

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: 1621632  
STURTZ HOMES-ROLLINS ROOF

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Builders FirstSource (Albermarle,NC).

Pages or sheets covered by this seal: E12546416 thru E12546478

My license renewal date for the state of North Carolina is December 31, 2018.

North Carolina COA: C-0844



December 21, 2018

Gilbert, Eric

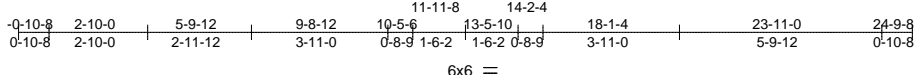
**IMPORTANT NOTE:** Truss Engineer's responsibility is solely for design of individual trusses based upon design parameters shown on referenced truss drawings. Parameters have not been verified as appropriate for any use. Any location identification specified is for file reference only and has not been used in preparing design. Suitability of truss designs for any particular building is the responsibility of the building designer, not the Truss Engineer, per ANSI/TPI-1, Chapter 2.

Job 1621632	Truss AT1	Truss Type ATTIC	Qty 7	Ply 1	STURTZ HOMES-ROLLINS ROOF	E12546416
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Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:13 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawyWRuY-K79sAVzopUGtfq0M\_qfMAvuFxddCkyGU4v7U0Ry71f0



Scale = 1:66.2

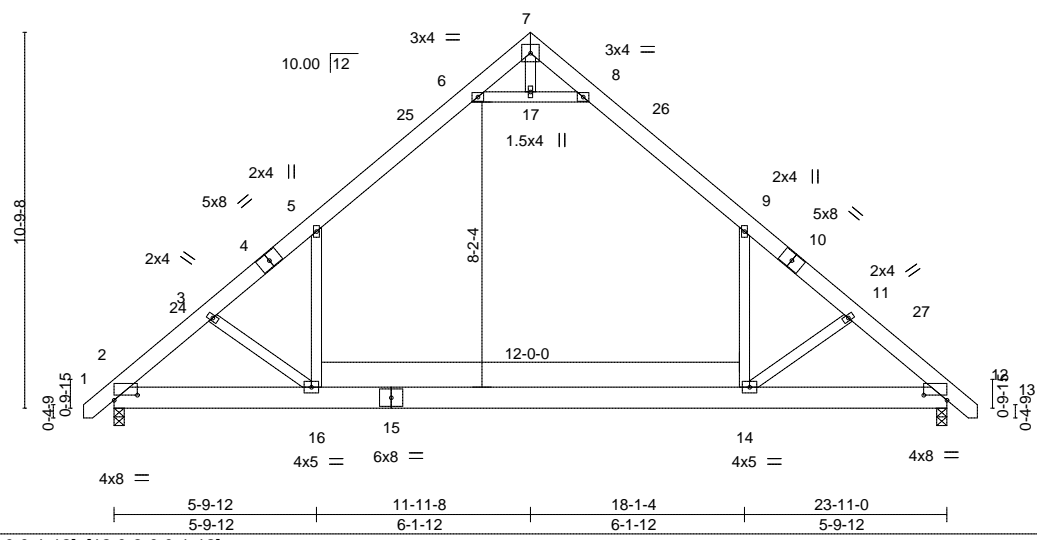


Plate Offsets (X,Y)--	[2:0-8-0,0-1-12], [12:0-8-0,0-1-12]
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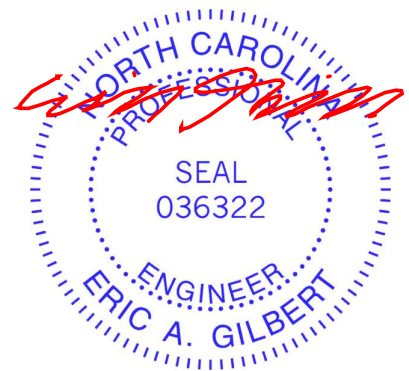
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.73	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.55	Vert(LL) -0.53 14-16 >542 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.56	Vert(CT) -0.76 14-16 >376 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.01 2 n/a n/a		
	Code IBC2015/TPI2014		Attic -0.28 14-16 530 360	Weight: 184 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP DSS	TOP CHORD Structural wood sheathing directly applied or 4-10-5 oc purlins.
BOT CHORD 2x8 SP DSS	BOT CHORD Rigid ceiling directly applied or 9-10-2 oc bracing.
WEBS 2x4 SP No.3	

**REACTIONS.** (lb/size) 2=1063/0-3-8, 12=1063/0-3-8  
 Max Horz 2=-223(LC 10)  
 Max Uplift 2=-9(LC 12), 12=-9(LC 13)  
 Max Grav 2=1334(LC 20), 12=1334(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1944/20, 3-5=-1769/39, 5-6=-1061/118, 6-7=-57/693, 7-8=-57/694, 8-9=-1061/118, 9-11=-1768/38, 11-12=-1943/19  
 BOT CHORD 2-16=-82/1609, 14-16=0/1109, 12-14=0/1483  
 WEBS 9-14=0/1037, 5-16=0/1037, 6-17=-1948/176, 8-17=-1948/176, 3-16=-629/167, 11-14=-631/169

- NOTES-**
- 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) 0-8-15 to 2-3-1, Interior(1) 2-3-1 to 11-11-8, Exterior(2) 11-11-8 to 14-11-8, Interior(1) 14-11-8 to 24-7-15 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
  - 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.
  - Ceiling dead load (5.0 psf) on member(s). 5-6, 8-9, 6-17, 8-17
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 14-16
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 12. This connection is for uplift only and does not consider lateral forces.
  - Attic room checked for L/360 deflection.



December 21, 2018

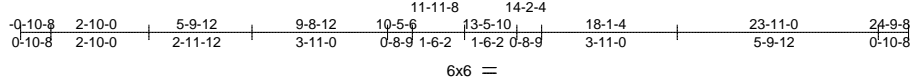
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>818 Soundside Road Edenton, NC 27932</p>
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Job 1621632	Truss AT1E	Truss Type GABLE	Qty 1	Ply 1	STURTZ HOMES-ROLLINS ROOF	E12546417
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Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:15 2018 Page 1

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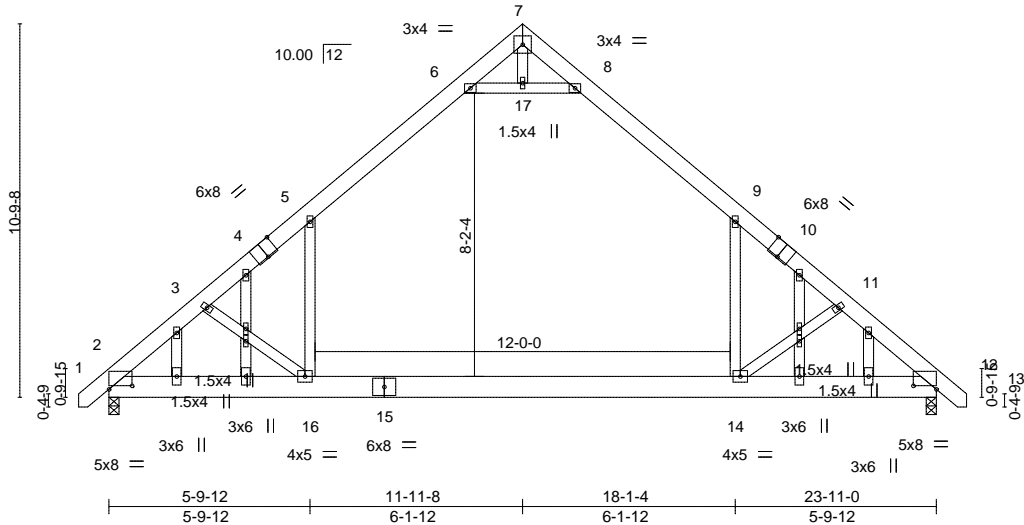


Plate Offsets (X,Y)-- [2:0-8-0,0-1-4], [4:0-4-0,Edge], [10:0-4-0,Edge], [12:0-8-0,0-1-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.73	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.55	Vert(LL) -0.53 14-16 >542 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.56	Vert(CT) -0.76 14-16 >376 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.01 2 n/a n/a		
	Code IBC2015/TPI2014		Attic -0.28 14-16 530 360	Weight: 196 lb	FT = 20%

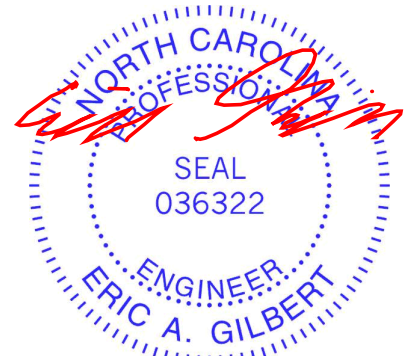
**LUMBER-**  
TOP CHORD 2x6 SP DSS  
BOT CHORD 2x8 SP DSS  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-10-5 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 9-10-2 oc bracing.

**REACTIONS.** (lb/size) 2=1063/0-3-8, 12=1063/0-3-8  
Max Horz 2=-223(LC 10)  
Max Uplift 2=-9(LC 12), 12=-9(LC 13)  
Max Grav 2=1334(LC 20), 12=1334(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1944/74, 3-5=-1769/64, 5-6=-1061/150, 6-7=-60/693, 7-8=-60/694, 8-9=-1061/150,  
9-11=-1768/64, 11-12=-1943/74  
BOT CHORD 2-16=-82/1609, 14-16=0/1109, 12-14=-10/1483  
WEBS 9-14=0/1037, 5-16=0/1037, 6-17=-1948/282, 8-17=-1948/282, 3-16=-629/167,  
11-14=-631/169

- NOTES-**
- 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) -0-8-15 to 2-3-1, Exterior(2) 2-3-1 to 11-11-8, Corner(3) 11-11-8 to 14-11-8, Exterior(2) 14-11-8 to 24-7-15 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.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 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.
  - Ceiling dead load (5.0 psf) on member(s). 5-6, 8-9, 6-17, 8-17
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 14-16
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 12. This connection is for uplift only and does not consider lateral forces.
  - Attic room checked for L/360 deflection.



December 21, 2018

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818 Soundside Road  
Edenton, NC 27932



Job 1621632	Truss AT3	Truss Type ATTIC	Qty 2	Ply 1	STURTZ HOMES-ROLLINS ROOF	E12546419
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Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:17 2018 Page 1

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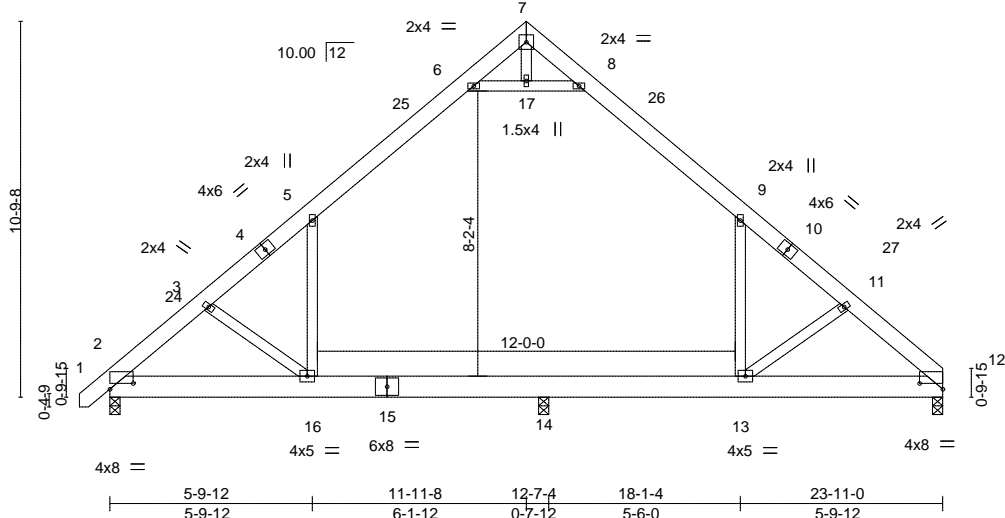
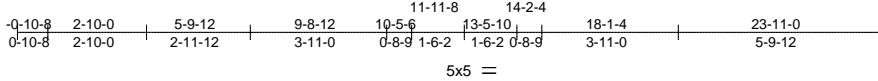


Plate Offsets (X,Y)--	[2:0-8-0,0-2-0], [12:0-8-0,0-2-0]
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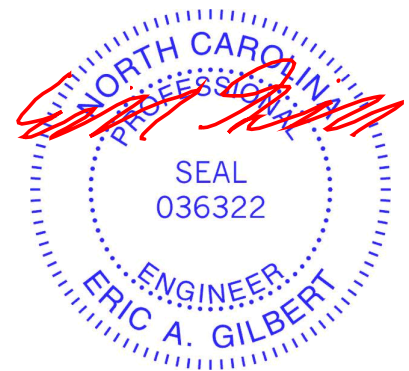
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.17	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.33	Vert(LL) -0.11 14-16 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.11	Vert(CT) -0.16 16 >911 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.01 2 n/a n/a		
	Code IBC2015/TPI2014		Attic -0.11 14-16 1450 360	Weight: 181 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP DSS	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x8 SP DSS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	

**REACTIONS.** (lb/size) 2=822/0-3-8, 12=755/0-3-8, 14=503/0-3-8  
 Max Horz 2=219(LC 9)  
 Max Uplift 2=-17(LC 12)  
 Max Grav 2=846(LC 20), 12=755(LC 1), 14=1074(LC 18)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-937/25, 3-5=-814/43, 5-6=-630/120, 8-9=-647/125, 9-11=-797/55, 11-12=-908/37  
 BOT CHORD 2-16=-103/871, 14-16=0/556, 13-14=0/556, 12-13=0/701  
 WEBS 6-17=-703/190, 8-17=-703/190, 3-16=-397/171, 11-13=-341/172

- NOTES-**
- 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) -0-8-15 to 2-3-1, Interior(1) 2-3-1 to 11-11-8, Exterior(2) 11-11-8 to 14-11-8, Interior(1) 14-11-8 to 23-11-0 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
  - 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.
  - Ceiling dead load (5.0 psf) on member(s). 5-6, 8-9, 6-17, 8-17
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 14-16, 13-14
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 14. This connection is for uplift only and does not consider lateral forces.
  - Attic room checked for L/360 deflection.



December 21, 2018

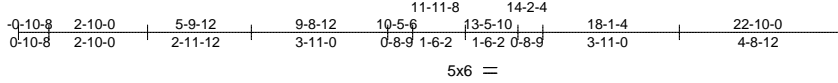
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>818 Soundside Road Edenton, NC 27932</p>
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Job 1621632	Truss AT4	Truss Type ATTIC	Qty 3	Ply 1	STURTZ HOMES-ROLLINS ROOF	E12546420
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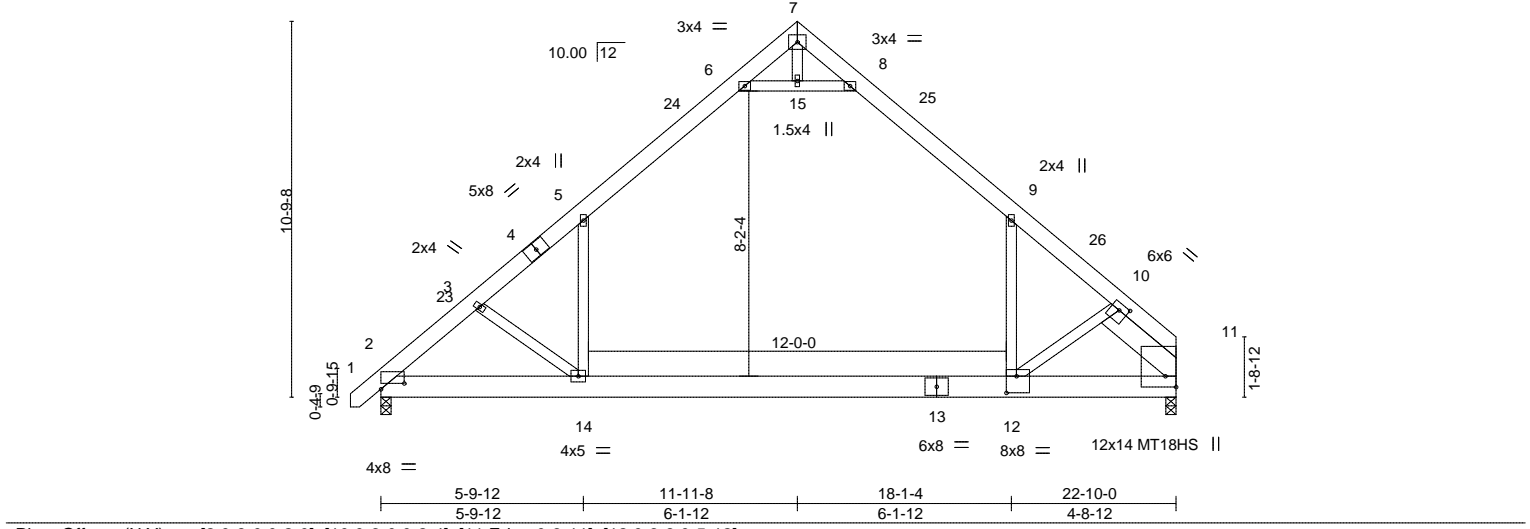
Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:18 2018 Page 1

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Scale = 1:66.2



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.67	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.54	Vert(LL) -0.47 12-14 >580 240	MT18HS	244/190
BCLL 0.0 *	Rep Stress Incr YES	WB 0.60	Vert(CT) -0.67 12-14 >412 180		
BCDL 10.0	Code IBC2015/TPI2014	Matrix-MS	Horz(CT) -0.03 11 n/a n/a		
			Attic -0.26 12-14 558 360	Weight: 183 lb	FT = 20%

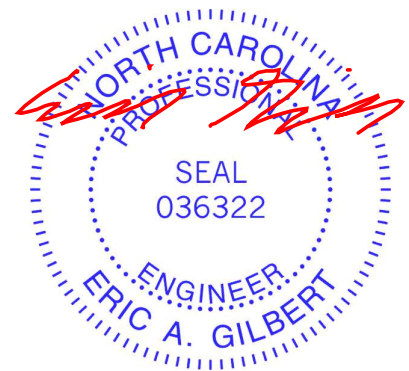
LUMBER-	BRACING-
TOP CHORD 2x6 SP DSS	TOP CHORD Structural wood sheathing directly applied or 4-10-1 oc purlins.
BOT CHORD 2x8 SP DSS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	
SLIDER Right 2x8 SP DSS 2-7-9	

**REACTIONS.** (lb/size) 11=1368/0-3-8, 2=1378/0-3-8  
 Max Horz 2=217(LC 9)  
 Max Uplift 2=22(LC 12)  
 Max Grav 11=1606(LC 2), 2=1581(LC 42)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2240/36, 3-5=-2073/55, 5-6=-1457/139, 6-7=-96/610, 7-8=-110/596,  
 8-9=-1474/137, 9-10=-2036/60, 10-11=-26/501  
 BOT CHORD 2-14=-121/1824, 12-14=0/1354, 11-12=-6/1210  
 WEBS 9-12=-22/885, 5-14=0/928, 6-15=-2019/189, 8-15=-2019/189, 3-14=-627/195,  
 10-12=-159/316

- NOTES-**
- 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) -0-8-15 to 2-3-1, Interior(1) 2-3-1 to 11-11-8, Exterior(2) 11-11-8 to 14-11-8, Interior(1) 14-11-8 to 22-10-0 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
  - 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.
  - Ceiling dead load (5.0 psf) on member(s). 5-6, 8-9, 6-15, 8-15
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 12-14
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 431 lb down and 86 lb up at 9-10-10, and 400 lb down and 67 lb up at 13-10-10 on top chord. The design/selection of such connection device(s) is the responsibility of others.
  - Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard  
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15



December 21, 2018

Continued on page 2

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**TRENCO**  
 ENGINEERING BY  
 A MiTek Affiliate

818 Soundside Road  
 Edenton, NC 27932

Job 1621632	Truss AT4	Truss Type ATTIC	Qty 3	Ply 1	STURTZ HOMES-ROLLINS ROOF Job Reference (optional)	E12546420
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Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:18 2018 Page 2  
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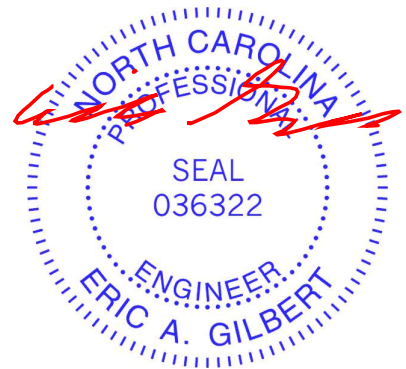
**LOAD CASE(S)** Standard

Uniform Loads (plf)

Vert: 1-5=-60, 5-6=-70, 6-7=-60, 7-8=-60, 8-9=-70, 9-11=-60, 16-20=-20, 6-8=-10

Concentrated Loads (lb)

Vert: 6=-391 8=-360



December 21, 2018

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818 Soundside Road  
Edenton, NC 27932

Job 1621632	Truss D1	Truss Type Hip	Qty 1	Ply 1	STURTZ HOMES-ROLLINS ROOF	E12546421
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Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:20 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawyWRuY-dL4Weu3B9e9u?v3iuoH?yNhW7R2xt7DWhVKMIYy71ev

Job Reference (optional)

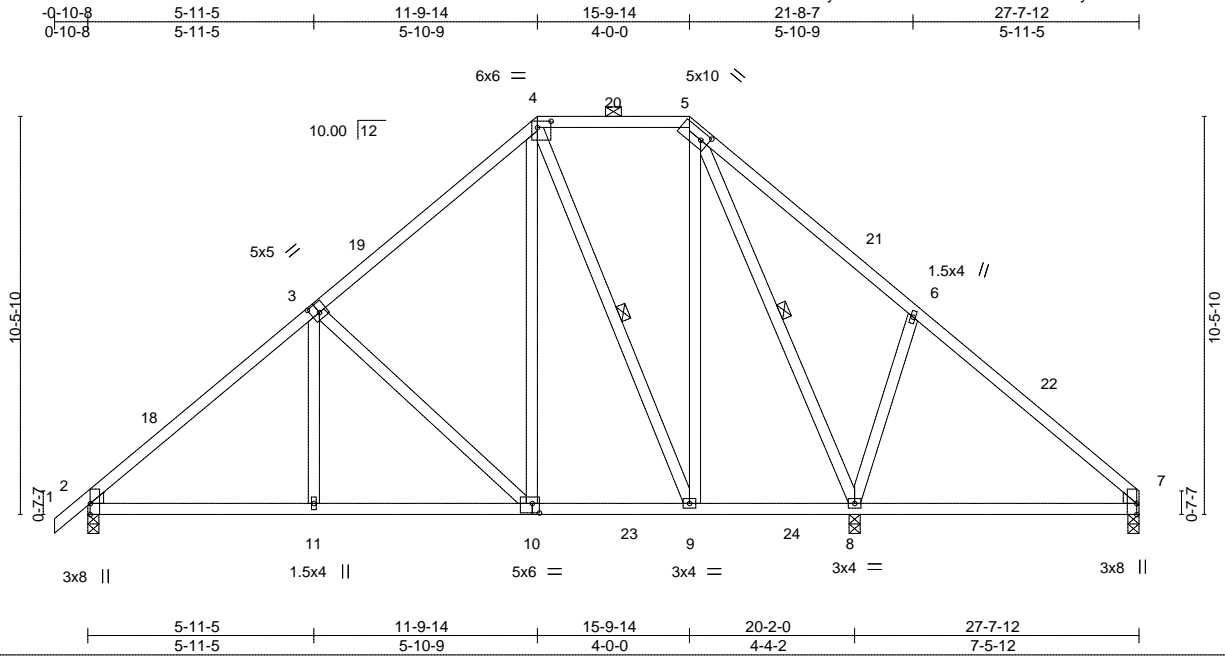


Plate Offsets (X,Y)--	[2:0-3-8,Edge], [2:0-0-10,0-3-9], [2:0-0-5,0-0-6], [3:0-2-8,0-3-0], [4:0-4-4,0-2-0], [5:0-2-8,0-2-8], [7:0-0-5,0-0-6], [7:0-3-8,Edge], [7:0-0-10,0-3-9], [10:0-2-4,0-3-0]
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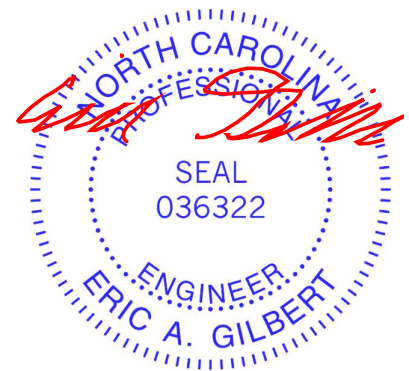
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15		TC 0.47	Vert(LL) -0.06	8-17	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15		BC 0.42	Vert(CT) -0.14	8-17	>636	180		
BCLL 0.0 *	Rep Stress Incr YES		WB 0.49	Horz(CT) 0.02	8	n/a	n/a		
BCDL 10.0	Code IBC2015/TPI2014		Matrix-MS					Weight: 183 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-6-2 oc purlins, except 2-0-0 oc purlins (6-0-0 max.); 4-5.
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 4-9, 5-8
WEDGE	
Left: 2x4 SP No.3, Right: 2x4 SP No.3	

**REACTIONS.** (lb/size) 2=909/0-3-8, 7=430/0-3-8, 8=926/0-3-8  
 Max Horz 2=219(LC 9)  
 Max Uplift 2=-53(LC 12), 7=-11(LC 13), 8=-50(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1066/87, 3-4=-725/155, 4-5=-403/159, 5-6=-391/181, 6-7=-402/62  
 BOT CHORD 2-11=-101/827, 10-11=-101/826, 9-10=-33/514, 8-9=-8/409, 7-8=0/263  
 WEBS 3-10=-427/183, 4-10=-55/440, 4-9=-324/84, 5-9=-40/441, 6-8=-371/240, 5-8=-537/67

- NOTES-**
- 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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 11-9-14, Exterior(2) 11-9-14 to 20-0-13, Interior(1) 20-0-13 to 27-7-12 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
  - 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.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 7, and 8. This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 21, 2018

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>818 Soundside Road Edenton, NC 27932</p>
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Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES-ROLLINS ROOF	E12546422
1621632	D2	Piggyback Base	3	1		

Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:21 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawyWRuY-5XeurE3pwyHld2euSVpEVbEeerORcaPfv94vH\_y71eu

Job Reference (optional)

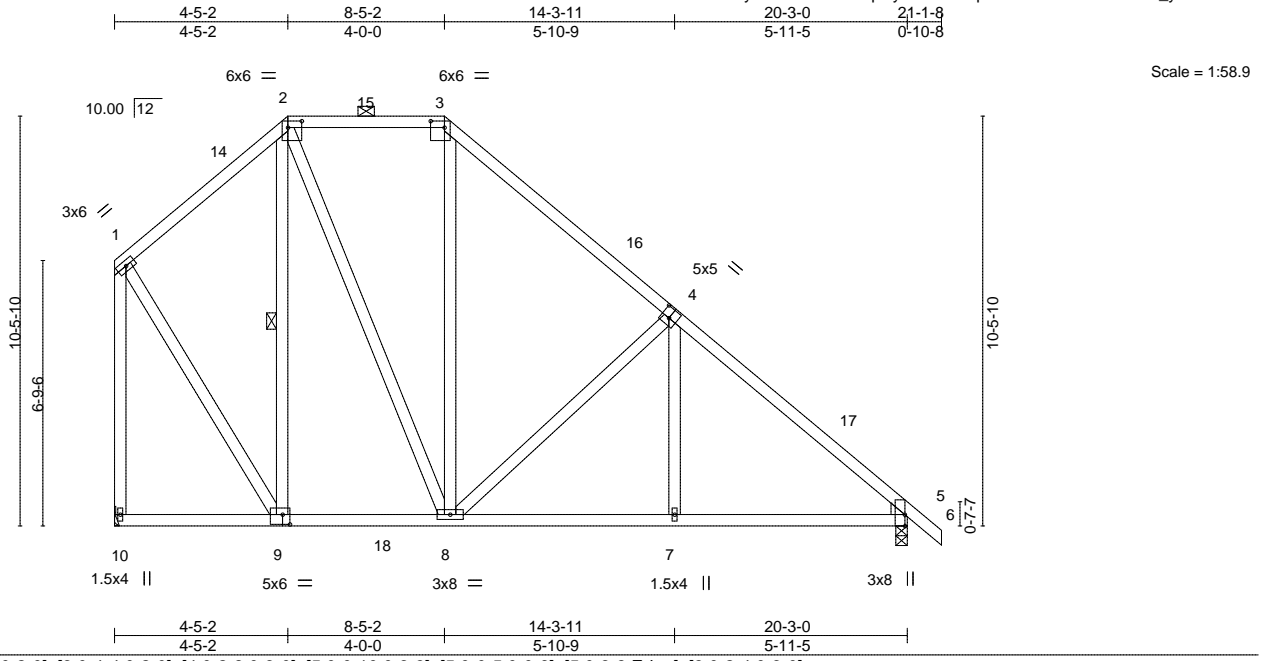


Plate Offsets (X,Y)--	[2:0-4,4,0-2,0], [3:0-4,4,0-2,0], [4:0-2-8,0-3,0], [5:0-0-10,0-3-9], [5:0-0-5,0-0-6], [5:0-3-8,Edge], [9:0-2-4,0-3-0]
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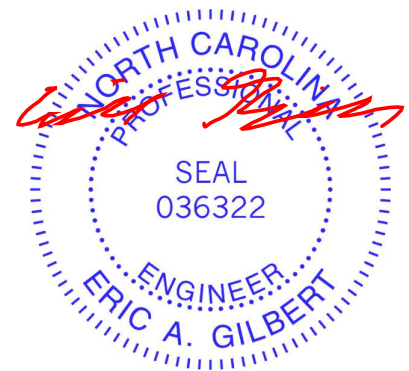
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.68	Vert(LL)	-0.03	7-8	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.34	Vert(CT)	-0.06	7-8	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.49	Horz(CT)	0.01	5	n/a		
BCDL 10.0	Code IBC2015/TPI2014		Matrix-MS					Weight: 154 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-8-7 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	WEBS 1 Row at midpt 2-9
WEDGE	
Right: 2x4 SP No.3	

**REACTIONS.** (lb/size) 10=803/Mechanical, 5=858/0-3-8  
 Max Horz 10=-295(LC 10)  
 Max Uplift 10=-53(LC 13), 5=-51(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-431/170, 2-3=-438/168, 3-4=-648/168, 4-5=-991/99, 1-10=-765/125  
 BOT CHORD 8-9=-56/365, 7-8=0/685, 5-7=0/687  
 WEBS 2-9=-330/121, 2-8=-89/362, 4-8=-430/183, 1-9=-69/506

- NOTES-**
- 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) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 4-5-2, Exterior(2) 4-5-2 to 12-8-1, Interior(1) 12-8-1 to 21-1-8 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
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 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) Refer to girder(s) for truss to truss connections.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10.
  - 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
  - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



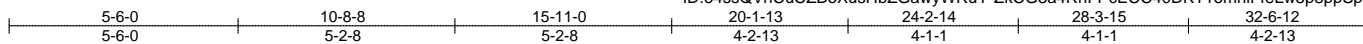
December 21, 2018

Job 1621632	Truss F1G	Truss Type Flat Girder	Qty 1	Ply 2	STURTZ HOMES-ROLLINS ROOF E12546423
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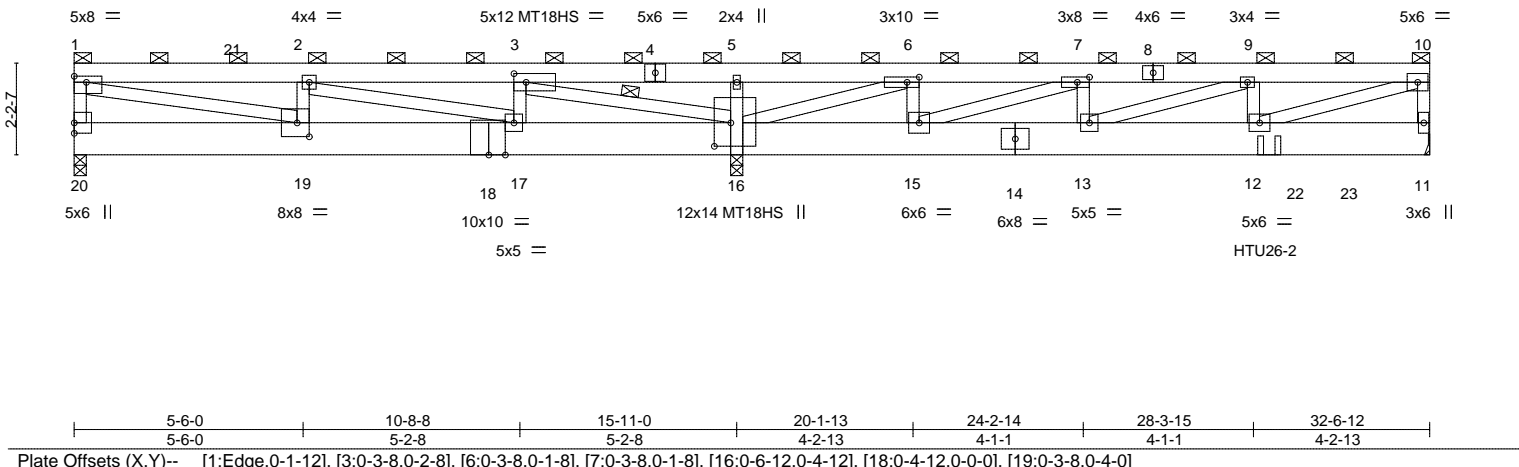
Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:22 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawyWRuY-ZkCG3a4RhFPcECC40DKT1omniFfeLw5p8ppSpQy71et



Scale = 1:55.3



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 0.79	Vert(LL)	-0.12 17-19	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.66	Vert(CT)	-0.25 17-19	>756	180	MT18HS	244/190
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.91	Horz(CT)	0.03 11	n/a	n/a		
BCDL 10.0	Code IBC2015/TPI2014		Matrix-MS						
								Weight: 523 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP DSS \*Except\*  
8-10: 2x6 SP No.2  
BOT CHORD 2x10 SP DSS \*Except\*  
14-16: 2x10 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
1-19,2-17,3-16,7-15,9-13,10-12: 2x4 SP No.2

**BRACING-**

TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-10, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 3-16

**REACTIONS.**

(lb/size) 20=3314/0-3-8, 11=3229/Mechanical, 16=10332/0-3-8  
Max Horz 20=-49(LC 6)  
Max Uplift 20=-390(LC 19), 11=-434(LC 5), 16=-1182(LC 5)  
Max Grav 20=3434(LC 15), 11=3229(LC 1), 16=10469(LC 29)

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

TOP CHORD 1-20=-2895/361, 1-2=-7964/905, 2-3=-5920/716, 3-5=-604/5107, 5-6=-604/5107, 6-7=-551/86, 7-9=-4980/639, 9-10=-5112/695, 10-11=-2364/332  
BOT CHORD 19-20=-88/462, 17-19=-926/7973, 16-17=-736/5930, 15-16=-92/551, 13-15=-642/4980, 12-13=-696/5112, 11-12=-48/263  
WEBS 1-19=-887/7835, 2-19=-2568/374, 2-17=-2265/274, 3-17=-275/112, 3-16=-11332/1229, 5-16=-3000/399, 6-16=-6043/726, 6-15=-163/1807, 7-15=-4751/593, 7-13=-45/727, 9-13=-201/288, 9-12=-950/258, 10-12=-694/5203

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 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.
- 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; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 16 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide metal plate or equivalent at bearing(s) 16 to support reaction shown.



December 21,2018

Continued on page 2

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road  
Edenton, NC 27932

Job 1621632	Truss F1G	Truss Type Flat Girder	Qty 1	Ply 2	STURTZ HOMES-ROLLINS ROOF Job Reference (optional)	E12546423
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Builders First Source,

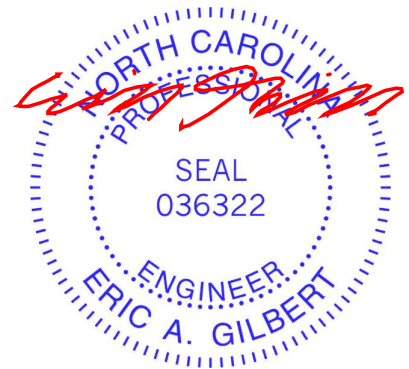
8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:22 2018 Page 2  
ID:o4ssQVnCuCZBoXusHbZGawyWRuY-ZkCG3a4RhFPcECC40DKT1omniFfeLw5p8ppSpQy71et

**NOTES-**

- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=434.
- 12) Two HTS20 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 20 and 16. This connection is for uplift only and does not consider lateral forces.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 14) Use Simpson Strong-Tie HTU26-2 (20-10d Girder, 14-10d Truss, Single Ply Girder) or equivalent at 28-8-8 from the left end to connect truss(es) to back face of bottom chord.
- 15) Fill all nail holes where hanger is in contact with lumber.
- 16) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 195 lb down and 53 lb up at 30-7-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-21=-250, 5-21=-680, 5-10=-220, 16-20=-20, 11-16=-170(F=-150)  
Concentrated Loads (lb)  
Vert: 22=-787(B) 23=-195



December 21, 2018

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

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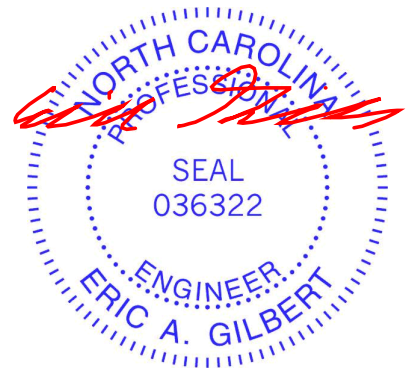
Job 1621632	Truss F2G	Truss Type FLAT GIRDER	Qty 1	Ply <b>2</b>	STURTZ HOMES-ROLLINS ROOF Job Reference (optional)	E12546424
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Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:23 2018 Page 2  
ID:o4ssQVnCuCZBoXusHbZGawyWRuY-1wmeGv53SZXTsMnHawria0J2uf1c4RiyNTZ0Lsy71es

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
  - Vert: 1-5=-280, 6-10=-170(F=-150)
- Concentrated Loads (lb)
  - Vert: 5=-288 11=-159 12=-158 13=-158 14=-158 15=-158 16=-158 17=-158 18=-198



December 21, 2018

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES-ROLLINS ROOF	E12546425
1621632	H1	Hip	1	1	Job Reference (optional)	

Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:24 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawyWRuY-V6J1UF6hDfIKUWMT7dMx6Dr8W2Nupxa5b7IZuJy71er



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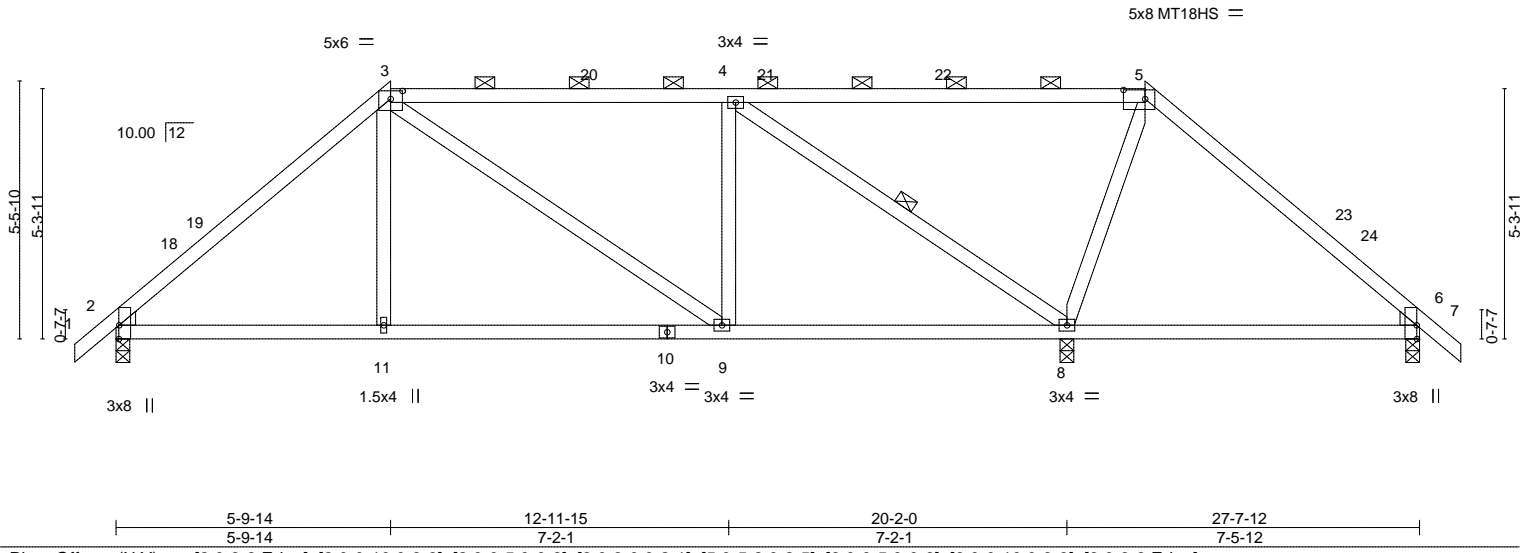


Plate Offsets (X,Y)--	[2:0-3-8,Edge], [2:0-0-10,0-3-9], [2:0-0-5,0-0-6], [3:0-3-0,0-2-1], [5:0-5-8,0-2-5], [6:0-0-5,0-0-6], [6:0-0-10,0-3-9], [6:0-3-8,Edge]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.77	Vert(LL) -0.06 8-17 >999 240	MT20 244/190	
TCDL 10.0	Lumber DOL 1.15	BC 0.55	Vert(CT) -0.14 8-17 >655 180	MT18HS 244/190	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.46	Horz(CT) 0.02 8 n/a n/a		Weight: 139 lb FT = 20%
BCDL 10.0	Code IBC2015/TPI2014	Matrix-MS			

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 *Except* 3-5: 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-8-3 oc purlins, except 2-0-0 oc purlins (5-9-2 max.): 3-5.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS 2x4 SP No.3	6-0-0 oc bracing: 6-8.
WEDGE	WEBS 1 Row at midpt 4-8
Left: 2x4 SP No.3, Right: 2x4 SP No.3	

**REACTIONS.** (lb/size) 2=856/0-3-8, 8=1117/0-3-8, 6=343/0-3-8  
 Max Horz 2=-116(LC 10)  
 Max Uplift 2=-92(LC 12), 8=-145(LC 9), 6=-123(LC 13)  
 Max Grav 2=856(LC 1), 8=1127(LC 23), 6=402(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1000/131, 3-4=-830/189, 5-6=-290/175  
 BOT CHORD 2-11=-50/690, 9-11=-51/686, 8-9=-38/829  
 WEBS 3-11=0/268, 4-8=-1093/211, 5-8=-377/130

- NOTES-**
- 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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-9-14, Exterior(2) 5-9-14 to 10-0-13, Interior(1) 10-0-13 to 21-9-14, Exterior(2) 21-9-14 to 26-0-13, Interior(1) 26-0-13 to 28-6-4 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
  - 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.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 8, and 6. This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 21, 2018

Job 1621632	Truss H1G	Truss Type Hip Girder	Qty 1	Ply 1	STURTZ HOMES-ROLLINS ROOF	E12546426
Builders First Source,					Job Reference (optional)	

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:41 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawyWRuY-WOrS23JMD5ov079kdiAwlo34svDtIZXcWGwz\_qy71ea



Scale: 1/4"=1'

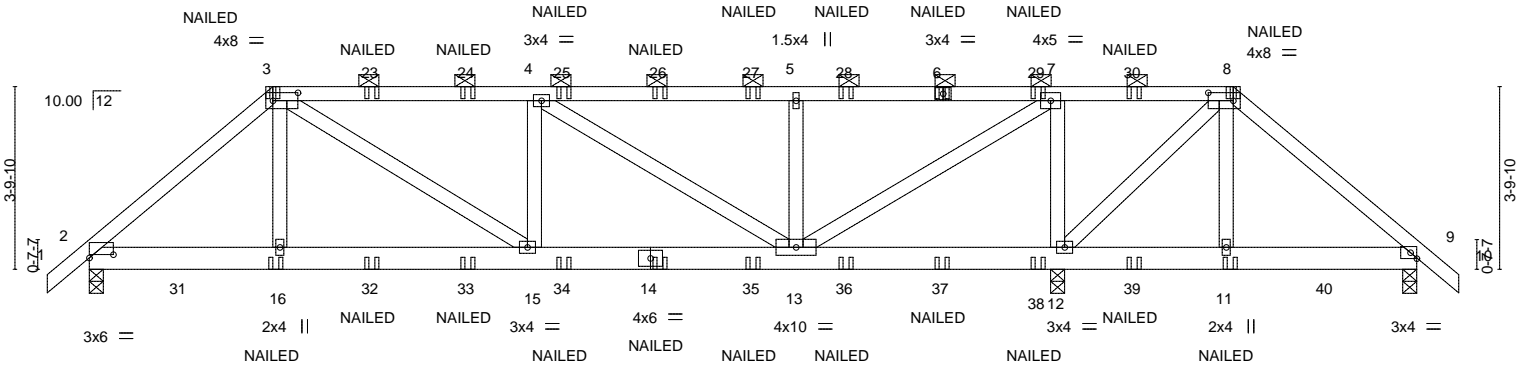


Plate Offsets (X,Y)--	[2:0-6-0,0-0-13], [3:0-6-4,0-2-0], [8:0-6-4,0-2-0]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.60	Vert(LL)	-0.05	13-15	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.35	Vert(CT)	-0.09	13-15	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.73	Horz(CT)	0.01	12	n/a		
BCDL 10.0	Code IBC2015/TPI2014		Matrix-MS						
								Weight: 169 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-1-10 oc purlins, except
BOT CHORD 2x6 SP No.2	2-0-0 oc purlins (4-4-10 max.): 3-8.
WEBS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

<b>REACTIONS.</b>	(lb/size) 2=1076/0-3-8, 12=2067/0-3-8, 9=127/0-3-8
	Max Horz 2=-83(LC 6)
	Max Uplift 2=-233(LC 8), 12=-465(LC 5), 9=-104(LC 28)
	Max Grav 2=1076(LC 1), 12=2067(LC 1), 9=166(LC 16)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-1282/292, 3-4=-1382/356, 4-5=-803/207, 5-7=-803/207, 7-8=-171/701, 8-9=-112/270
BOT CHORD	2-16=-221/928, 15-16=-219/936, 13-15=-328/1382, 12-13=-701/202
WEBS	3-16=0/263, 3-15=-176/556, 4-13=-686/180, 5-13=-419/240, 7-13=-421/1773, 7-12=-1338/446, 8-12=-773/162

- NOTES-**
- 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; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 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.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 12, and 9. This connection is for uplift only and does not consider lateral forces.
  - 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) 123 lb down and 51 lb up at 1-10-10, and 123 lb down and 51 lb up at 25-9-2 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).

<b>LOAD CASE(S)</b>	Standard
1) Dead + Roof Live (balanced):	Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)	
Vert:	1-3=-60, 3-8=-60, 8-10=-60, 17-20=-20



December 21, 2018

Continued on page 2

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>818 Soundside Road Edenton, NC 27932</p>
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Job 1621632	Truss H1G	Truss Type Hip Girder	Qty 1	Ply 1	STURTZ HOMES-ROLLINS ROOF Job Reference (optional)	E12546426
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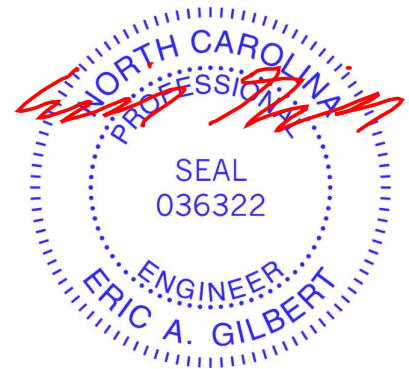
Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:41 2018 Page 2  
ID:o4ssQVnCuCZBoXusHbZGawyWRuY-WOrS23JMD5ov079kdiAwlo34svDtIZXcWGwz\_qy71ea

**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 3=-35(F) 6=-35(F) 8=-35(F) 14=-29(F) 16=-29(F) 11=-29(F) 23=-35(F) 24=-35(F) 25=-35(F) 26=-35(F) 27=-35(F) 28=-35(F) 29=-35(F) 30=-35(F) 31=-123  
32=-29(F) 33=-29(F) 34=-29(F) 35=-29(F) 36=-29(F) 37=-29(F) 38=-29(F) 39=-29(F) 40=-123



December 21, 2018

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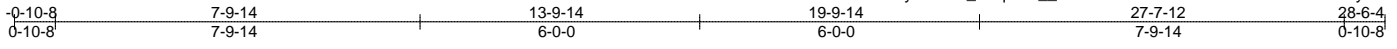


Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES-ROLLINS ROOF	E12546427
1621632	H2	Hip	1	1		

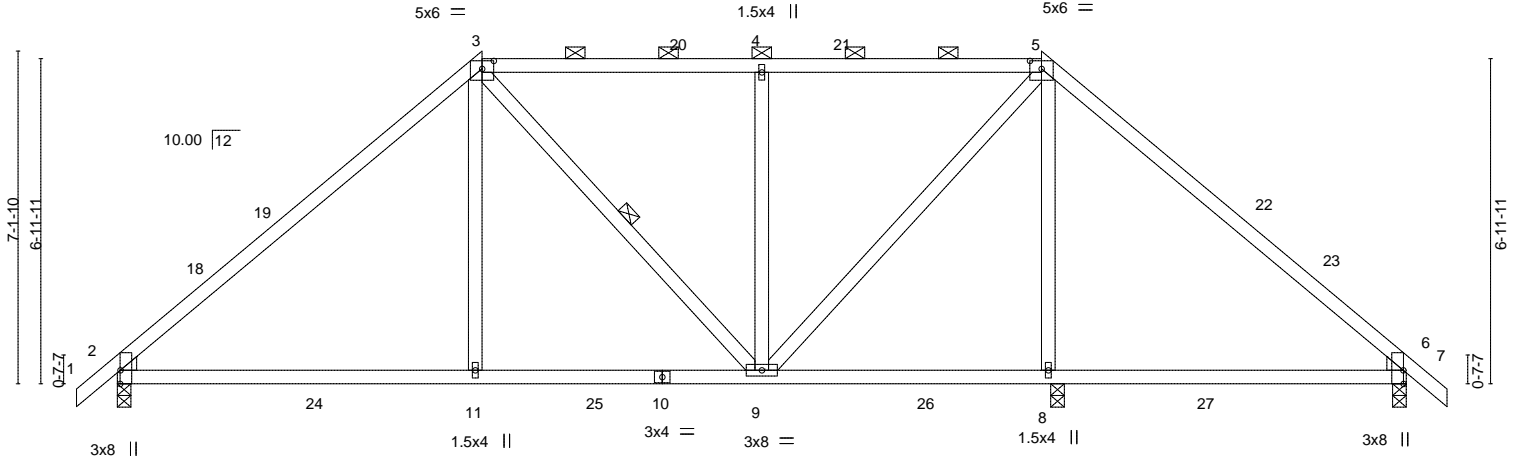
Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:42 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawYWRuY-\_aPqFPK\_\_OwmeHkwBPh9r0b9SJvN14AlkwfWWGy71eZ



Scale = 1:49.4



	7-9-14	13-9-14	19-9-14	20-3-12	27-7-12
	7-9-14	6-0-0	6-0-0	0-5-14	7-4-0
Plate Offsets (X,Y)--	[2:0-3-8,Edge], [2:0-0-10,0-3-9], [2:0-0-5,0-0-6], [3:0-3-0,0-2-1], [5:0-3-0,0-2-1], [6:0-0-5,0-0-6], [6:0-0-10,0-3-9], [6:0-3-8,Edge]				

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.93	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.63	Vert(LL) -0.10 8-17 >908 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.45	Vert(CT) -0.21 8-17 >437 180		
BCDL 10.0	Code IBC2015/TPI2014	Matrix-MS	Horz(CT) 0.03 2 n/a n/a		
				Weight: 149 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (6-0-0 max.): 3-5.
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 3-9
WEDGE	
Left: 2x4 SP No.3, Right: 2x4 SP No.3	

**REACTIONS.** (lb/size) 2=987/0-3-8, 8=618/0-3-8, 6=712/0-3-8  
 Max Horz 2=-151(LC 10)  
 Max Uplift 2=-119(LC 12), 8=-102(LC 9), 6=-240(LC 13)  
 Max Grav 2=987(LC 1), 8=803(LC 25), 6=753(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1154/206, 3-4=-817/265, 4-5=-817/265, 5-6=-761/350  
 BOT CHORD 2-11=-73/807, 9-11=-74/800, 8-9=-108/468, 6-8=-112/468  
 WEBS 3-11=0/366, 4-9=-400/153, 5-9=-161/654, 5-8=-527/206

- NOTES-**
- 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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 7-9-14, Exterior(2) 7-9-14 to 12-0-13, Interior(1) 12-0-13 to 19-9-14, Exterior(2) 19-9-14 to 24-0-13, Interior(1) 24-0-13 to 28-6-4 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
  - 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.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.
  - One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8. This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 21, 2018

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**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate

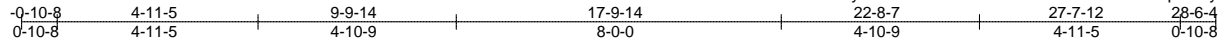
818 Soundside Road  
 Edenton, NC 27932

Job 1621632	Truss H3	Truss Type Hip	Qty 1	Ply 1	STURTZ HOMES-ROLLINS ROOF	E12546428
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8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:43 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawyWRuY-SmzCTIKcki2dGRJ7k7COOD8LYip9mayuzaP43iy71eY



5x5 = 6x10 //

Scale = 1:56.7

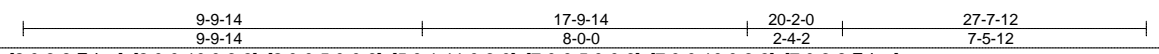
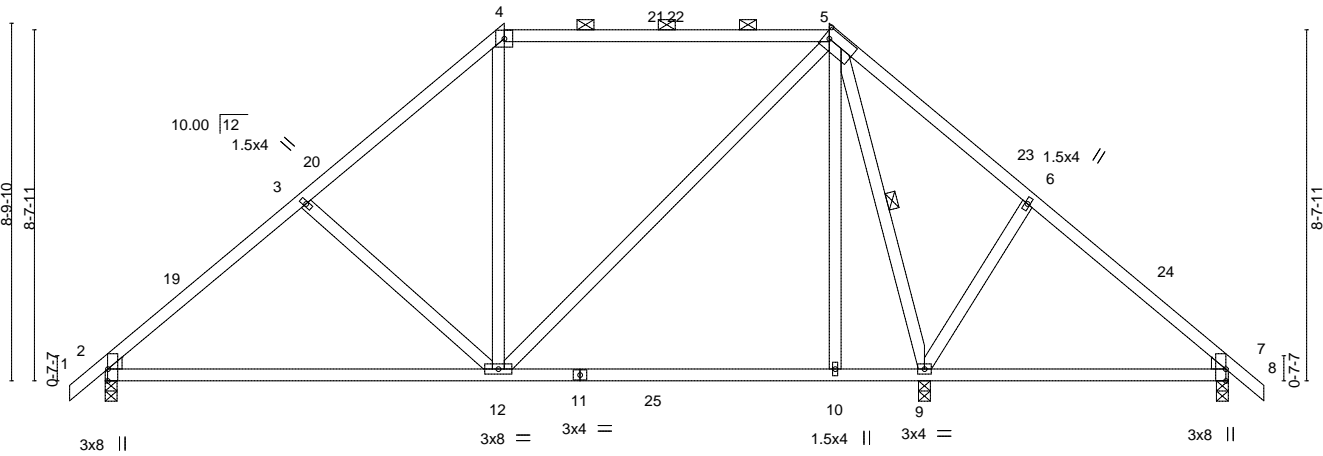


Plate Offsets (X, Y)--	[2:0-3-8,Edge], [2:0-0-10,0-3-9], [2:0-0-5,0-0-6], [5:0-1-11,0-3-0], [7:0-0-5,0-0-6], [7:0-0-10,0-3-9], [7:0-3-8,Edge]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.84	Vert(LL)	-0.14	12-15	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.75	Vert(CT)	-0.29	12-15	>843		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.29	Horz(CT)	0.02	9	n/a		
BCDL 10.0	Code IBC2015/TPI2014		Matrix-MS						
								Weight: 166 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 *Except* 4-5: 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-7-1 oc purlins, except 2-0-0 oc purlins (4-4-5 max.): 4-5.
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 5-9
WEDGE Left: 2x4 SP No.3, Right: 2x4 SP No.3	

**REACTIONS.** (lb/size) 2=895/0-3-8, 7=448/0-3-8, 9=974/0-3-8  
 Max Horz 2=-186(LC 10)  
 Max Uplift 2=-57(LC 12), 7=-31(LC 13), 9=-56(LC 13)  
 Max Grav 2=895(LC 1), 7=461(LC 24), 9=974(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1022/106, 3-4=-818/124, 4-5=-563/145, 5-6=-290/114, 6-7=-380/51  
 BOT CHORD 2-12=-97/771, 10-12=0/358, 9-10=0/362, 7-9=0/253  
 WEBS 3-12=-267/168, 4-12=0/259, 5-12=-86/399, 5-10=0/304, 6-9=-276/173, 5-9=-729/86

- NOTES-**
- 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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 9-9-14, Exterior(2) 9-9-14 to 14-0-13, Interior(1) 14-0-13 to 17-9-14, Exterior(2) 17-9-14 to 22-0-13, Interior(1) 22-0-13 to 28-6-4 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
  - Provide adequate drainage to prevent water ponding.
  - The Fabrication Tolerance at joint 5 = 4%
  - 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.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 7, and 9. This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 21, 2018

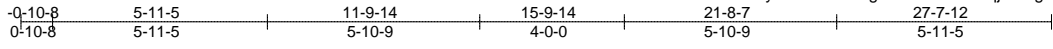
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job 1621632	Truss H4	Truss Type Hip	Qty 1	Ply 1	STURTZ HOMES-ROLLINS ROOF	E12546429
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8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:44 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawYWRuY-wzXbg5LEV0AUtbuJlqjdwRgc36EYV\_K2CE8db8y71eX



Scale: 3/16"=1'

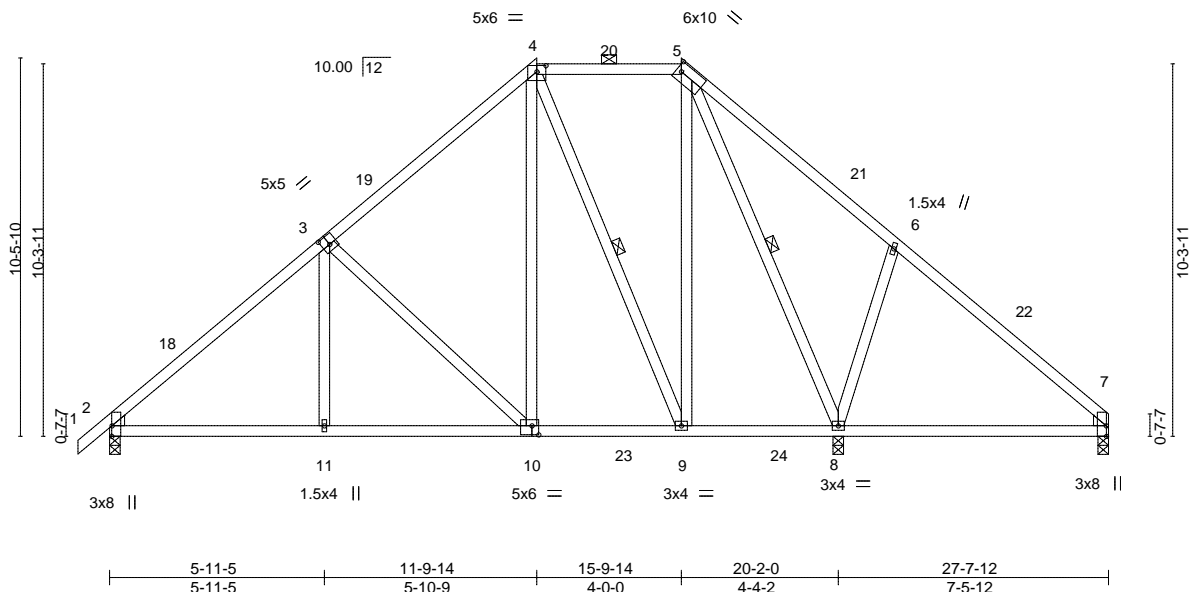


Plate Offsets (X,Y)--	[2:0-3-8,Edge], [2:0-0-10,0-3-9], [2:0-0-5,0-0-6], [3:0-2-8,0-3-0], [4:0-3-0,0-2-1], [5:0-1-11,0-3-0], [7:0-3-8,Edge], [7:0-0-10,0-3-9], [7:0-0-5,0-0-6], [10:0-2-4,0-3-0]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15		TC 0.47	Vert(LL) -0.06	8-17	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15		BC 0.42	Vert(CT) -0.14	8-17	>637	180		
BCLL 0.0 *	Rep Stress Incr YES		WB 0.48	Horz(CT) 0.02	8	n/a	n/a		
BCDL 10.0	Code IBC2015/TPI2014		Matrix-MS					Weight: 183 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-6-3 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-5.
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 4-9, 5-8
WEDGE	
Left: 2x4 SP No.3, Right: 2x4 SP No.3	

**REACTIONS.** (lb/size) 2=909/0-3-8, 7=429/0-3-8, 8=927/0-3-8  
 Max Horz 2=216(LC 9)  
 Max Uplift 2=-54(LC 12), 7=-15(LC 13), 8=-46(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1065/88, 3-4=-724/155, 4-5=-406/159, 5-6=-390/183, 6-7=-401/65  
 BOT CHORD 2-11=-100/825, 10-11=-101/824, 9-10=-31/518, 8-9=-6/410, 7-8=0/262  
 WEBS 3-10=-418/180, 4-10=-53/435, 4-9=-325/82, 5-9=-38/440, 6-8=-367/236, 5-8=-541/67

- NOTES-**
- 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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 11-9-14, Exterior(2) 11-9-14 to 20-0-13, Interior(1) 20-0-13 to 27-7-12 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) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 7, and 8. This connection is for uplift only and does not consider lateral forces.
  - 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 21,2018

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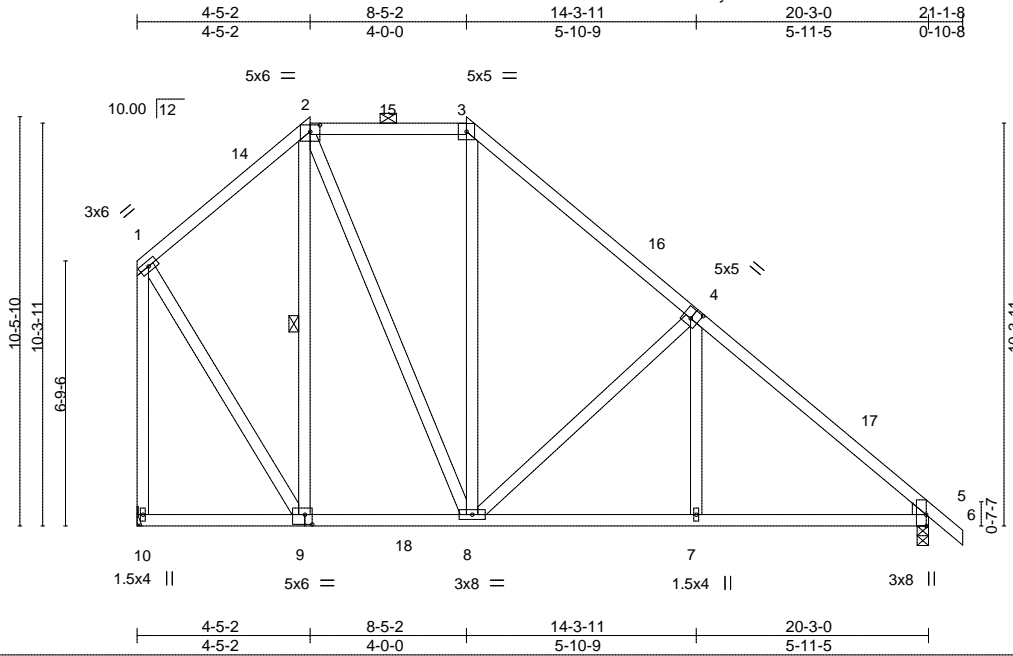
Job 1621632	Truss H5	Truss Type Piggyback Base	Qty 1	Ply 1	STURTZ HOMES-ROLLINS ROOF	E12546430
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Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:45 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawyWRuY-O95zuRMsGJILVktVsYEsTeDkcWb2ERUBRuuA7by71eW

Job Reference (optional)



Scale = 1:59.0

Plate Offsets (X,Y)--	[2:0-3-0,0-2-1], [4:0-2-8,0-3-0], [5:0-3-8,Edge], [5:0-0-10,0-3-9], [5:0-0-5,0-0-6], [9:0-2-4,0-3-0]
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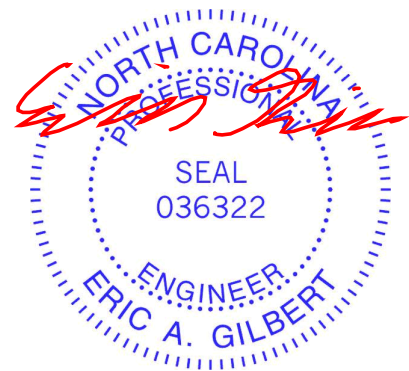
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.68	Vert(LL) -0.03 7-8 >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.34	Vert(CT) -0.06 7-8 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.48	Horz(CT) 0.01 5 n/a n/a		
BCDL 10.0	Code IBC2015/TPI2014	Matrix-MS		Weight: 154 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-8-7 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	WEBS 1 Row at midpt 2-9
WEDGE	
Right: 2x4 SP No.3	

**REACTIONS.** (lb/size) 10=803/Mechanical, 5=858/0-3-8  
 Max Horz 10=-292(LC 10)  
 Max Uplift 10=-52(LC 13), 5=-52(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-429/168, 2-3=-440/166, 3-4=-647/166, 4-5=-991/99, 1-10=-765/125  
 BOT CHORD 8-9=-55/366, 7-8=0/685, 5-7=0/687  
 WEBS 2-9=-335/123, 2-8=-88/361, 4-8=-423/180, 1-9=-72/510

- NOTES-**
- 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; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 4-5-2, Exterior(2) 4-5-2 to 12-8-1, Interior(1) 12-8-1 to 21-1-8 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
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 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) Refer to girder(s) for truss to truss connections.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10.
  - 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
  - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 21, 2018

Job 1621632	Truss H6	Truss Type Hip	Qty 1	Ply 1	STURTZ HOMES-ROLLINS ROOF	E12546431
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Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:45 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawYWRuY-O95zuRMsGJILVktVsYEsTeDiqWWvEUHBRuuA7by71eW

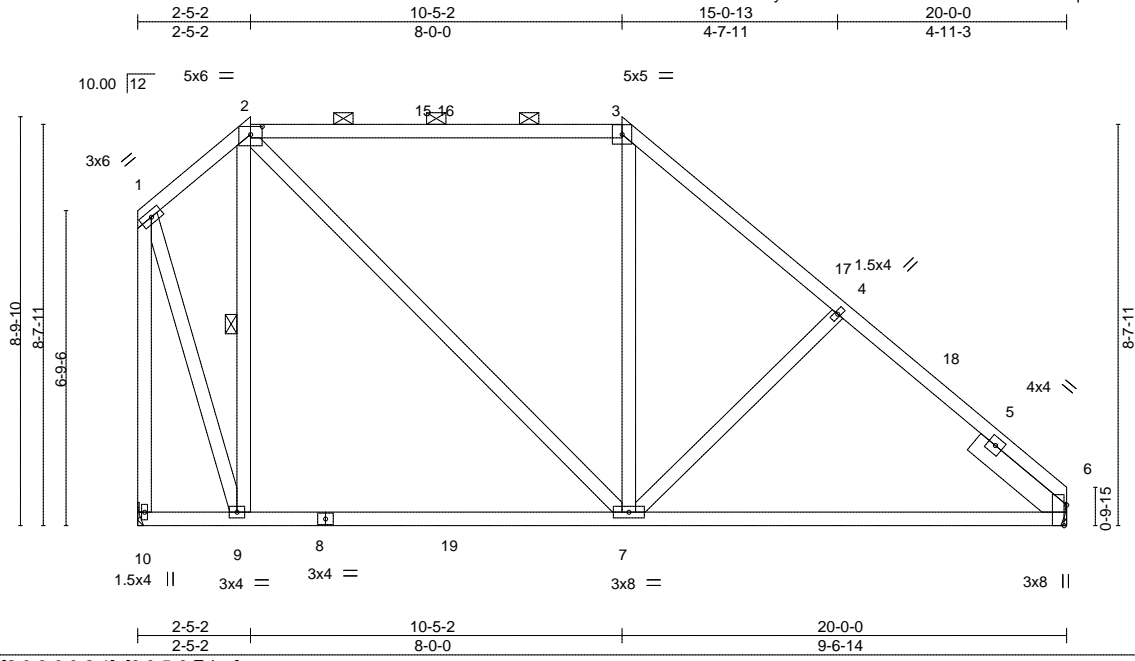


Plate Offsets (X,Y)--	[2:0-3:0,0-2:1], [6:0-5:6,Edge]
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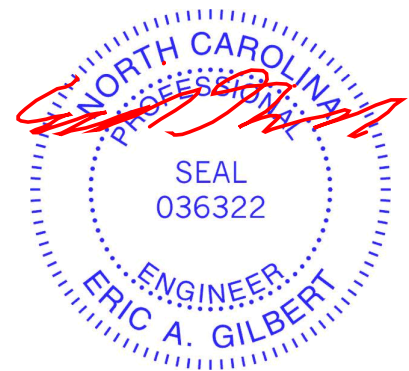
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.79	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.67	Vert(LL) -0.13 7-9 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.30	Vert(CT) -0.22 7-13 >999 180		
BCDL 10.0	Code IBC2015/TPI2014	Matrix-MS	Horz(CT) -0.01 6 n/a n/a		
				Weight: 141 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except* 2-3: 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-2-11 max.): 2-3.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 2-9
SLIDER Right 2x6 SP No.2 2-6-0	

**REACTIONS.** (lb/size) 6=794/Mechanical, 10=794/Mechanical  
 Max Horz 10=-245(LC 10)  
 Max Uplift 6=-46(LC 13), 10=-48(LC 12)  
 Max Grav 6=794(LC 1), 10=799(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-321/147, 2-3=-508/146, 3-4=-738/142, 4-6=-841/117, 1-10=-869/87  
 BOT CHORD 7-9=-82/308, 6-7=-9/646  
 WEBS 2-9=-513/200, 2-7=-90/422, 1-9=-102/730

- NOTES-**
- 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) 0-1-12 to 6-8-1, Interior(1) 6-8-1 to 10-5-2, Exterior(2) 10-5-2 to 14-8-1, Interior(1) 14-8-1 to 20-0-0 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
  - 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.
  - 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) 6, 10.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



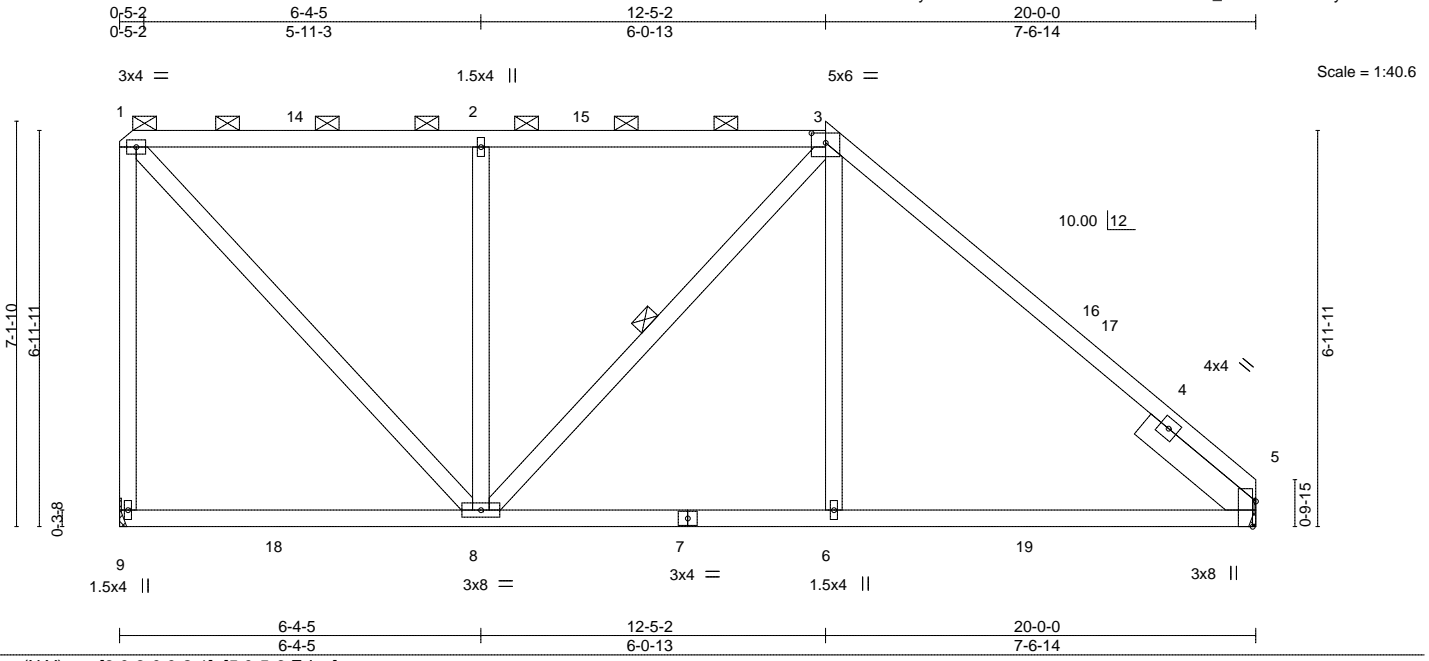
December 21, 2018

Job 1621632	Truss H7	Truss Type Hip	Qty 1	Ply 1	STURTZ HOMES-ROLLINS ROOF	E12546432
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Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:46 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawyWRuY-sLfl5nNV1dQC7u2hQF5?smu\_wt?zwJLfYdkf1y71eV



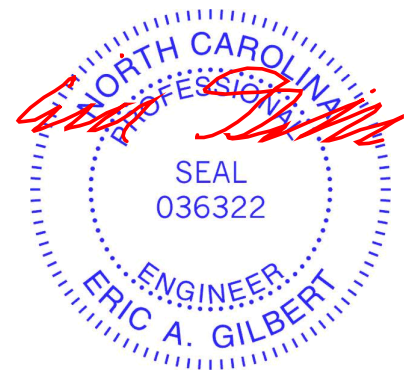
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.77	Vert(LL)	0.13	6-12	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.55	Vert(CT)	-0.15	6-12	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.38	Horz(CT)	0.04	5	n/a		
BCDL 10.0	Code IBC2015/TPI2014		Matrix-MS						
								Weight: 124 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-5-11 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-3.
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 3-8
SLIDER Right 2x6 SP No.2 2-6-0	

**REACTIONS.** (lb/size) 5=794/Mechanical, 9=794/Mechanical  
 Max Horz 9=-210(LC 10)  
 Max Uplift 5=-16(LC 13), 9=-104(LC 8)  
 Max Grav 5=816(LC 2), 9=832(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-555/130, 2-3=-556/131, 3-5=-869/114, 1-9=-736/136  
 BOT CHORD 6-8=0/633, 5-6=0/639  
 WEBS 1-8=-116/795, 2-8=-435/157, 3-6=0/343

- NOTES-**
- 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) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 12-5-2, Exterior(2) 12-5-2 to 16-8-1, Interior(1) 16-8-1 to 20-0-0 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
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 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) Refer to girder(s) for truss to truss connections.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 9=104.
  - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



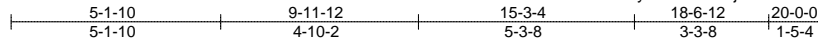
December 21, 2018

Job 1621632	Truss H8	Truss Type Roof Special	Qty 1	Ply 1	STURTZ HOMES-ROLLINS ROOF Job Reference (optional)	E12546433
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Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:47 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawyWRuY-KYCjI7O7oxY3k2duzzGKY3l8FKHQiOZUuCNHCTy71eU



4x4 =

Scale = 1:56.4

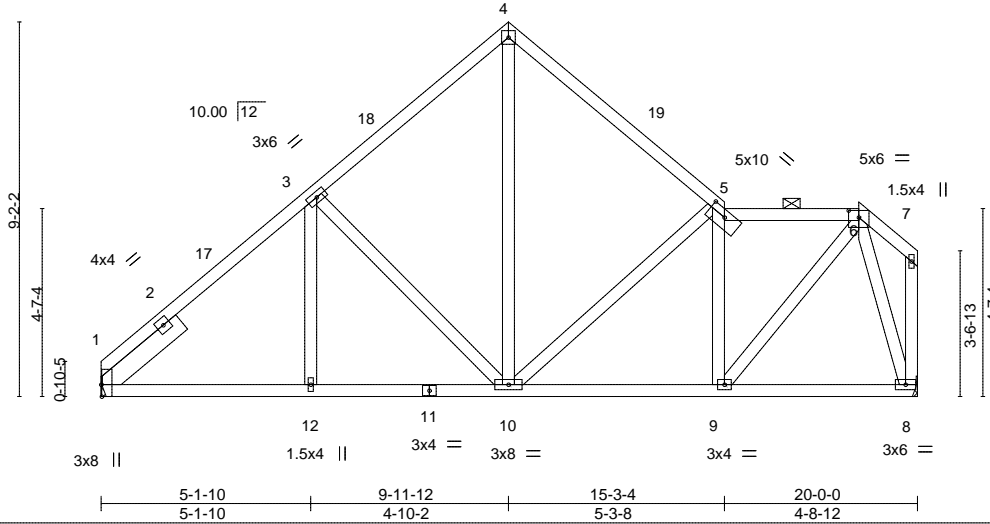


Plate Offsets (X,Y)--	[1:0-3-8,Edge], [5:0-5-0,0-2-0], [6:0-3-0,0-2-1]
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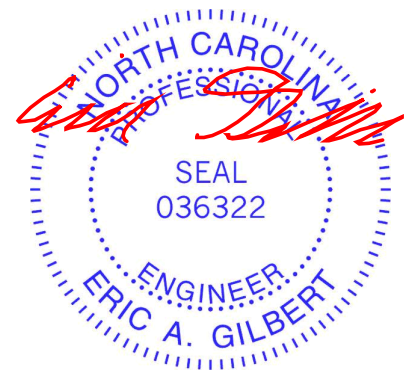
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.41	Vert(LL)	-0.02	10	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.28	Vert(CT)	-0.05	9-10	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.32	Horz(CT)	0.02	8	n/a		
BCDL 10.0	Code IBC2015/TPI2014		Matrix-MS						
								Weight: 138 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.): 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	
SLIDER Left 2x6 SP No.2 2-6-0	

**REACTIONS.** (lb/size) 1=794/Mechanical, 8=794/Mechanical  
 Max Horz 1=219(LC 11)  
 Max Uplift 1=-25(LC 12), 8=-37(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-3=-910/91, 3-4=-694/144, 4-5=-705/126, 5-6=-687/95  
 BOT CHORD 1-12=-112/693, 10-12=-112/693, 9-10=-84/670  
 WEBS 3-10=-314/156, 4-10=-68/495, 5-10=-285/98, 5-9=-489/107, 6-9=-52/754, 6-8=-740/104

- NOTES-**
- 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) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 9-11-12, Exterior(2) 9-11-12 to 12-11-12, Interior(1) 12-11-12 to 18-6-12, Exterior(2) 18-6-12 to 19-10-4 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
  - 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.
  - 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) 1, 8.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 21, 2018

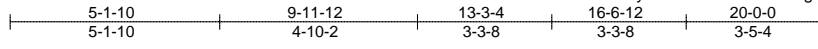
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job 1621632	Truss H9	Truss Type Roof Special	Qty 1	Ply 1	STURTZ HOMES-ROLLINS ROOF Job Reference (optional)	E12546434
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Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:48 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawyWRuY-okm5WTOlZEgwMCC4XgoZ5HrLGjXRpje7s6qkwy71eT



4x4 =

Scale = 1:56.4

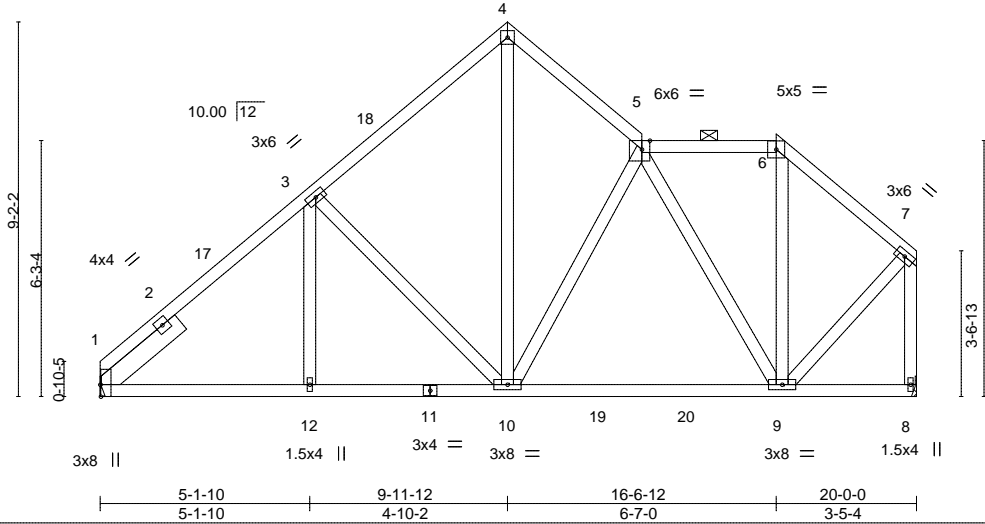


Plate Offsets (X,Y)--	[1:0-3-8,Edge], [5:0-2-5,Edge]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.27	Vert(LL)	-0.06	9-10	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.42	Vert(CT)	-0.11	9-10	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.39	Horz(CT)	0.02	8	n/a	n/a		
BCDL 10.0	Code IBC2015/TPI2014		Matrix-MS						Weight: 142 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.): 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	
SLIDER Left 2x6 SP No.2 2-6-0	

**REACTIONS.** (lb/size) 1=794/Mechanical, 8=794/Mechanical  
 Max Horz 1=219(LC 11)  
 Max Uplift 1=25(LC 12), 8=37(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-3=-908/100, 3-4=-698/150, 4-5=-663/147, 5-6=-368/105, 6-7=-535/96, 7-8=-779/77  
 BOT CHORD 1-12=-111/713, 10-12=-111/713, 9-10=-81/583  
 WEBS 3-10=-314/161, 4-10=-111/551, 5-10=-255/129, 5-9=-419/62, 7-9=-27/536

- NOTES-**
- 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) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 9-11-12, Exterior(2) 9-11-12 to 13-3-4, Interior(1) 13-3-4 to 16-6-12, Exterior(2) 16-6-12 to 19-10-4 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
  - 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.
  - 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) 1, 8.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 21, 2018

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>818 Soundside Road Edenton, NC 27932</p>
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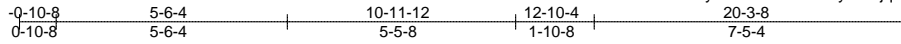


Job 1621632	Truss H11	Truss Type Hip	Qty 1	Ply 1	STURTZ HOMES-ROLLINS ROOF	E12546436
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Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:26 2018 Page 1

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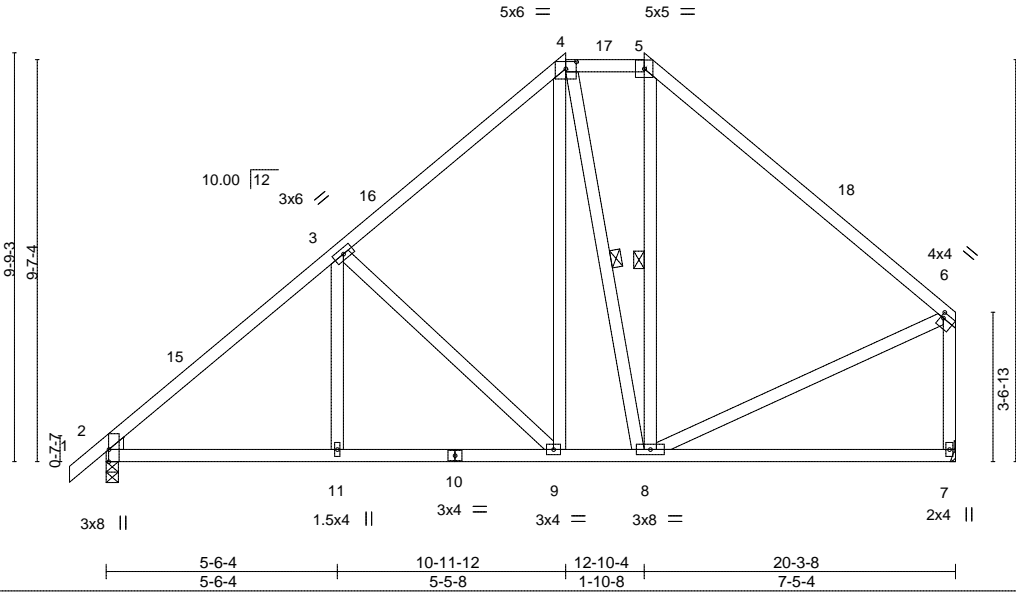


Plate Offsets (X,Y)--	[2:0-3-8,Edge], [2:0-0-10,0-3-9], [2:0-0-5,0-0-6], [4:0-3-0,0-2-1], [6:0-0-12,0-1-8]
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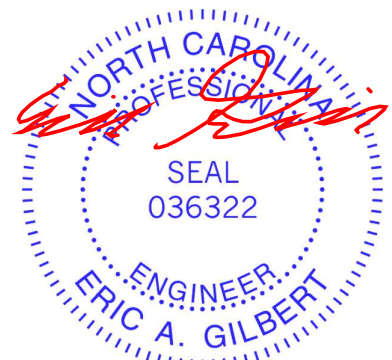
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.85	Vert(LL) -0.07 7-8 >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.43	Vert(CT) -0.15 7-8 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.38	Horz(CT) 0.01 7 n/a n/a		
BCDL 10.0	Code IBC2015/TPI2014	Matrix-MS		Weight: 145 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.
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 4-8, 5-8
WEDGE	
Left: 2x4 SP No.3	

**REACTIONS.** (lb/size) 2=859/0-3-8, 7=805/Mechanical  
 Max Horz 2=242(LC 11)  
 Max Uplift 2=-49(LC 12), 7=-28(LC 12)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1003/91, 3-4=-687/155, 4-5=-462/161, 5-6=-686/117, 6-7=-738/103  
 BOT CHORD 2-11=-119/736, 9-11=-119/736, 8-9=-41/447  
 WEBS 3-9=-389/165, 4-9=-78/298, 6-8=-13/408

- NOTES-**
- 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; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-11-12, Exterior(2) 10-11-12 to 17-1-3, Interior(1) 17-1-3 to 20-1-12 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) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 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.
  - 6) Refer to girder(s) for truss to truss connections.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7.
  - 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
  - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 21, 2018

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job 1621632	Truss H12	Truss Type Hip	Qty 1	Ply 1	STURTZ HOMES-ROLLINS ROOF	E12546437
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Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:27 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawyWRuY-wh?96H8aWo1uLz52pmweksThMGOD0MSYI4XDUEy71eo

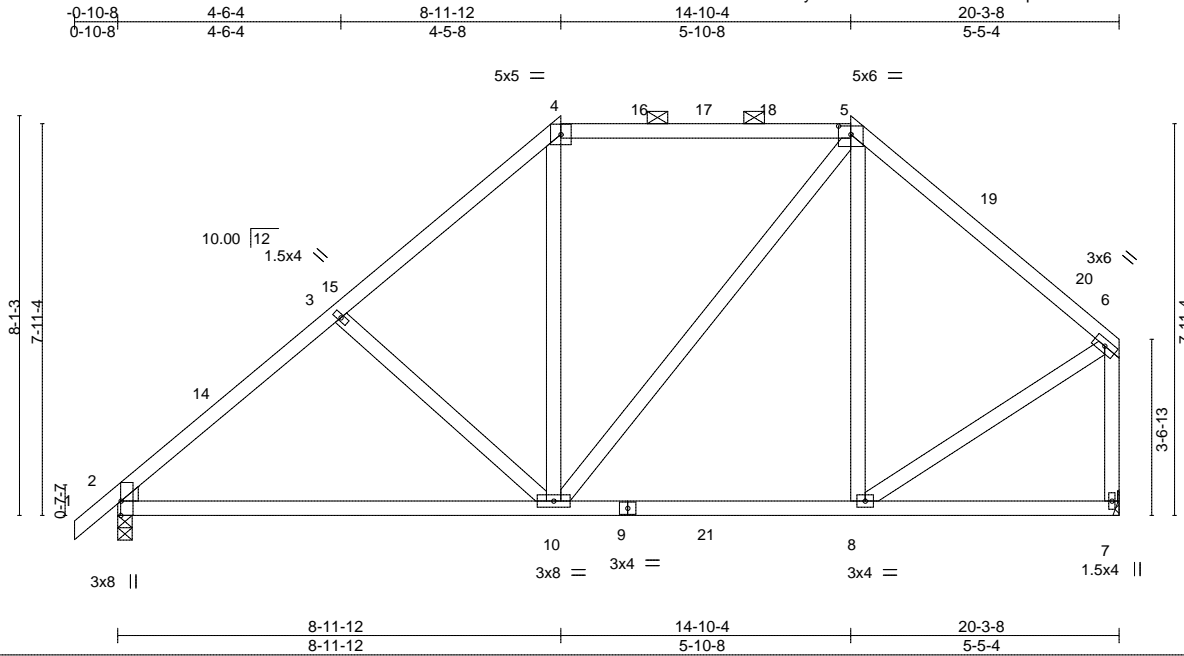


Plate Offsets (X, Y)--	[2:0-3-8,Edge], [2:0-0-10,0-3-9], [2:0-0-5,0-0-6], [5:0-3-0,0-2-1]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.54	Vert(LL)	-0.11	10-13	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.57	Vert(CT)	-0.22	10-13	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.20	Horz(CT)	0.01	7	n/a		
BCDL 10.0	Code IBC2015/TPI2014		Matrix-MS					Weight: 127 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-9-9 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	
WEDGE	
Left: 2x4 SP No.3	

**REACTIONS.** (lb/size) 2=859/0-3-8, 7=805/Mechanical  
 Max Horz 2=207(LC 11)  
 Max Uplift 2=-59(LC 12), 7=-31(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-982/117, 3-4=-797/136, 4-5=-546/139, 5-6=-644/121, 6-7=-758/102  
 BOT CHORD 2-10=-154/726, 8-10=-52/428  
 WEBS 4-10=0/255, 6-8=-28/477

- NOTES-**
- 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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-11-12, Exterior(2) 8-11-12 to 13-2-11, Interior(1) 13-2-11 to 14-10-4, Exterior(2) 14-10-4 to 19-1-3, Interior(1) 19-1-3 to 20-1-12 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
  - 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.
  - 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.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



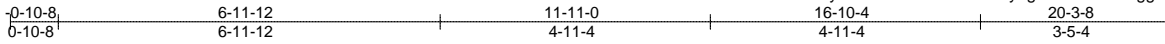
December 21, 2018

Job 1621632	Truss H13	Truss Type Hip	Qty 1	Ply 1	STURTZ HOMES-ROLLINS ROOF	E12546438
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Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:28 2018 Page 1

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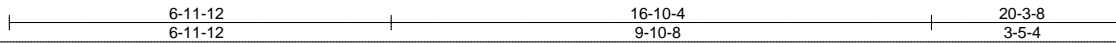
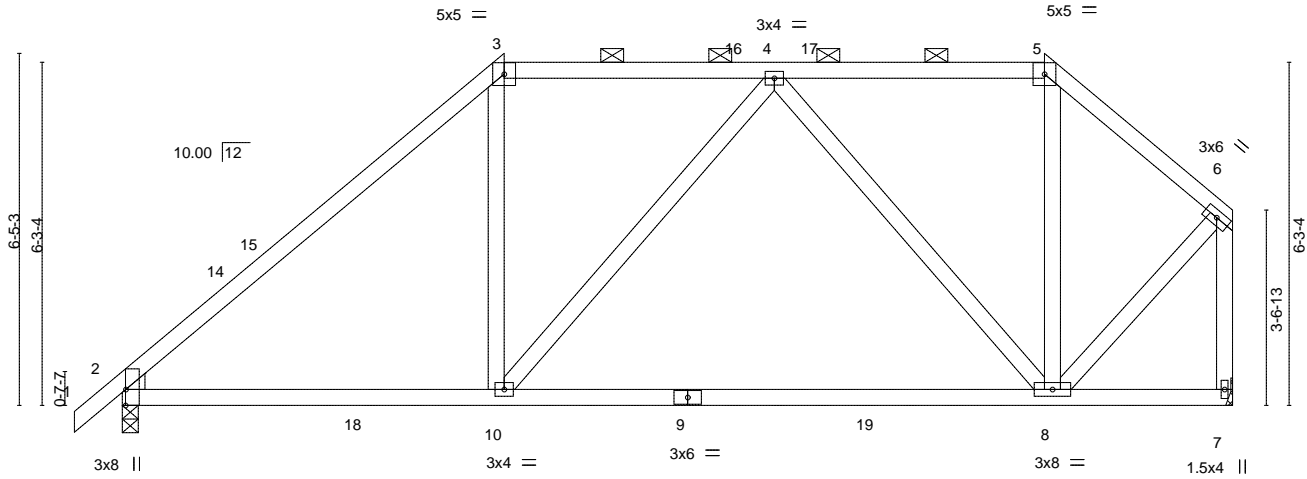


Plate Offsets (X,Y)-- [2:0-0-5,0-0-6], [2:0-0-10,0-3-9], [2:0-3-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.59	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.83	Vert(LL) -0.24 8-10 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.52	Vert(CT) -0.45 8-10 >538 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.02 7 n/a n/a		
	Code IBC2015/TPI2014			Weight: 118 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-9-8 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-5.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.** (lb/size) 2=859/0-3-8, 7=805/Mechanical  
 Max Horz 2=171(LC 11)  
 Max Uplift 2=-67(LC 12), 7=-39(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1003/96, 3-4=-682/129, 4-5=-403/102, 5-6=-567/91, 6-7=-835/64  
 BOT CHORD 2-10=-95/688, 8-10=-115/660  
 WEBS 3-10=0/332, 4-8=-435/122, 6-8=-17/596

**NOTES-**

- 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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-11-12, Exterior(2) 6-11-12 to 11-2-11, Interior(1) 11-2-11 to 16-10-4, Exterior(2) 16-10-4 to 20-1-12 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) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 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) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7.
- 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 21, 2018

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818 Soundside Road  
 Edenton, NC 27932

Job 1621632	Truss H14	Truss Type Hip	Qty 1	Ply 1	STURTZ HOMES-ROLLINS ROOF	E12546439
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Builders First Source,

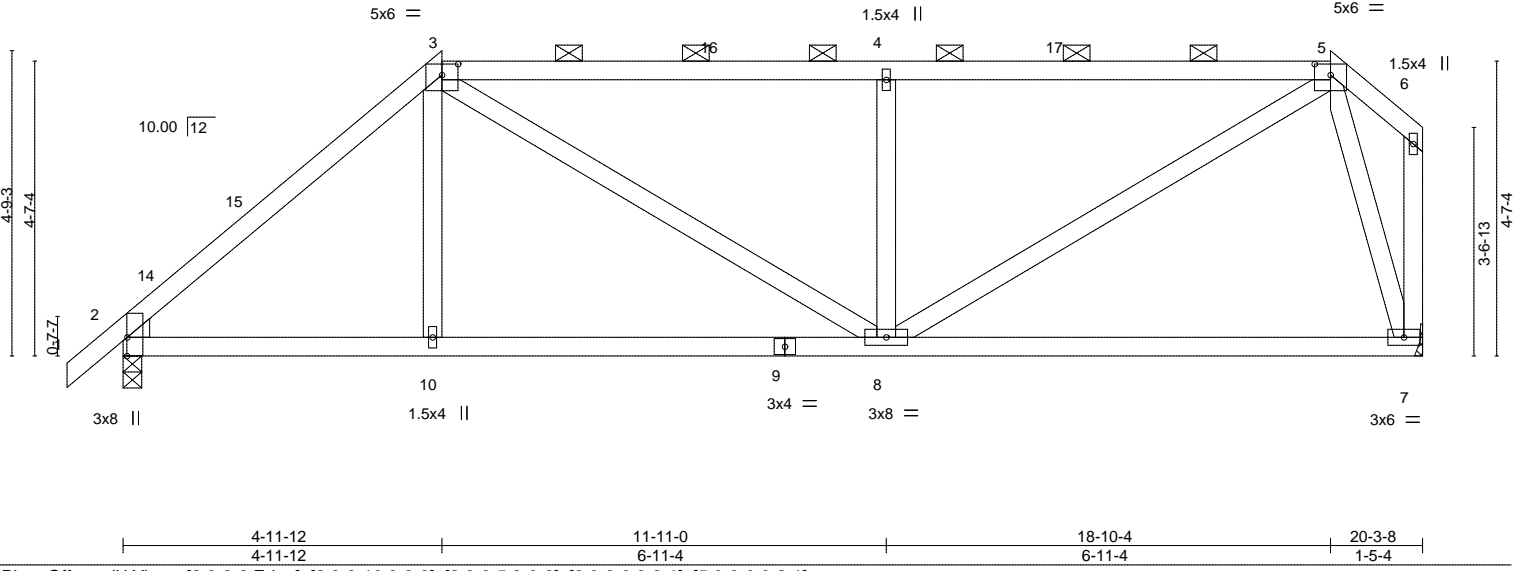
8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:29 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawYWRuY-s47wXzAq1PHcaHFQwBy6pHZ?V33FUEArI0OKZWY71em

Job Reference (optional)



Scale = 1:36.0



<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)	-0.12	7-8	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.60	Vert(CT)	-0.25	7-8	>975		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.38	Horz(CT)	0.02	7	n/a		
BCDL 10.0	Code IBC2015/TPI2014		Matrix-MS						
								Weight: 113 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-8-4 oc purlins, except end verticals, and 2-0-0 oc purlins (4-11-5 max.): 3-5.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 2=859/0-3-8, 7=805/Mechanical  
 Max Horz 2=136(LC 11)  
 Max Uplift 2=-73(LC 12), 7=-50(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1023/98, 3-4=-1006/128, 4-5=-1006/128  
 BOT CHORD 2-10=-128/723, 8-10=-130/720  
 WEBS 3-8=-104/393, 4-8=-493/173, 5-8=-94/908, 5-7=-775/173

**NOTES-**

- 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; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-11-12, Exterior(2) 4-11-12 to 9-2-11, Interior(1) 9-2-11 to 18-10-4, Exterior(2) 18-10-4 to 20-1-12 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) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 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.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7.
- 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 21, 2018

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate

818 Soundside Road  
 Edenton, NC 27932

Job 1621632	Truss H14G	Truss Type Half Hip Girder	Qty 1	Ply 1	STURTZ HOMES-ROLLINS ROOF E12546440
Builders First Source,					Job Reference (optional)

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:30 2018 Page 1  
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Scale = 1:35.5

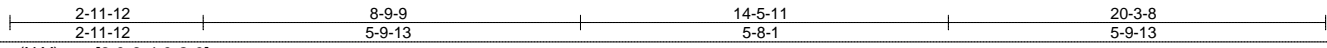
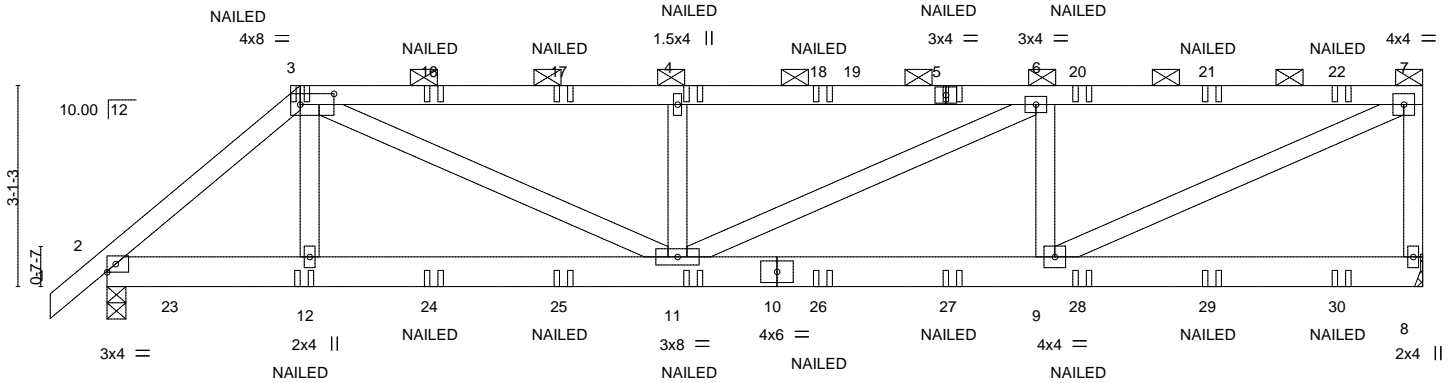


Plate Offsets (X,Y)-- [3:0-6-4,0-2-0]

<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 0.62	Vert(LL)	0.09	9-11	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.38	Vert(CT)	-0.14	9-11	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.67	Horz(CT)	0.02	8	n/a		
BCDL 10.0	Code IBC2015/TPI2014		Matrix-MS						
								Weight: 121 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-1-1 oc purlins, except end verticals, and 2-0-0 oc purlins (3-7-14 max.): 3-7.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(lb/size) 8=951/Mechanical, 2=1058/0-3-8  
 Max Horz 2=96(LC 22)  
 Max Uplift 8=304(LC 5), 2=289(LC 8)

**FORCES.**

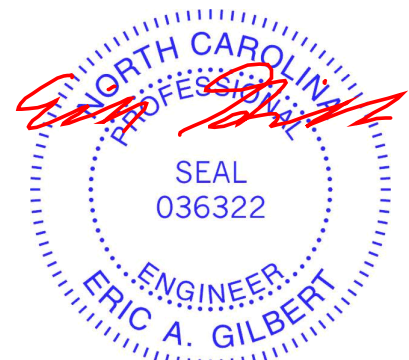
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1282/375, 3-4=-1810/573, 4-6=-1810/573, 6-7=-1506/482, 7-8=-869/312  
 BOT CHORD 2-12=-333/943, 11-12=-332/950, 9-11=-503/1506  
 WEBS 3-11=-341/949, 4-11=-398/221, 6-11=-138/336, 6-9=-537/267, 7-9=-516/1621

**NOTES-**

- 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; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 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.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=304.
- 7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 85 lb down and 37 lb up at 1-0-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=-60, 3-7=-60, 8-13=-20



December 21, 2018

Continued on page 2

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

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818 Soundside Road  
 Edenton, NC 27932

Job 1621632	Truss H14G	Truss Type Half Hip Girder	Qty 1	Ply 1	STURTZ HOMES-ROLLINS ROOF Job Reference (optional)	E12546440
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Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:30 2018 Page 2  
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**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 3=-12(B) 5=-12(B) 12=-17(B) 11=-17(B) 4=-12(B) 16=-12(B) 17=-12(B) 18=-12(B) 20=-12(B) 21=-12(B) 22=-12(B) 23=-85 24=-17(B) 25=-17(B) 26=-17(B)  
27=-17(B) 28=-17(B) 29=-17(B) 30=-17(B)



December 21, 2018

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



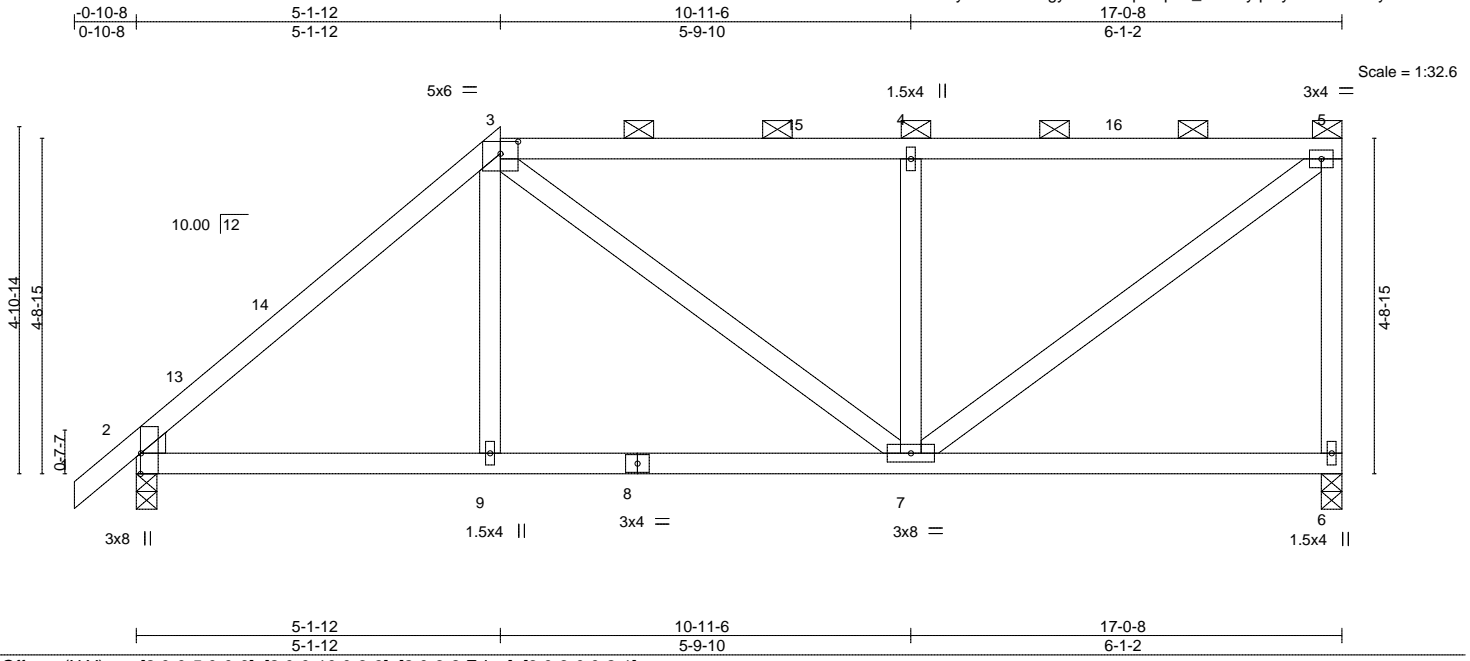
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES-ROLLINS ROOF	E12546441
1621632	H15	Half Hip	1	1	Job Reference (optional)	

Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:31 2018 Page 1

ID:04ssQVnCuCZBoXusHbZGawyWRuY-oTFgyfB4Z0XKpbOp1b\_aueOytpOy8T7CVrRdPy71ek



<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 0.50	Vert(LL)	-0.03	6-7	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.36	Vert(CT)	-0.07	6-7	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.32	Horz(CT)	0.01	6	n/a	n/a		
BCDL 10.0	Code IBC2015/TPI2014		Matrix-MS						Weight: 95 lb	FT = 20%

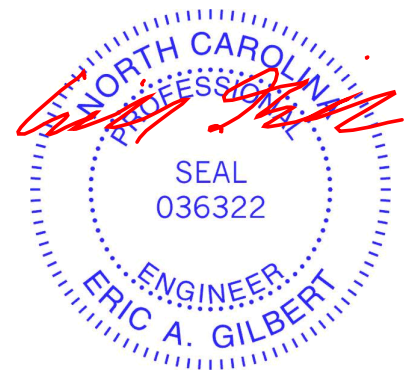
**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
WEDGE  
Left: 2x4 SP No.3

**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.): 3-5.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 6=674/0-3-8, 2=730/0-3-8  
Max Horz 2=150(LC 11)  
Max Uplift 6=-83(LC 9), 2=-22(LC 12)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-823/89, 3-4=-648/111, 4-5=-646/110, 5-6=-621/110  
BOT CHORD 2-9=-154/565, 7-9=-155/561  
WEBS 4-7=-416/147, 5-7=-100/784

- NOTES-**
- 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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-1-12, Exterior(2) 5-1-12 to 9-4-11, Interior(1) 9-4-11 to 16-10-12 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
  - 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.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6 and 2. This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 21, 2018



Job 1621632	Truss H15G	Truss Type Half Hip Girder	Qty 1	Ply 1	STURTZ HOMES-ROLLINS ROOF E12546442
Builders First Source,					Job Reference (optional)

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:32 2018 Page 1  
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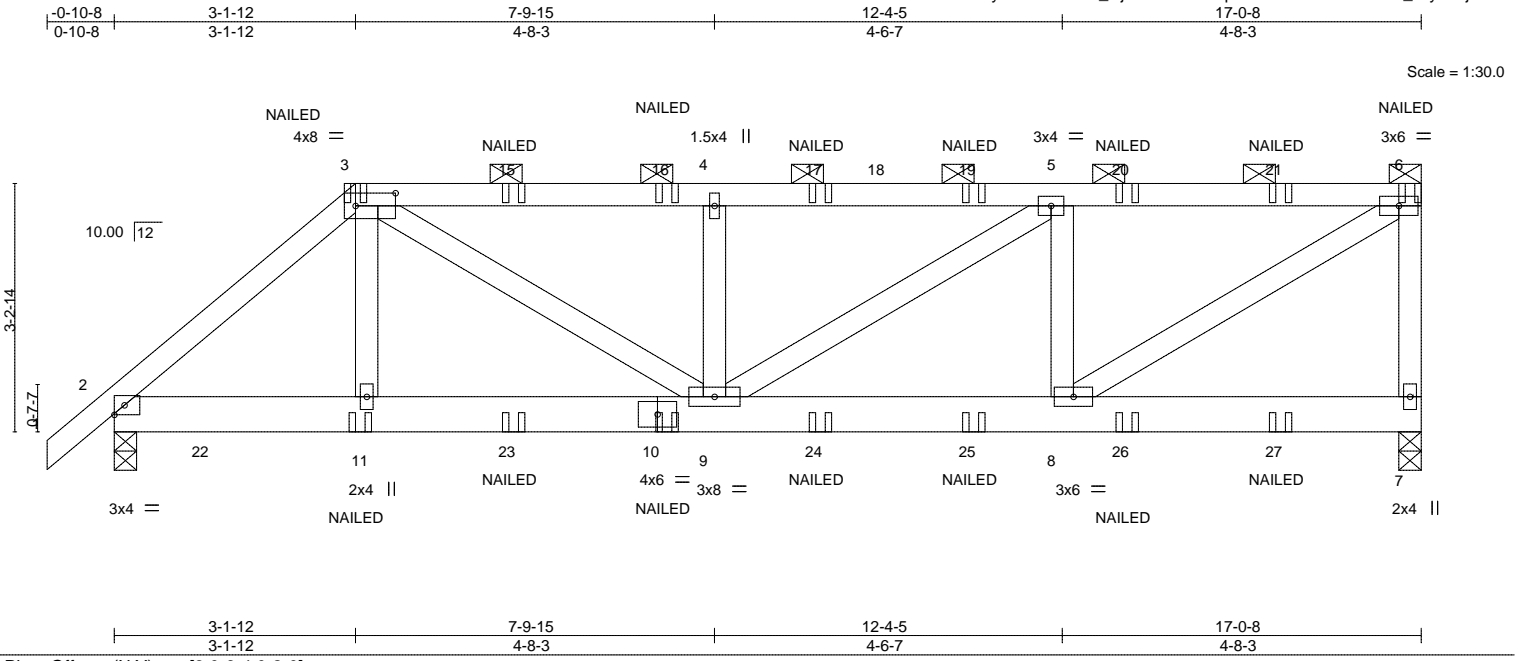


Plate Offsets (X,Y)--	[3:0-6,4,0-2:0]									
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15		TC 0.34	Vert(LL) 0.04	0.04	9	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15		BC 0.25	Vert(CT) -0.07	-0.07	8-9	>999	180		
BCLL 0.0 *	Rep Stress Incr NO		WB 0.48	Horz(CT) 0.01	0.01	7	n/a	n/a		
BCDL 10.0	Code IBC2015/TPI2014		Matrix-MS							
									Weight: 105 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-7-12 oc purlins, except end verticals, and 2-0-0 oc purlins (4-10-1 max.): 3-6.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	

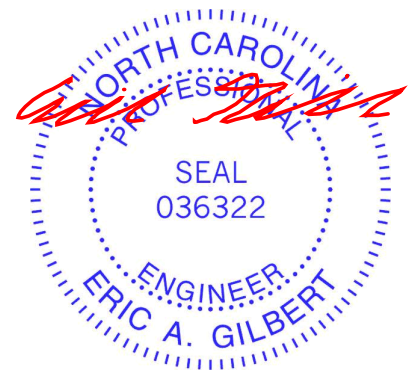
**REACTIONS.** (lb/size) 7=865/0-3-8, 2=930/0-3-8  
 Max Horz 2=100(LC 22)  
 Max Uplift 7=229(LC 5), 2=190(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1077/230, 3-4=-1267/294, 4-5=-1267/294, 5-6=-1013/236, 6-7=-803/250  
 BOT CHORD 2-11=-217/780, 9-11=-214/787, 8-9=-256/1013  
 WEBS 3-9=-166/563, 4-9=-330/185, 5-9=-89/300, 5-8=-485/224, 6-8=-269/1167

- NOTES-**
- 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; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Provide adequate drainage to prevent water ponding.
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 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.
  - 5) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 7 and 2. This connection is for uplift only and does not consider lateral forces.
  - 6) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 7) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
  - 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 92 lb down and 38 lb up at 1-2-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=-60, 3-6=-60, 7-12=-20  
 Concentrated Loads (lb)  
 Vert: 3=-16(F) 10=-20(F) 11=-20(F) 6=-47(F) 15=-16(F) 16=-16(F) 17=-16(F) 19=-16(F) 20=-16(F) 21=-16(F) 22=-92  
 23=-20(F) 24=-20(F) 25=-20(F) 26=-20(F) 27=-20(F)



December 21, 2018



Job 1621632	Truss H16G	Truss Type Half Hip Girder	Qty 1	Ply 2	STURTZ HOMES-ROLLINS ROOF	E12546444
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Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:34 2018 Page 1

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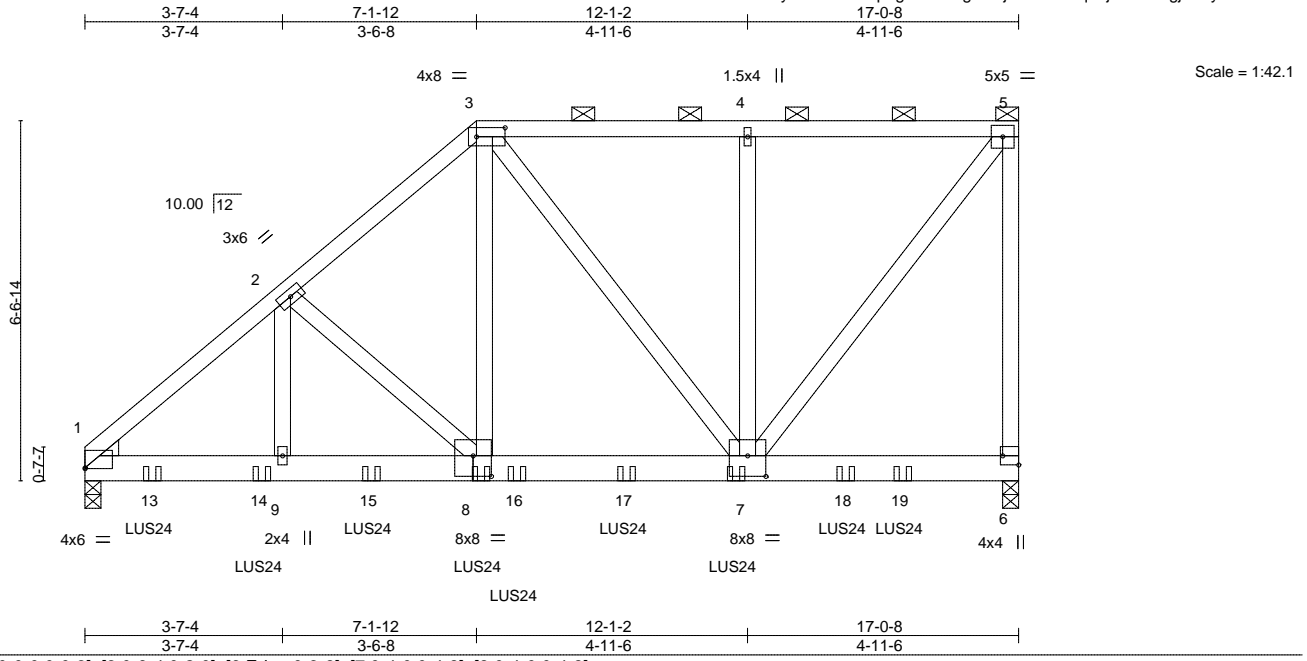


Plate Offsets (X,Y)--	[1:0-0-0,0-0-3], [3:0-6-4,0-2-0], [6:Edge,0-3-8], [7:0-4-0,0-4-8], [8:0-4-0,0-4-8]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.82	Vert(LL)	-0.05	7-8	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.80	Vert(CT)	-0.11	7-8	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.89	Horz(CT)	-0.02	1	n/a		
BCDL 10.0	Code IBC2015/TPI2014		Matrix-MS					Weight: 256 lb	FT = 20%

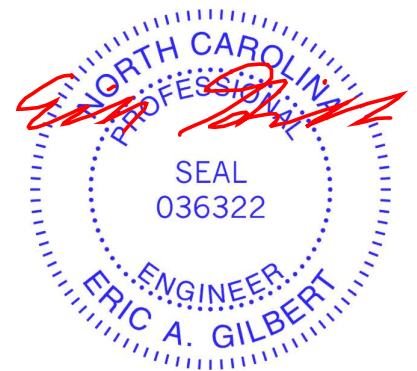
<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-5-14 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	
WEDGE	
Left: 2x4 SP No.3	

**REACTIONS.** (lb/size) 1=4195/0-3-8, 6=4157/0-3-8  
 Max Horz 6=197(LC 7)  
 Max Uplift 1=-281(LC 8), 6=-372(LC 5)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-5187/380, 2-3=-4164/384, 3-4=-2666/271, 4-5=-2666/271, 5-6=-3536/339  
 BOT CHORD 1-9=-232/3926, 8-9=-232/3926, 7-8=-205/3116  
 WEBS 2-9=-10/1160, 2-8=-1060/136, 3-8=-223/2963, 3-7=-720/90, 4-7=-317/136, 5-7=-382/4308

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-8-0 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; 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
- 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.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1. This connection is for uplift only and does not consider lateral forces.
- Two HTS20 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6. This connection is for uplift only and does not consider lateral forces.
- 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 LUS24 (4-10d Girder, 2-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-2-12 from the left end to 14-11-2 to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.



December 21, 2018

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

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road  
 Edenton, NC 27932

Job 1621632	Truss H16G	Truss Type Half Hip Girder	Qty 1	Ply 2	STURTZ HOMES-ROLLINS ROOF Job Reference (optional)	E12546444
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Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:34 2018 Page 2  
ID:o4ssQVnCuCZBoXusHbZGawyWRuY-D1wpagDzswvg27OjkYHWKGq54jJ9MLavgj5Eky71eh

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-3=-60, 3-5=-60, 6-10=-20

Concentrated Loads (lb)

Vert: 8=-780(B) 7=-783(B) 13=-774(B) 14=-774(B) 15=-774(B) 16=-774(B) 17=-774(B) 18=-783(B) 19=-783(B)



December 21, 2018

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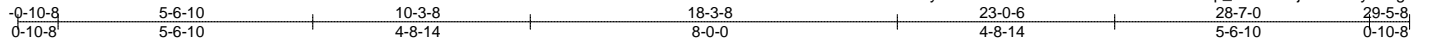
818 Soundside Road  
Edenton, NC 27932

Job 1621632	Truss H17	Truss Type Hip	Qty 1	Ply 1	STURTZ HOMES-ROLLINS ROOF	E12546445
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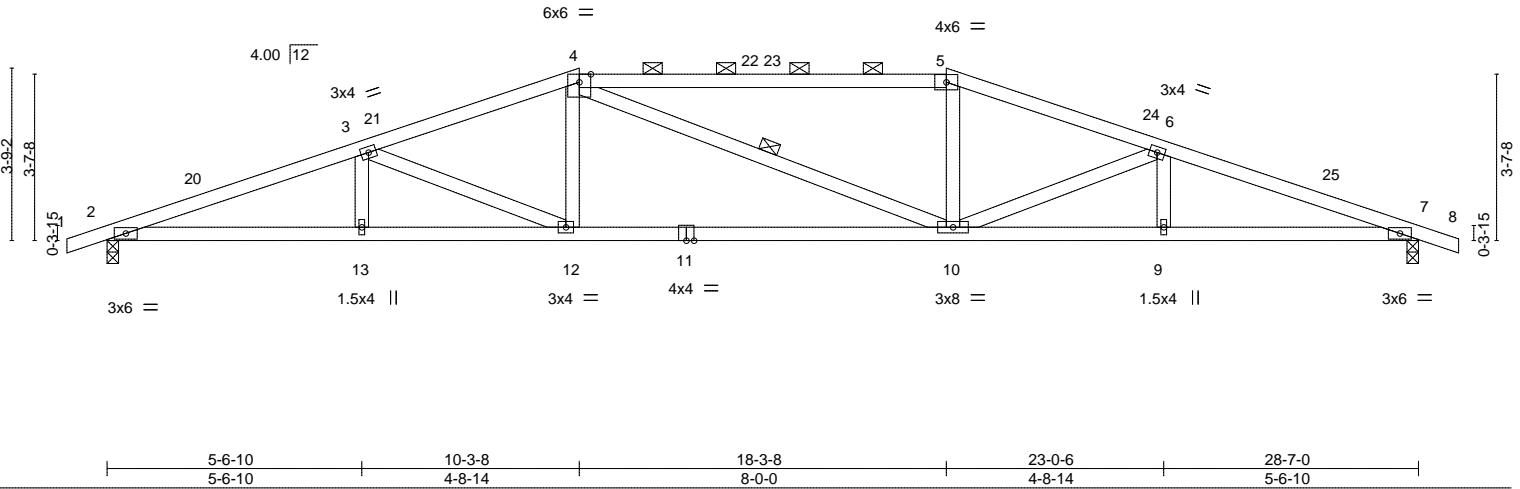
Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:35 2018 Page 1

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Scale = 1:50.2



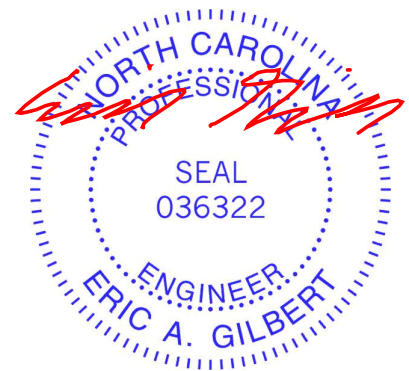
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.87	Vert(LL)	-0.19 10-12	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.86	Vert(CT)	-0.46 10-12	>742	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.25	Horz(CT)	0.11 7	n/a	n/a		
BCDL 10.0	Code IBC2015/TPI2014		Matrix-MS					Weight: 130 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except* 4-5: 2x4 SP DSS	TOP CHORD Structural wood sheathing directly applied or 2-11-2 oc purlins, except
BOT CHORD 2x4 SP No.2	2-0-0 oc purlins (2-2-0 max.): 4-5.
WEBS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
	WEBS 1 Row at midpt 4-10

**REACTIONS.** (lb/size) 2=1196/0-3-0, 7=1196/0-3-0  
 Max Horz 2=-52(LC 13)  
 Max Uplift 2=-134(LC 8), 7=-134(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2938/277, 3-4=-2446/228, 4-5=-2280/238, 5-6=-2448/228, 6-7=-2937/277  
 BOT CHORD 2-13=-250/2758, 12-13=-250/2758, 10-12=-156/2278, 9-10=-207/2757, 7-9=-207/2757  
 WEBS 3-12=-514/115, 4-12=0/424, 5-10=0/424, 6-10=-511/118

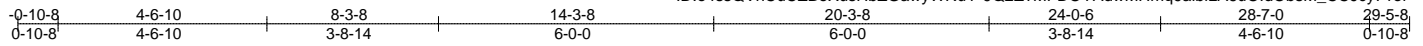
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-3-8, Exterior(2) 10-3-8 to 14-6-7, Interior(1) 14-6-7 to 18-3-8, Exterior(2) 18-3-8 to 22-6-7, Interior(1) 22-6-7 to 29-5-8 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
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 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.
  - 6) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 7. This connection is for uplift only and does not consider lateral forces.
  - 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



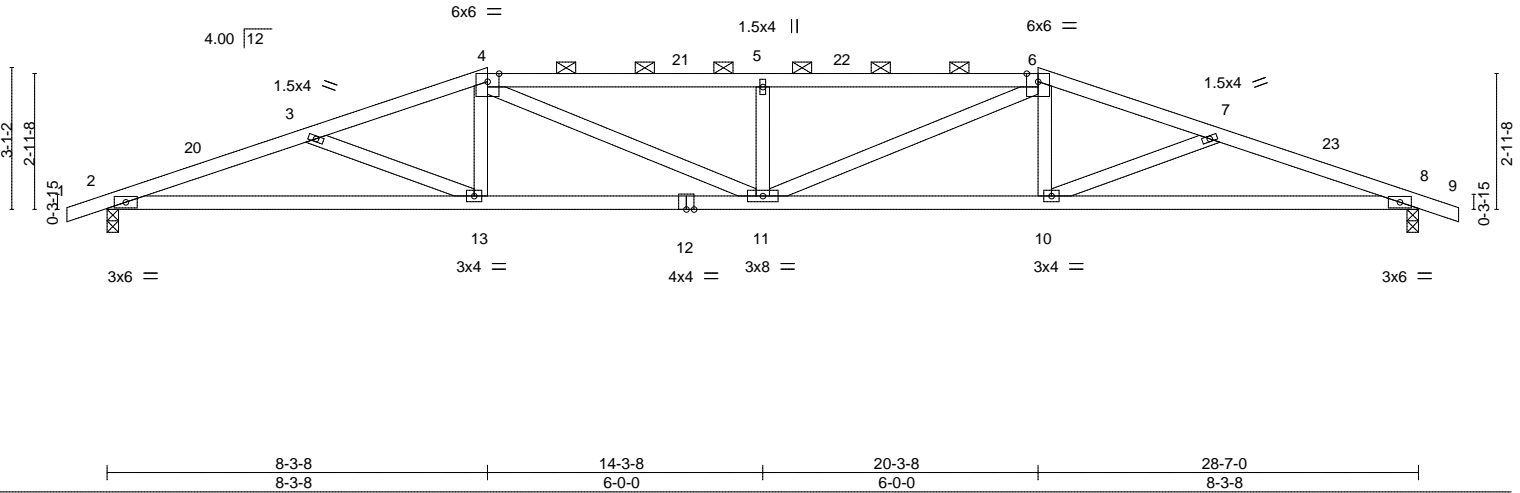
December 21, 2018

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>818 Soundside Road Edenton, NC 27932</p>
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Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES-ROLLINS ROOF	E12546446
1621632	H18	Hip	1	1		
Builders First Source,						8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:36 2018 Page 1
Job Reference (optional)						ID:o4ssQVnCuCZBoXusHbZGawYWRuY-9Q2Z?MFD0YAdwMHmq9albILA6uOldObsM_CCJcy71ef



Scale = 1:50.2



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 0.79	Vert(LL)	-0.24	11	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.89	Vert(CT)	-0.48	11	>717		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.33	Horz(CT)	0.12	8	n/a		
BCDL 10.0	Code IBC2015/TPI2014		Matrix-MS						
								Weight: 131 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 3-0-14 oc purlins, except  
2-0-0 oc purlins (2-6-3 max.): 4-6.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 2=1196/0-3-0, 8=1196/0-3-0  
Max Horz 2=-42(LC 17)  
Max Uplift 2=-142(LC 8), 8=-142(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2977/331, 3-4=-2685/262, 4-5=-3138/326, 5-6=-3138/326, 6-7=-2685/262,  
7-8=-2977/332  
BOT CHORD 2-13=-299/2807, 11-13=-201/2513, 10-11=-165/2513, 8-10=-264/2807  
WEBS 3-13=-309/114, 4-13=0/347, 4-11=-132/802, 5-11=-464/149, 6-11=-132/802, 6-10=0/347,  
7-10=-309/115

- NOTES-**
- 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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-3-8, Exterior(2) 8-3-8 to 12-6-7, Interior(1) 12-6-7 to 20-3-8, Exterior(2) 20-3-8 to 24-3-0, Interior(1) 24-3-0 to 29-5-8 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
  - 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.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 8. This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



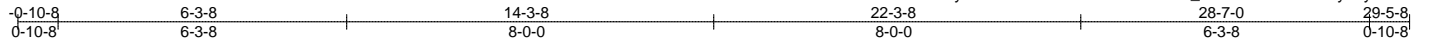
December 21, 2018

Job 1621632	Truss H19	Truss Type Hip	Qty 1	Ply 1	STURTZ HOMES-ROLLINS ROOF	E12546447
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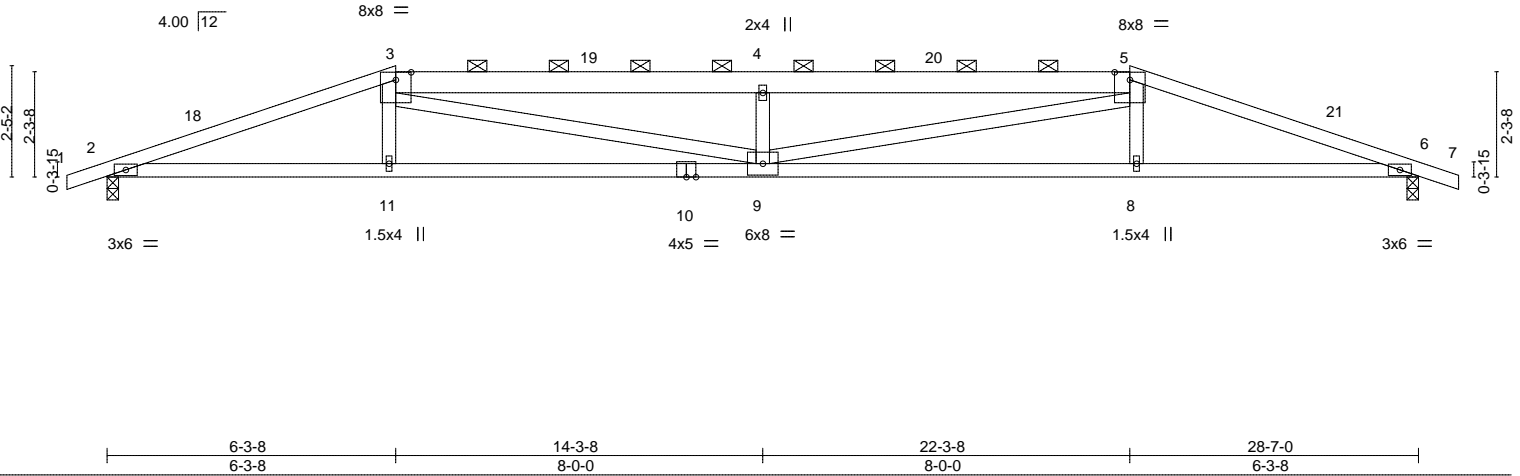
Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:37 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawyWRuY-dcccCiGr9slUXWszOs5\_8zuMslkWMiW0beylr2y71ee



Scale = 1:50.2



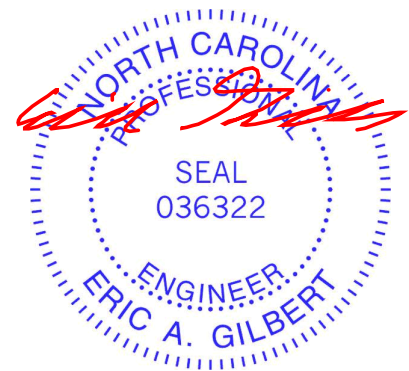
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.73	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.89	Vert(LL) -0.33 9 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.74	Vert(CT) -0.67 9-11 >512 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.12 6 n/a n/a		
	Code IBC2015/TPI2014			Weight: 134 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except* 3-5: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-6-5 oc purlins, except 2-0-0 oc purlins (2-7-15 max.): 3-5.
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) 2=1196/0-3-0, 6=1196/0-3-0  
 Max Horz 2=-31(LC 17)  
 Max Uplift 2=-148(LC 8), 6=-148(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3013/301, 3-4=-4399/469, 4-5=-4399/469, 5-6=-3013/301  
 BOT CHORD 2-11=-255/2824, 9-11=-261/2811, 8-9=-232/2811, 6-8=-227/2824  
 WEBS 3-11=0/302, 3-9=-235/1779, 4-9=-666/206, 5-9=-235/1779, 5-8=0/302

- NOTES-**
- 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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-3-8, Exterior(2) 6-3-8 to 10-6-7, Interior(1) 10-6-7 to 22-3-8, Exterior(2) 22-3-8 to 26-6-7, Interior(1) 26-6-7 to 29-5-8 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
  - 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.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 21, 2018

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate

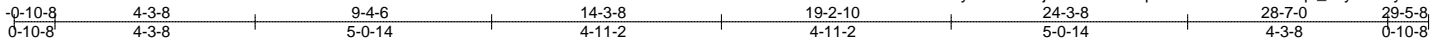
818 Soundside Road  
 Edenton, NC 27932

Job 1621632	Truss H19G	Truss Type Hip Girder	Qty 1	Ply 2	STURTZ HOMES-ROLLINS ROOF	E12546448
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Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:39 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawYWRuY-Z?jidOH6hTYBnpOLVH7SDNzhT5X9qh\_J2yRswxy71ec



Scale = 1:49.4

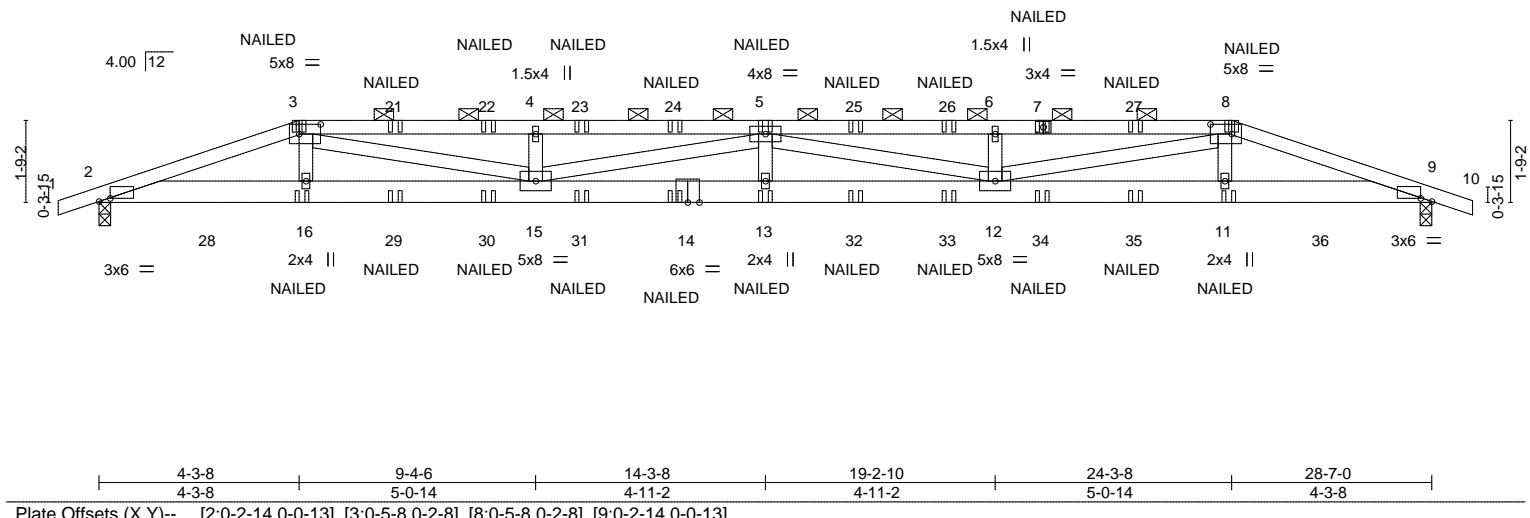


Plate Offsets (X, Y)-- [2:0-2-14,0-0-13], [3:0-5-8,0-2-8], [8:0-5-8,0-2-8], [9:0-2-14,0-0-13]

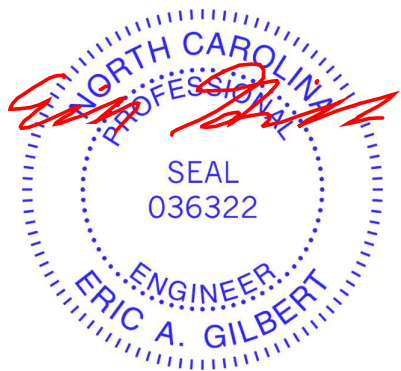
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.78	Vert(LL)	-0.38	13	>903	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.43	Vert(CT)	-0.76	13	>450		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.61	Horz(CT)	0.07	9	n/a		
BCDL 10.0	Code IBC2015/TPI2014		Matrix-MS						
								Weight: 297 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-7-13 oc purlins, except
BOT CHORD 2x6 SP DSS	2-0-0 oc purlins (3-9-3 max.); 3-8.
WEBS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 2=1799/0-3-0, 9=1800/0-3-0  
 Max Horz 2=25(LC 31)  
 Max Uplift 2=-199(LC 4), 9=-199(LC 5)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-4929/438, 3-4=-7481/652, 4-5=-7481/652, 5-6=-7486/649, 6-8=-7486/649, 8-9=-4931/438  
 BOT CHORD 2-16=-391/4650, 15-16=-387/4699, 13-15=-728/8958, 12-13=-728/8958, 11-12=-363/4701, 9-11=-367/4653  
 WEBS 3-16=0/465, 3-15=-257/2940, 4-15=-413/154, 5-15=-1557/152, 5-13=0/439, 5-12=-1552/153, 6-12=-413/154, 8-12=-256/2943, 8-11=0/465

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 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; TCDL=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
  - 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.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 9. This connection is for uplift only and does not consider lateral forces.
  - 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) 146 lb down and 38 lb up at 2-4-4, and 146 lb down and 38 lb up at 26-2-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



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

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932



Job 1621632	Truss H19G	Truss Type Hip Girder	Qty 1	Ply 2	STURTZ HOMES-ROLLINS ROOF Job Reference (optional)	E12546448
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Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:39 2018 Page 2  
ID:o4ssQVnCuCZBoXusHbZGawyWRuY-Z?jidOH6hTYBnp0LVH7SDNzhT5X9qh\_J2yRswxy71ec

**LOAD CASE(S)** Standard

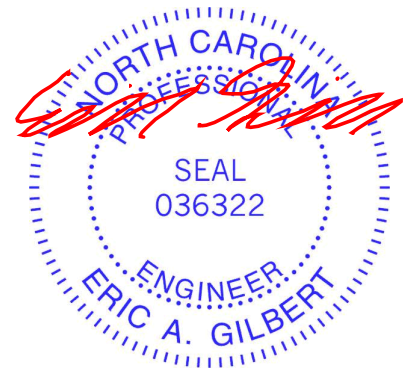
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-60, 3-8=-60, 8-10=-60, 2-9=-20

Concentrated Loads (lb)

Vert: 3=-47(B) 7=-47(B) 8=-47(B) 14=-37(B) 16=-37(B) 5=-47(B) 13=-37(B) 11=-37(B) 21=-47(B) 22=-47(B) 23=-47(B) 24=-47(B) 25=-47(B) 26=-47(B) 27=-47(B)  
28=-146 29=-37(B) 30=-37(B) 31=-37(B) 32=-37(B) 33=-37(B) 34=-37(B) 35=-37(B) 36=-146



December 21, 2018

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

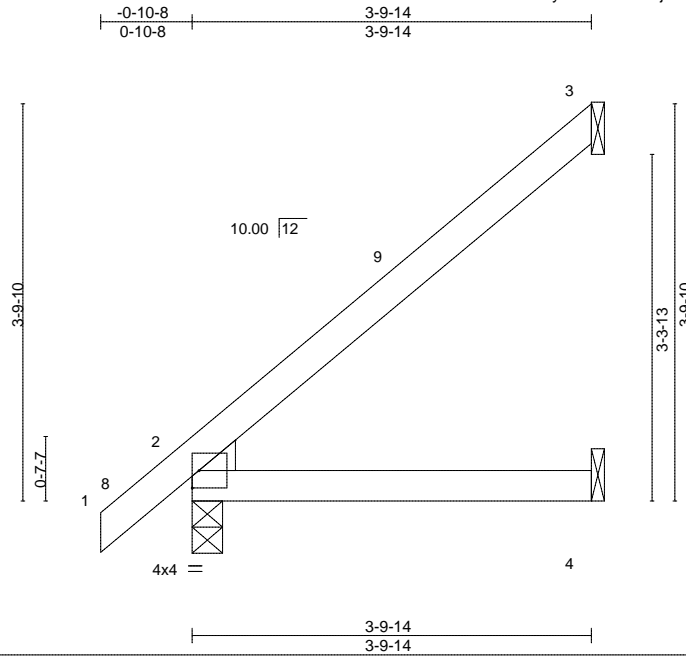
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road  
Edenton, NC 27932

Job 1621632	Truss J1	Truss Type Jack-Open	Qty 11	Ply 1	STURTZ HOMES-ROLLINS ROOF E12546449
Builders First Source,					Job Reference (optional)

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:49 2018 Page 1  
 ID:o4ssQVnCuCZBoXusHbZGawYWRuY-HwKtjoPNKYon\_Mng5NJodUOYD7?kAM\_nLWsOGMy71eS



Scale = 1:22.1

Plate Offsets (X,Y)--	[2:0-0-6,0-0-5], [2:0-3-9,0-0-10]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
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 0.16	Vert(LL) 0.02 4-7 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.02 4-7 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MP	Horz(CT) 0.01 3 n/a n/a		
	Code IBC2015/TPI2014			Weight: 16 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-9-14 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEDGE	
Left: 2x4 SP No.3	

**REACTIONS.** (lb/size) 3=95/Mechanical, 2=209/0-3-8, 4=49/Mechanical  
 Max Horz 2=124(LC 12)  
 Max Uplift 3=67(LC 12)  
 Max Grav 3=104(LC 19), 2=209(LC 1), 4=70(LC 3)

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

- NOTES-**
- 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 Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-9-2 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 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.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.



December 21, 2018

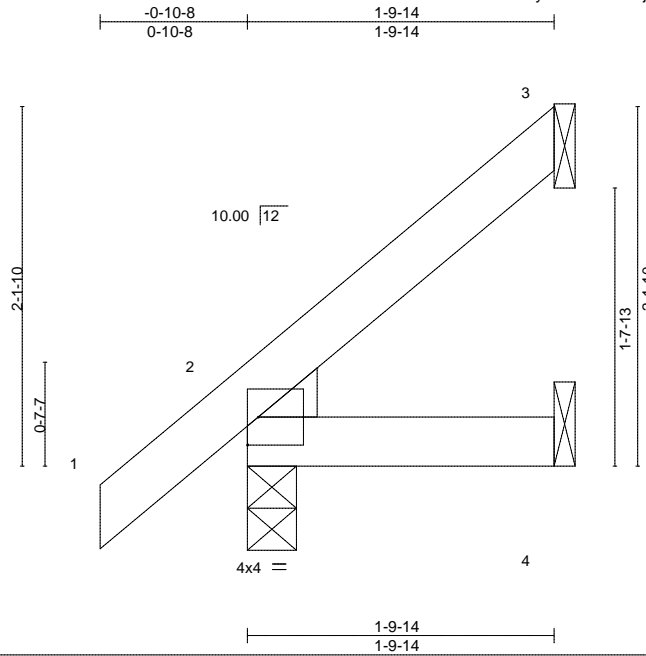
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>818 Soundside Road Edenton, NC 27932</p>
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Job 1621632	Truss J1A	Truss Type Jack-Open	Qty 2	Ply 1	STURTZ HOMES-ROLLINS ROOF	E12546450
					Job Reference (optional)	

Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:49 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawYWRuY-HwKTjoPNKYon\_MnG5NJodUOaK71cAM\_nLWsOGMy71eS



Scale = 1:13.7

Plate Offsets (X,Y)--	[2:0-0-6,0-0-5], [2:0-3-9,0-0-10]
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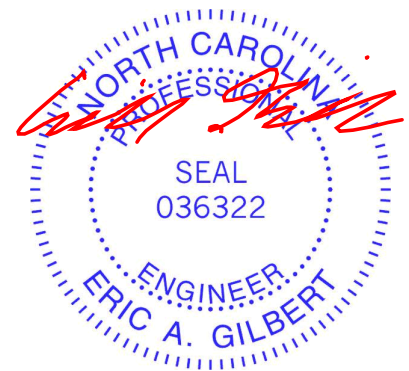
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.06	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(LL) 0.00 7 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Vert(CT) -0.00 7 >999 180		
BCDL 10.0	Code IBC2015/TPI2014	Matrix-MP	Horz(CT) 0.00 3 n/a n/a		
				Weight: 9 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 1-9-14 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEDGE	
Left: 2x4 SP No.3	

**REACTIONS.** (lb/size) 3=40/Mechanical, 2=138/0-3-8, 4=20/Mechanical  
 Max Horz 2=70(LC 12)  
 Max Uplift 3=30(LC 12), 4=2(LC 12)  
 Max Grav 3=45(LC 19), 2=138(LC 1), 4=32(LC 3)

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

- NOTES-**
- 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 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 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.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4.



December 21, 2018

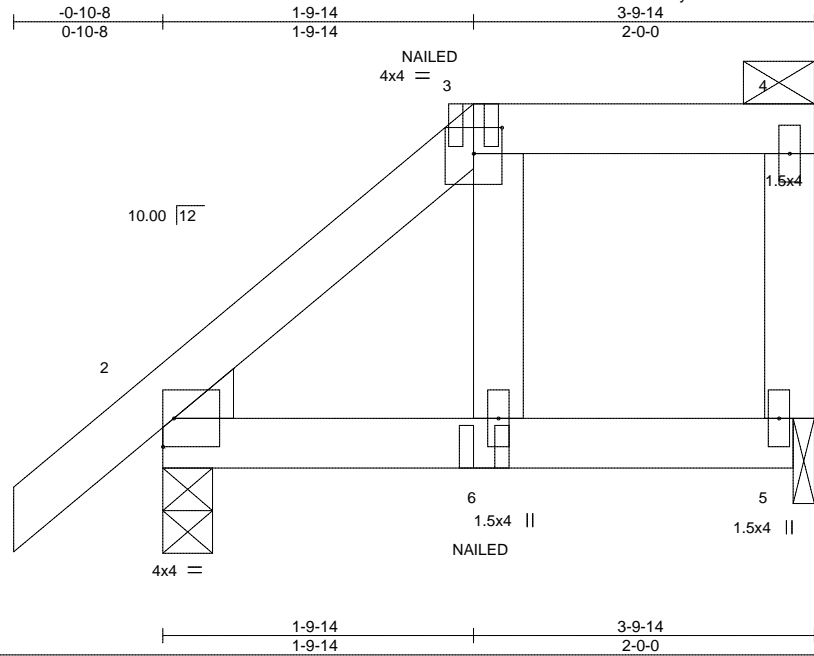
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job 1621632	Truss J1G	Truss Type Jack-Closed Girder	Qty 2	Ply 1	STURTZ HOMES-ROLLINS ROOF	E12546451
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Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:50 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawyWRuY-I6usx8Q?5sxbdWLTf5q1AiwkWXJsvptwa9bXooy71eR



Scale = 1:13.5

Plate Offsets (X,Y)--	[2:0-3-9,0-0-10], [2:0-0-6,0-0-5], [3:0-2-0,0-1-13]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.09	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.30	Vert(LL) 0.02 6 >999 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.02	Vert(CT) -0.03 6 >999 180		
BCDL 10.0	Code IBC2015/TPI2014	Matrix-MP	Horz(CT) 0.01 2 n/a n/a		
				Weight: 19 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-9-14 oc purlins, except
BOT CHORD 2x4 SP No.2	2-0-0 oc purlins: 3-4.
WEBS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEDGE	
Left: 2x4 SP No.3	

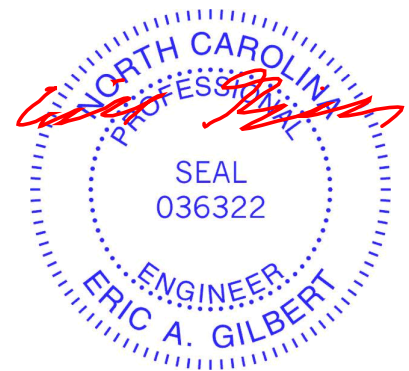
**REACTIONS.** (lb/size) 2=207/0-3-8, 5=143/0-1-8  
 Max Horz 2=72(LC 8)  
 Max Uplift 2=-24(LC 8), 5=-31(LC 5)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWF RS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 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.
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 5. This connection is for uplift only and does not consider lateral forces.
  - 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.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-60, 5-7=-20
Concentrated Loads (lb)
Vert: 6=-3(B)



December 21, 2018

Job 1621632	Truss J2	Truss Type Jack-Open	Qty 9	Ply 1	STURTZ HOMES-ROLLINS ROOF Job Reference (optional)	E12546452
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Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:51 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawyWRuY-DJSE8URds93UDfwCoLGivTv2xi9eGU4ppLVLfy71eQ



Scale = 1:18.6

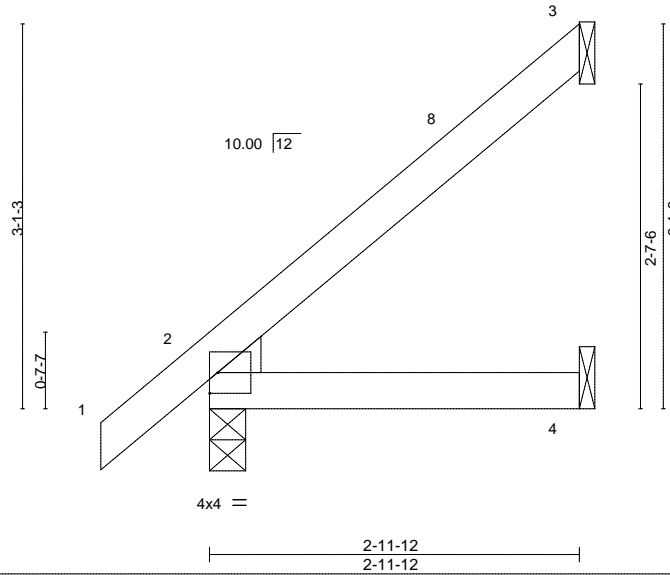


Plate Offsets (X,Y)--	[2:0-0-6,0-0-5], [2:0-3-9,0-0-10]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15		TC 0.10	Vert(LL) 0.01	4-7	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15		BC 0.10	Vert(CT) -0.01	4-7	>999	180		
BCLL 0.0 *	Rep Stress Incr YES		WB 0.00	Horz(CT) 0.00	3	n/a	n/a		
BCDL 10.0	Code IBC2015/TPI2014		Matrix-MP					Weight: 13 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 2-11-12 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 3=72/Mechanical, 2=177/0-3-8, 4=37/Mechanical  
 Max Horz 2=101(LC 12)  
 Max Uplift 3=51(LC 12)  
 Max Grav 3=79(LC 19), 2=177(LC 1), 4=54(LC 3)

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

**NOTES-**

- 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 Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 2-11-0 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 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.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.



December 21, 2018

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road  
 Edenton, NC 27932

Job 1621632	Truss J2G	Truss Type Half Hip Girder	Qty 1	Ply 1	STURTZ HOMES-ROLLINS ROOF	E12546453
Builders First Source,					8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:51 2018 Page 1	
					Job Reference (optional)	

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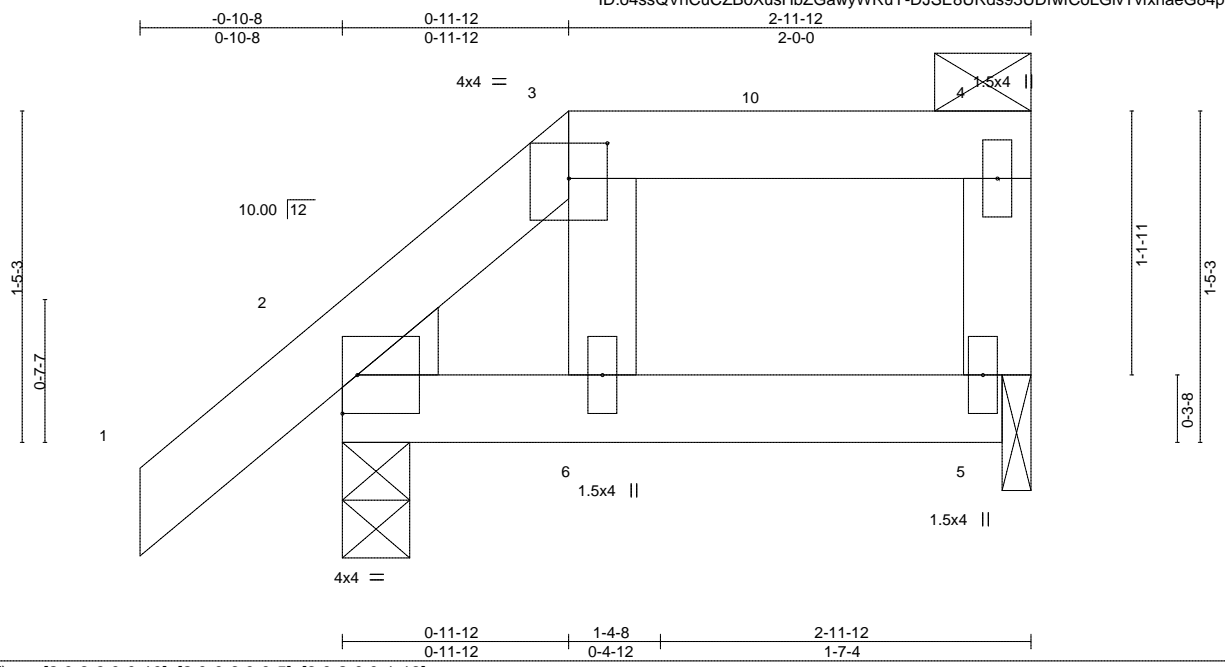


Plate Offsets (X,Y)--	[2:0-3-9,0-0-10], [2:0-0-6,0-0-5], [3:0-2-0,0-1-13]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 2-0-0	TC 0.07	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.14	Vert(LL) 0.01 6 >999 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.02	Vert(CT) -0.01 6 >999 180		
BCDL 10.0	Code IBC2015/TPI2014	Matrix-MP	Horz(CT) 0.00 2 n/a n/a	Weight: 14 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-11-12 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	
WEDGE	
Left: 2x4 SP No.3	

**REACTIONS.** (lb/size) 2=174/0-3-8, 5=105/0-1-8  
 Max Horz 2=44(LC 11)  
 Max Uplift 2=-24(LC 12), 5=-17(LC 9)

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

- NOTES-**
- 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 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) Provide adequate drainage to prevent water ponding.
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 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.
  - 5) 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.
  - 6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
  - 7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 5. This connection is for uplift only and does not consider lateral forces.
  - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 21, 2018

Job 1621632	Truss J3	Truss Type Jack-Open	Qty 8	Ply 1	STURTZ HOMES-ROLLINS ROOF Job Reference (optional)	E12546454
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Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:52 2018 Page 1

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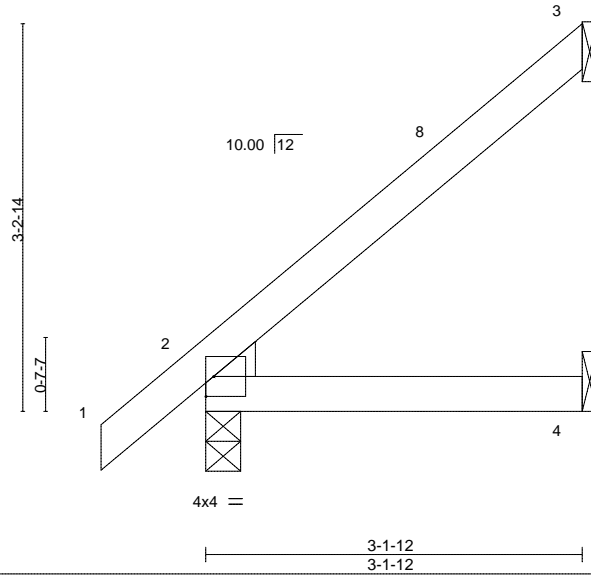


Plate Offsets (X,Y)--	[2:0-0-6,0-0-5], [2:0-3-9,0-0-10]
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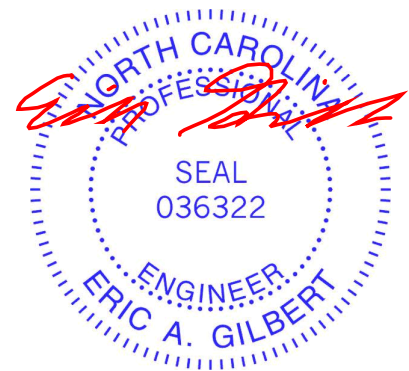
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.12	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.11	Vert(LL) 0.01 4-7 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.01 4-7 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MP	Horz(CT) 0.00 3 n/a n/a		
	Code IBC2015/TPI2014			Weight: 13 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-1-12 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEDGE	
Left: 2x4 SP No.3	

**REACTIONS.** (lb/size) 3=76/Mechanical, 2=183/0-3-8, 4=40/Mechanical  
 Max Horz 2=105(LC 12)  
 Max Uplift 3=-54(LC 12)  
 Max Grav 3=84(LC 19), 2=183(LC 1), 4=57(LC 3)

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

- NOTES-**
- 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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-1-0 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 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.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.



December 21, 2018

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job 1621632	Truss J3G	Truss Type Half Hip Girder	Qty 1	Ply 1	STURTZ HOMES-ROLLINS ROOF	E12546455
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Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:52 2018 Page 1

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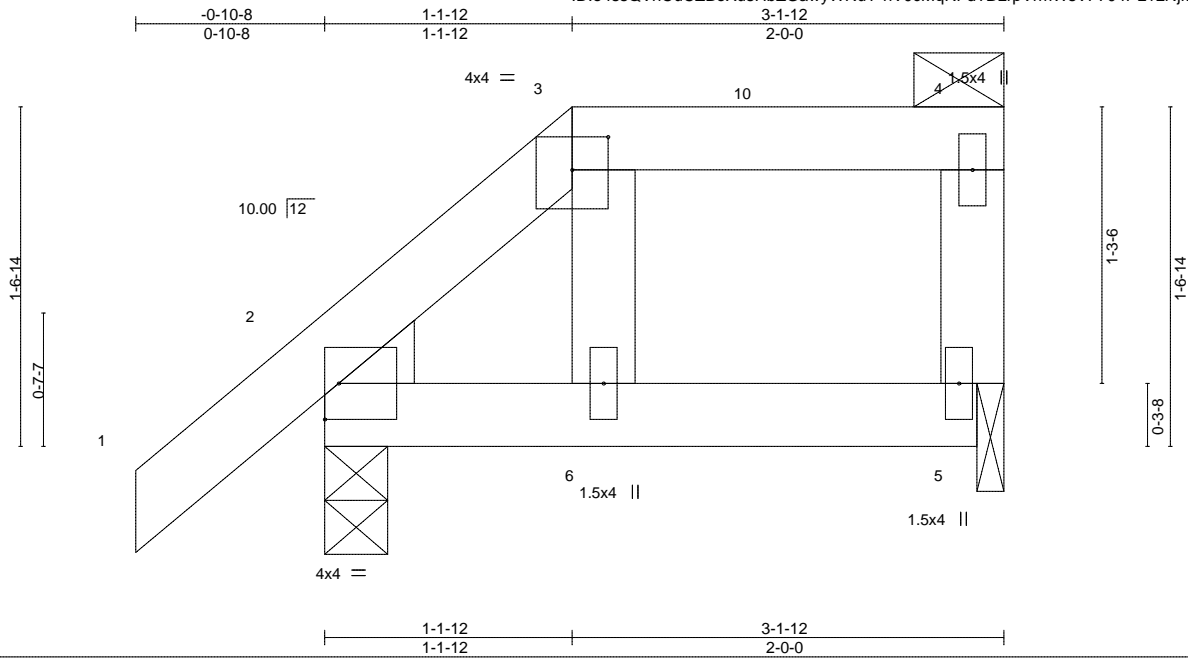


Plate Offsets (X,Y)--	[2:0-3-9,0-0-10], [2:0-0-6,0-0-5], [3:0-2-0,0-1-13]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.07	Vert(LL) 0.01	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.17	Vert(CT) -0.01		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.02	Horz(CT) 0.00		
BCDL 10.0	Code IBC2015/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  
 WEDGE  
 Left: 2x4 SP No.3

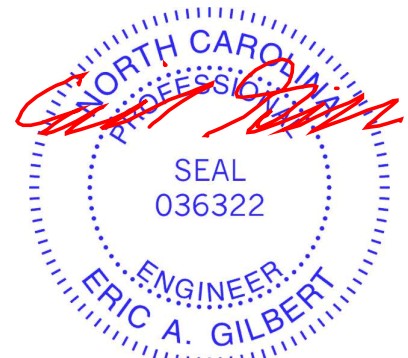
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 3-1-12 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 2=180/0-3-8, 5=112/0-1-8  
 Max Horz 2=49(LC 11)  
 Max Uplift 2=-24(LC 12), 5=-18(LC 9)

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

**NOTES-**

- 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) 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
- 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.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 5. This connection is for uplift only and does not consider lateral forces.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 21, 2018

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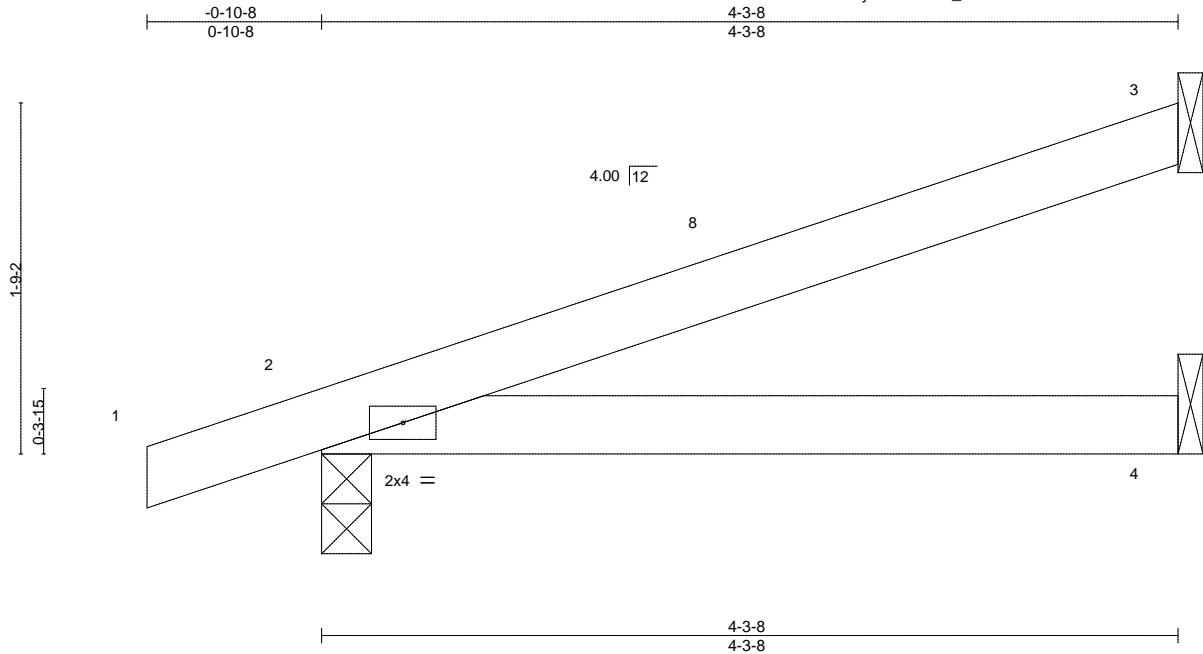


Job 1621632	Truss J4	Truss Type Jack-Open	Qty 11	Ply 1	STURTZ HOMES-ROLLINS ROOF	E12546456
					Job Reference (optional)	

Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:53 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawYWRuY-9ha\_ZASuOnJCSz42KDNkoKYDwKl169zNG7qbP7y71eO



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)	0.02	4-7	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.20	Vert(CT)	-0.03	4-7	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL 10.0	Code IBC2015/TPI2014		Matrix-MP						Weight: 15 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

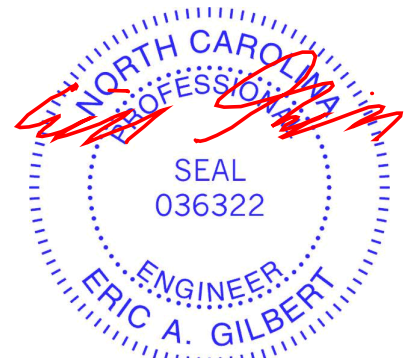
TOP CHORD Structural wood sheathing directly applied or 4-3-8 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 3=107/Mechanical, 2=227/0-3-0, 4=57/Mechanical  
Max Horz 2=59(LC 8)  
Max Uplift 3=-36(LC 12), 2=-42(LC 8)  
Max Grav 3=107(LC 1), 2=227(LC 1), 4=76(LC 3)

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

**NOTES-**

- 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 Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-2-12 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 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.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
- 6) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.



December 21, 2018

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

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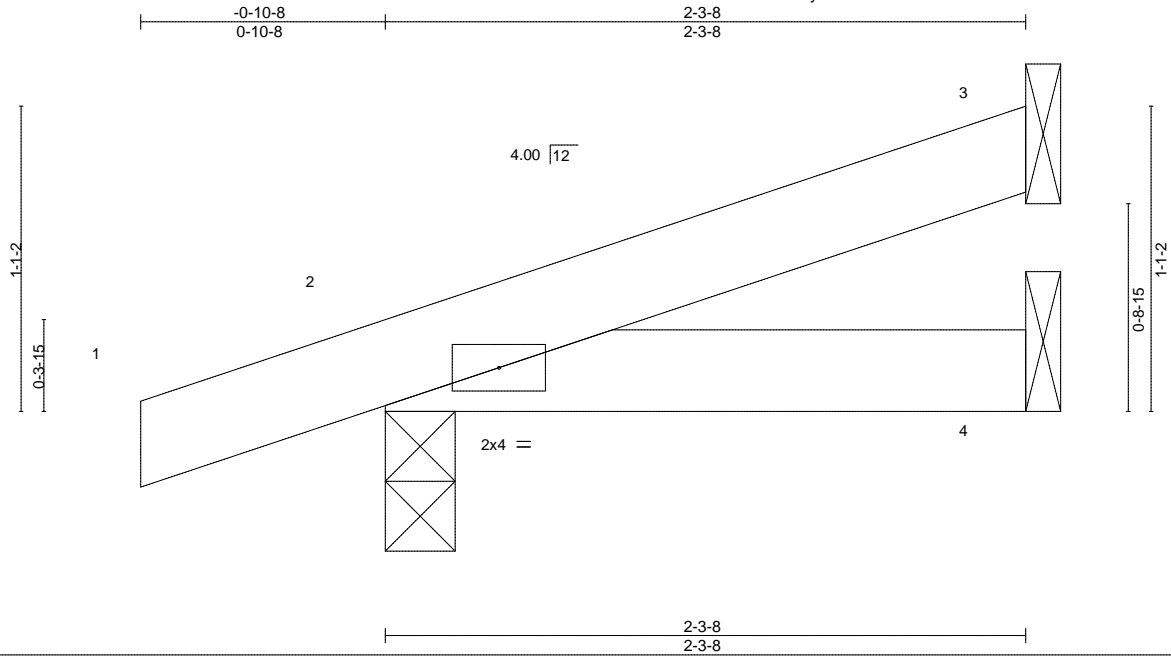


818 Soundside Road  
Edenton, NC 27932

Job 1621632	Truss J4A	Truss Type Jack-Open	Qty 2	Ply 1	STURTZ HOMES-ROLLINS ROOF	E12546457
					Job Reference (optional)	

Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:54 2018 Page 1  
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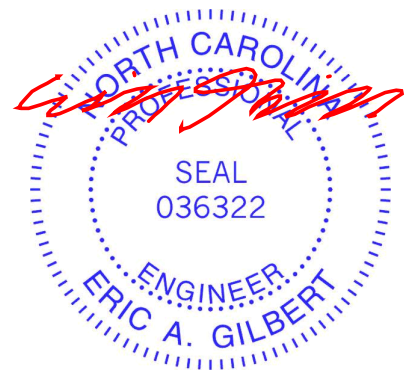
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	-0.00	7 >999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	-0.00	7 >999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	2 n/a	n/a		
BCDL 10.0	Code IBC2015/TPI2014		Matrix-MP					Weight: 9 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-3-8 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 3=50/Mechanical, 2=152/0-3-0, 4=29/Mechanical  
 Max Horz 2=37(LC 8)  
 Max Uplift 3=-16(LC 12), 2=-40(LC 8)  
 Max Grav 3=50(LC 1), 2=152(LC 1), 4=38(LC 3)

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

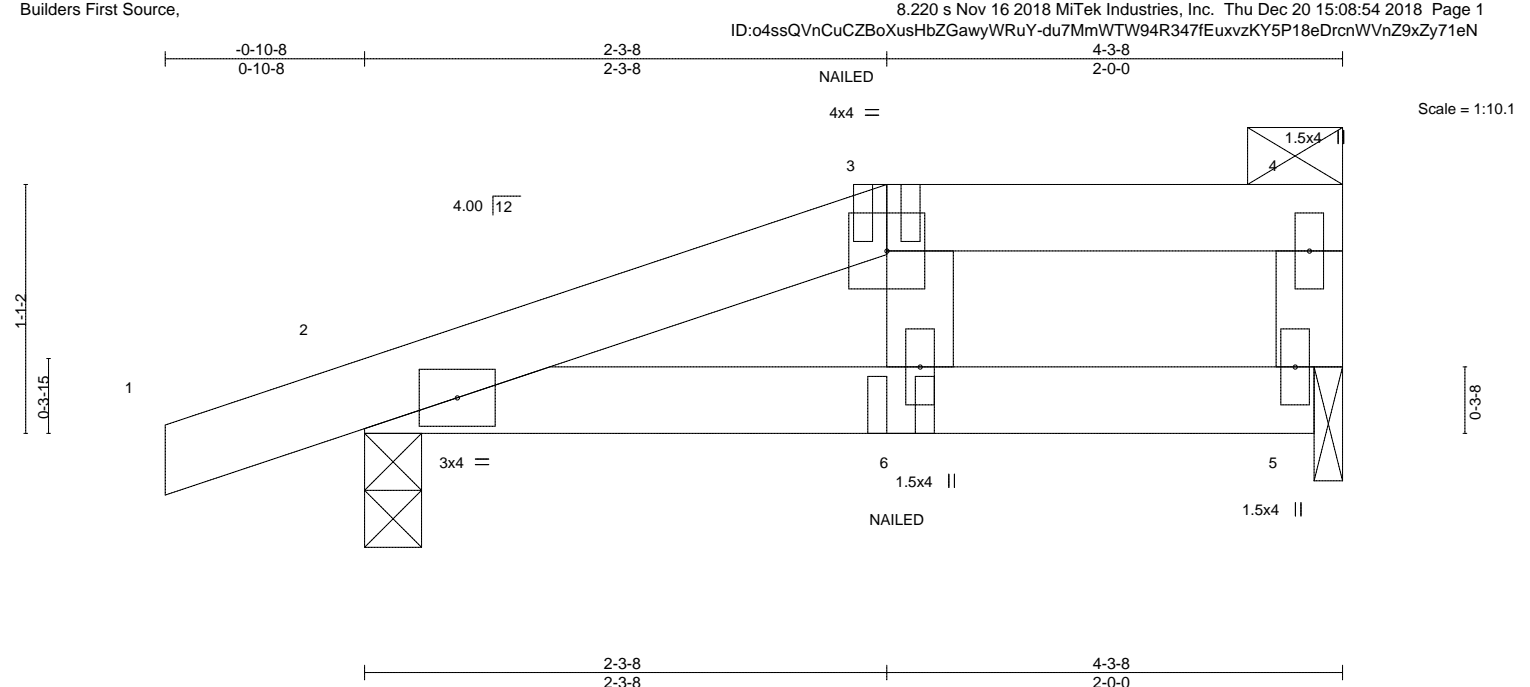
- NOTES-**
- 1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 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.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
  - 6) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.



December 21, 2018

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY  <b>TRENCO</b>        A MiTek Affiliate</p> <p>818 Soundside Road        Edenton, NC 27932</p>
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Job 1621632	Truss J4G	Truss Type Jack-Open Girder	Qty 2	Ply 1	STURTZ HOMES-ROLLINS ROOF	E12546458
Builders First Source,					8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:54 2018 Page 1	
					ID:o4ssQVnCuCZBoXusHbZGawyWRuY-du7MmWTW94R347fEuxvzKY5P18eDrcnWVnZ9xZy71eN	
Job Reference (optional)						



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)	-0.02	6	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.40	Vert(CT)	-0.05	6	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.03	Horz(CT)	0.00	2	n/a		
BCDL 10.0	Code IBC2015/TPI2014		Matrix-MP					Weight: 16 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-3-8 oc purlins, except 2-0-0 oc purlins: 3-4.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	

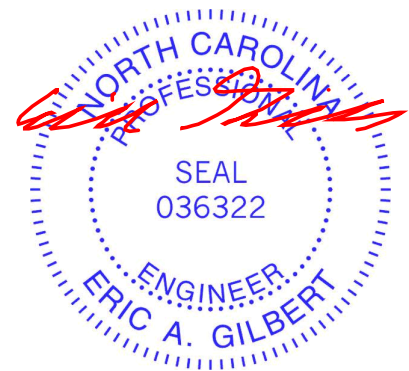
**REACTIONS.** (lb/size) 2=228/0-3-0, 5=166/0-1-8  
 Max Horz 2=38(LC 23)  
 Max Uplift 2=-47(LC 4), 5=-17(LC 4)

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=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
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 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.
  - 6) 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.
  - 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
  - 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 5. This connection is for uplift only and does not consider lateral forces.
  - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 10) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
  - 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
  - Vert: 1-3=-60, 3-4=-60, 5-7=-20
- Concentrated Loads (lb)
  - Vert: 3=0(F) 6=-9(F)



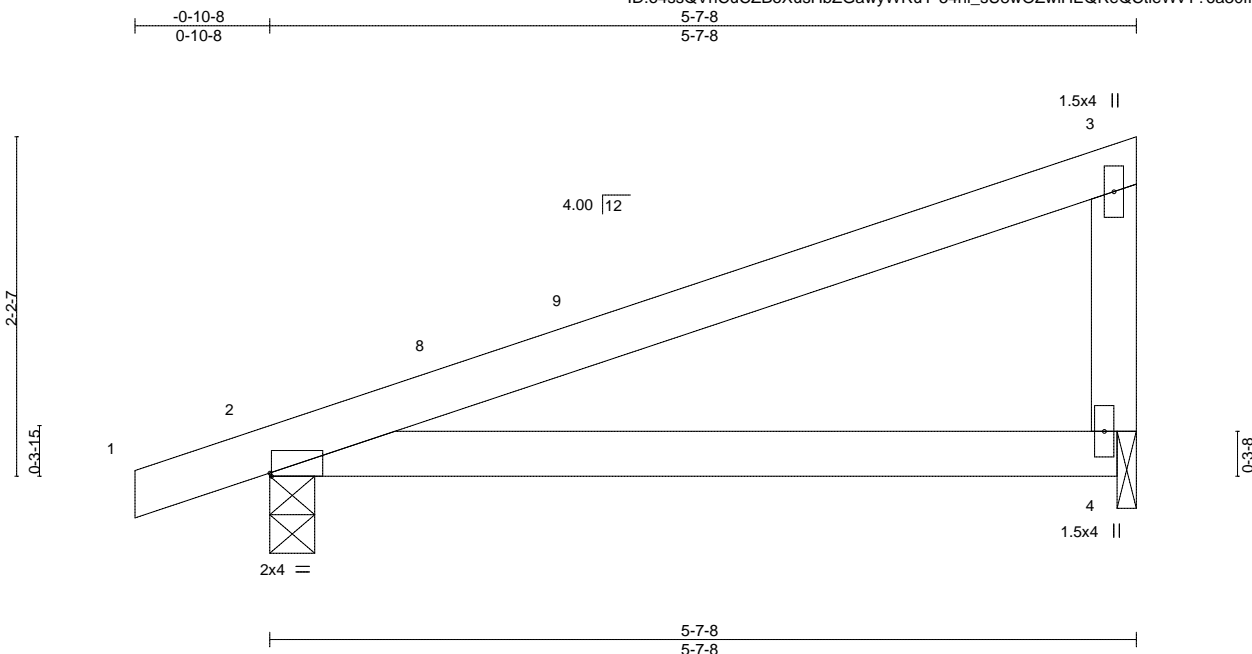
December 21, 2018

Job 1621632	Truss J5	Truss Type Jack-Open	Qty 1	Ply 1	STURTZ HOMES-ROLLINS ROOF	E12546459
					Job Reference (optional)	

Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:55 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawyWRuY-54hl\_sU8wOZwiHEQRQCtleWvY?6a30fkRJIU0y71eM



Scale = 1:15.0

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

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.43	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.36	Vert(LL) -0.04 4-7 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.03	Vert(CT) -0.09 4-7 >701 180		
BCDL 10.0	Code IBC2015/TPI2014	Matrix-MP	Horz(CT) 0.00 2 n/a n/a		
				Weight: 21 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

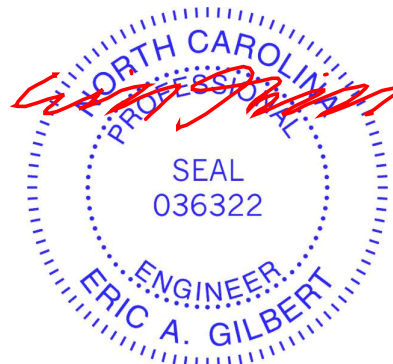
TOP CHORD Structural wood sheathing directly applied or 5-7-8 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 2=276/0-3-8, 4=215/0-1-8  
 Max Horz 2=73(LC 8)  
 Max Uplift 2=45(LC 8), 4=33(LC 12)

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

**NOTES-**

- 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 Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-5-12 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 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.
- 4) 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.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.



December 21,2018

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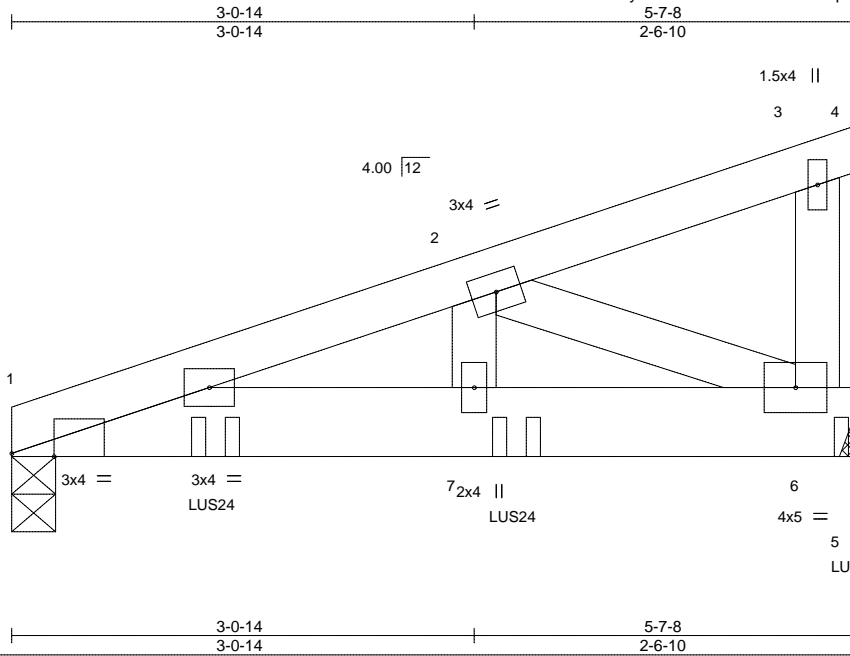
818 Soundside Road  
 Edenton, NC 27932

Job 1621632	Truss J5G	Truss Type Jack-Closed Girder	Qty 1	Ply 2	STURTZ HOMES-ROLLINS ROOF E12546460
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Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:56 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawyWRuY-ZGF7BCUmihhJRpc?MxRPzAmCyNWJVbpy52G0Sy71eL



Scale = 1:15.3

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.08	Vert(LL) -0.01 7-9 >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.22	Vert(CT) -0.01 7-9 >999 180		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.10	Horz(CT) 0.00 6 n/a n/a		
BCDL 10.0	Code IBC2015/TPI2014	Matrix-MP		Weight: 56 lb	FT = 20%

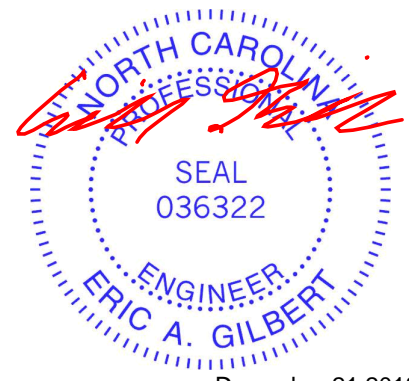
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-7-8 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	

**REACTIONS.** (lb/size) 1=603/0-3-8, 6=807/Mechanical  
 Max Horz 1=64(LC 5)  
 Max Uplift 1=-101(LC 4), 6=-148(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-909/153  
 BOT CHORD 1-7=-154/862, 6-7=-154/862  
 WEBS 2-7=-61/476, 2-6=-937/183

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 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; 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
  - 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) except (jt=lb) 6=148.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1. This connection is for uplift only and does not consider lateral forces.
  - Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-3-4 oc max. starting at 1-4-4 from the left end to 5-7-8 to connect truss(es) to front face of bottom chord.
  - Fill all nail holes where hanger is in contact with lumber.

**LOAD CASE(S)** Standard  
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=-60, 3-4=-20, 1-5=-20



December 21, 2018

Job 1621632	Truss J5G	Truss Type Jack-Closed Girder	Qty 1	Ply <b>2</b>	STURTZ HOMES-ROLLINS ROOF Job Reference (optional)	E12546460
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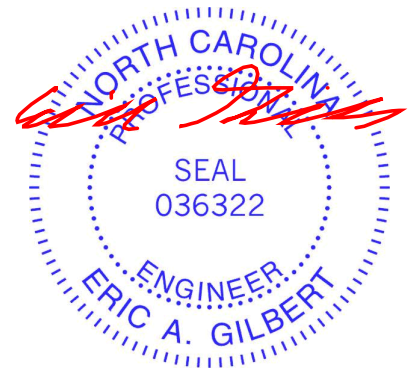
Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:56 2018 Page 2  
ID:o4ssQVnCuCZBoXusHbZGawyWRuY-ZGF7BCUmhihnJRpc?MxRPzAmCyNWJVBpy52G0Sy71eL

**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 7=-325(F) 6=-332(F) 9=-325(F)



December 21, 2018

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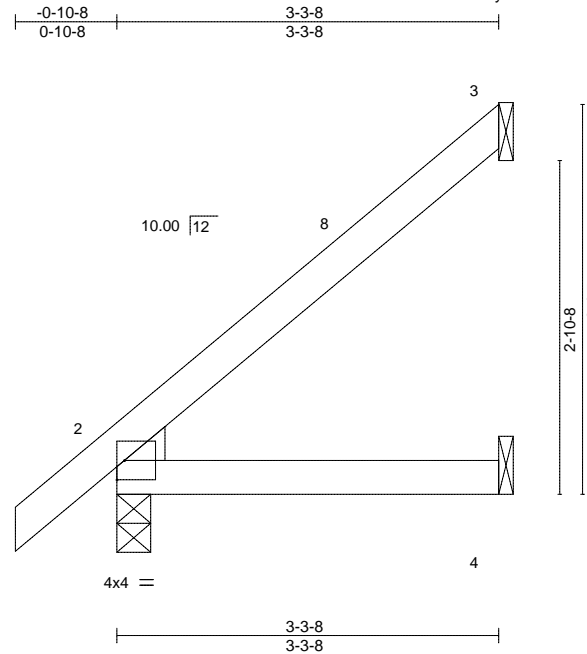
818 Soundside Road  
Edenton, NC 27932

Job 1621632	Truss J6	Truss Type Jack-Open	Qty 6	Ply 1	STURTZ HOMES-ROLLINS ROOF Job Reference (optional)	E12546461
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Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:56 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawyWRuY-ZGF7BCUmhJhJRpc?MxRPzAlMyP0JWjpy52G0Sy71eL



Scale = 1:19.9

Plate Offsets (X,Y)--	[2:0-0-6,0-0-5], [2:0-3-9,0-0-10]					
<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 0.13	Vert(LL) 0.01 4-7 >999 240	<b>MT20</b>	<b>244/190</b>	
TCDL 10.0	Lumber DOL 1.15	BC 0.12	Vert(CT) -0.01 4-7 >999 180			
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00 3 n/a n/a			
BCDL 10.0	Code IBC2015/TPI2014	Matrix-MP			Weight: 14 lb	FT = 20%

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

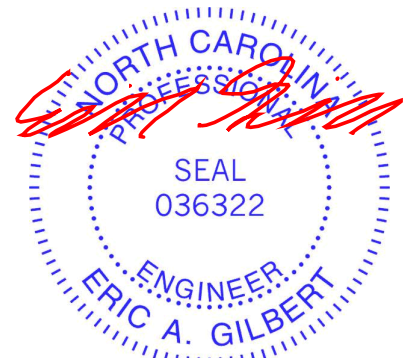
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 3-3-8 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 3=80/Mechanical, 2=189/0-3-8, 4=42/Mechanical  
 Max Horz 2=109(LC 12)  
 Max Uplift 3=57(LC 12)  
 Max Grav 3=88(LC 19), 2=189(LC 1), 4=60(LC 3)

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

**NOTES-**

- 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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-2-12 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
- 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) 3.



December 21, 2018

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road  
 Edenton, NC 27932

Job 1621632	Truss J6G	Truss Type Half Hip Girder	Qty 1	Ply 1	STURTZ HOMES-ROLLINS ROOF	E12546462
Builders First Source,					Job Reference (optional)	

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:57 2018 Page 1

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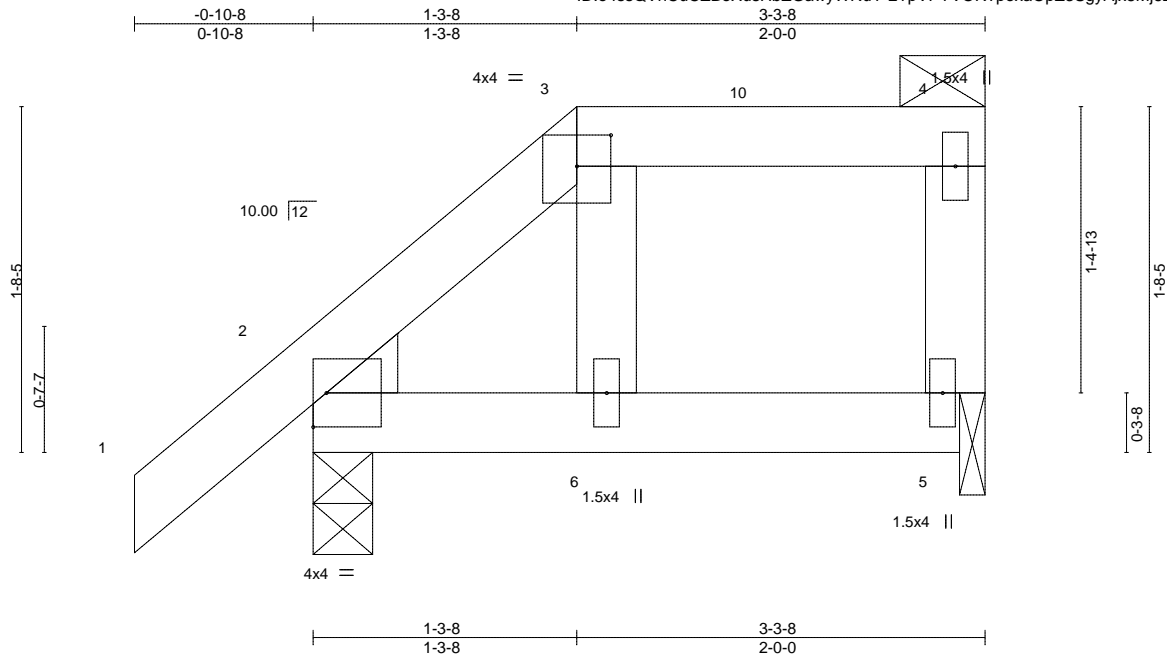


Plate Offsets (X,Y)--	[2:0-3-9,0-0-10], [2:0-0-6,0-0-5], [3:0-2-0,0-1-13]
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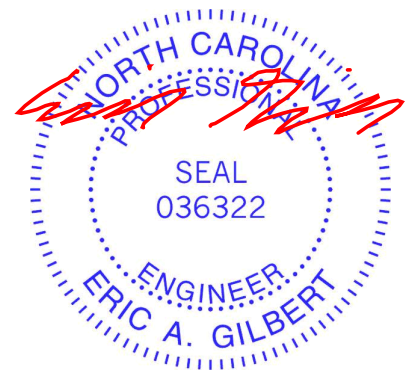
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.07	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.19	Vert(LL) -0.01 6 >999 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.03	Vert(CT) -0.01 6 >999 180		
BCDL 10.0	Code IBC2015/TPI2014	Matrix-MP	Horz(CT) 0.00 2 n/a n/a		
				Weight: 16 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-3-8 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	
WEDGE	
Left: 2x4 SP No.3	

**REACTIONS.** (lb/size) 2=186/0-3-8, 5=119/0-1-8  
 Max Horz 2=53(LC 11)  
 Max Uplift 2=-24(LC 12), 5=-20(LC 9)

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=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) 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) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 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.
  - 6) 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.
  - 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
  - 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 5. This connection is for uplift only and does not consider lateral forces.
  - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 21, 2018

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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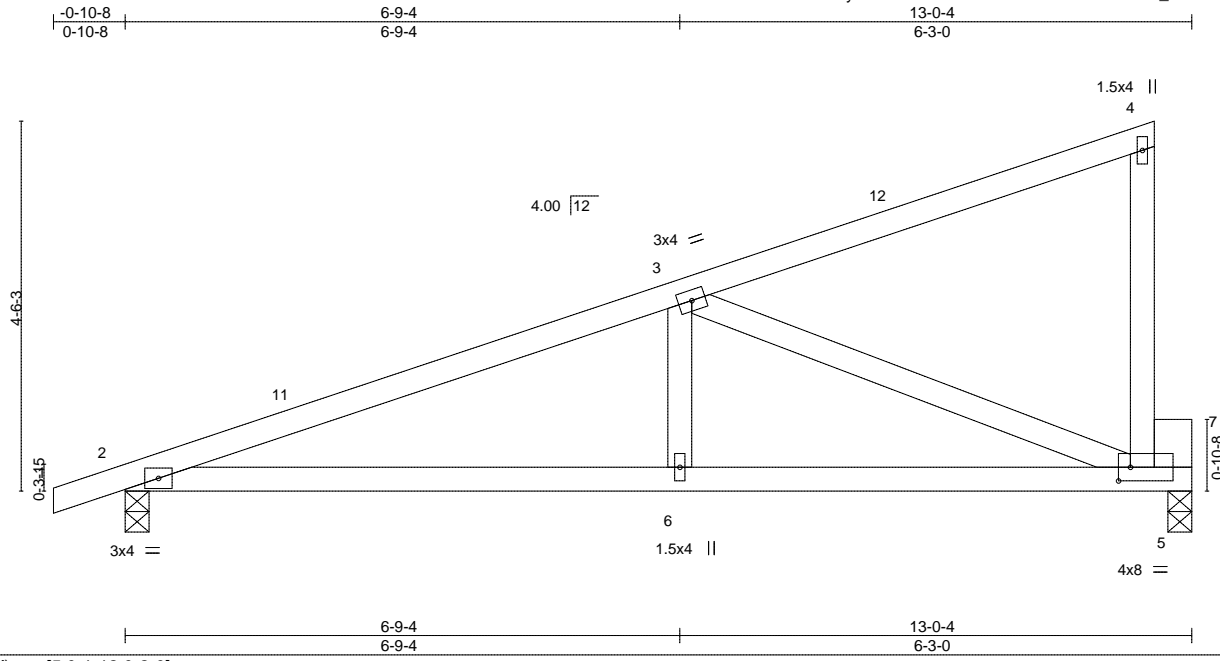


Job 1621632	Truss M1	Truss Type Monopitch	Qty 5	Ply 1	STURTZ HOMES-ROLLINS ROOF	E12546463
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Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:58 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawyWRuY-WfNtctW0CJxVZkz7mzvVOG?5I\_tnHL6QPXM5Ly71eJ



Scale = 1:28.1

Plate Offsets (X,Y)--	[5:0-1-12,0-2-0]									
<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 0.50	Vert(LL) -0.06	6-10	>999	240		MT20	244/190
TCDL 10.0	Lumber DOL 1.15		BC 0.54	Vert(CT) -0.14	6-10	>999	180			
BCLL 0.0 *	Rep Stress Incr YES		WB 0.63	Horz(CT) 0.02	5	n/a	n/a			
BCDL 10.0	Code IBC2015/TPI2014		Matrix-MS						Weight: 59 lb	FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 5-5-5 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3 *Except* 5-7: 2x6 SP No.2		

**REACTIONS.** (lb/size) 2=566/0-3-8, 5=488/0-3-8  
 Max Horz 2=154(LC 11)  
 Max Uplift 2=-75(LC 8), 5=-66(LC 12)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-935/86  
 BOT CHORD 2-6=-119/856, 5-6=-119/856  
 WEBS 3-6=0/292, 3-5=-886/138

- NOTES-**
- 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 Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 12-5-0 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 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.
  - 4) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 5. This connection is for uplift only and does not consider lateral forces.



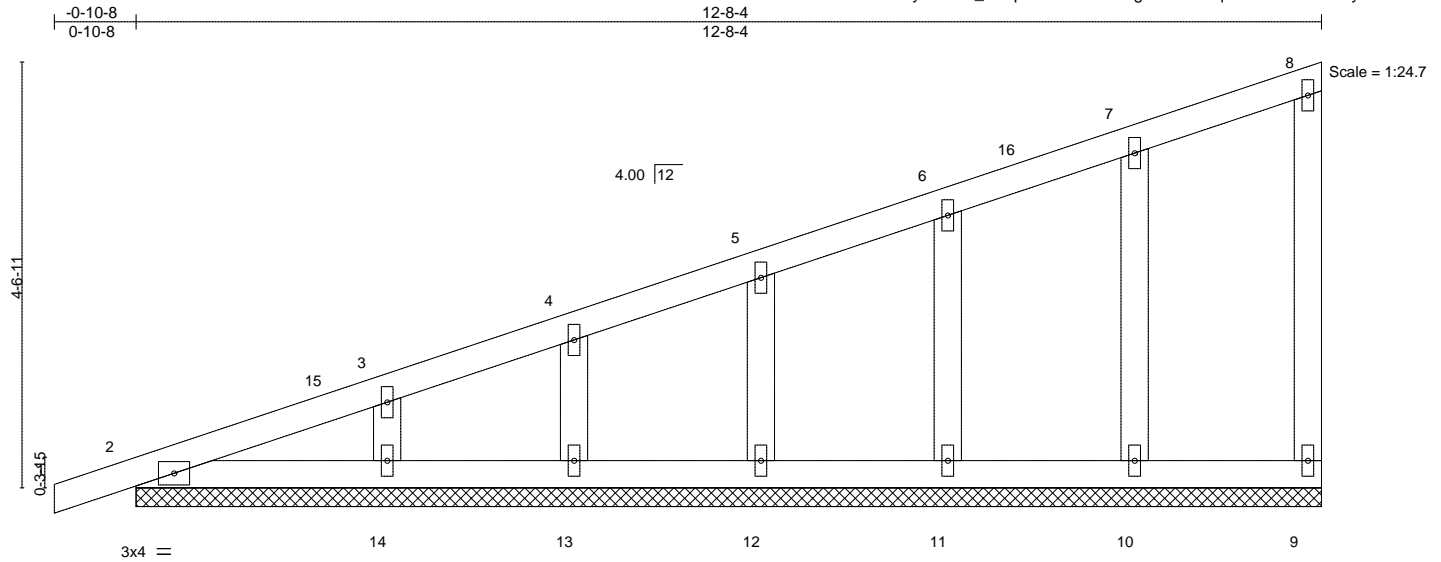
December 21, 2018

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>818 Soundside Road Edenton, NC 27932</p>
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Job 1621632	Truss M1E	Truss Type Monopitch Supported Gable	Qty 1	Ply 1	STURTZ HOMES-ROLLINS ROOF	E12546464
Builders First Source,					Job Reference (optional)	

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:59 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawyWRuY-\_rxFqDXezd3MAuXBgUU81boFq9RmWttFf3Hwdny71el



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 0.18	Vert(LL)	0.00	1	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	0.00	1	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	9	n/a	n/a		
BCDL 10.0	Code IBC2015/TPI2014		Matrix-S						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

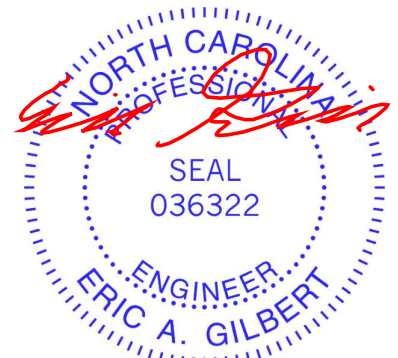
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 12-8-4.  
(lb) - Max Horz 2=156(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 9, 2, 10, 11, 12, 13, 14  
Max Grav All reactions 250 lb or less at joint(s) 9, 2, 10, 11, 12, 13, 14

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

**NOTES-**

- 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) -0-10-8 to 2-1-8, Exterior(2) 2-1-8 to 12-6-8 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) All plates are 1.5x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 9, 10, 11, 12, 13, and 14. This connection is for uplift only and does not consider lateral forces.
- 9) One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.



December 21, 2018

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818 Soundside Road  
Edenton, NC 27932

Job 1621632	Truss M1G	Truss Type Half Hip Girder	Qty 1	Ply 2	STURTZ HOMES-ROLLINS ROOF	E12546465
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Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:09:00 2018 Page 1

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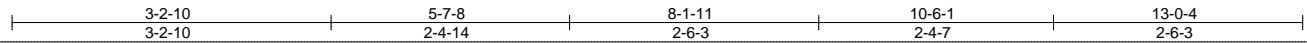
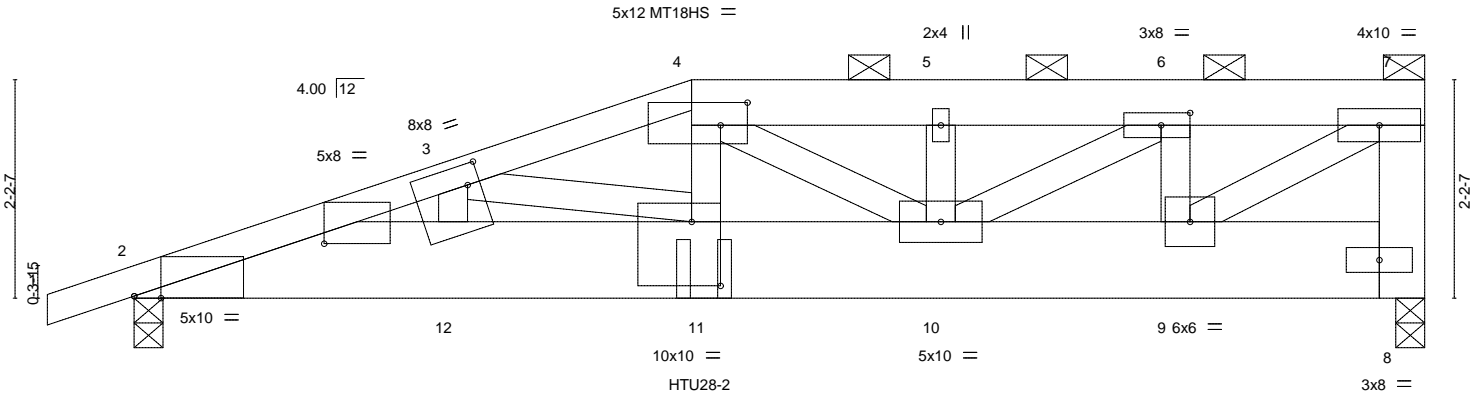


Plate Offsets (X,Y)-- [2:0-3-4,Edge], [2:1-11-0,0-6-6], [3:0-1-8,0-2-8], [4:0-3-4,0-2-12], [6:0-3-8,0-1-8], [11:0-3-8,0-7-12], [12:0-1-11,0-0-9]

<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 0.60	Vert(LL)	-0.09	11	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.49	Vert(CT)	-0.18	11	>849	MT18HS	244/190
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.82	Horz(CT)	0.03	8	n/a		
BCDL 10.0	Code IBC2015/TPI2014		Matrix-MS						
								Weight: 199 lb	FT = 20%

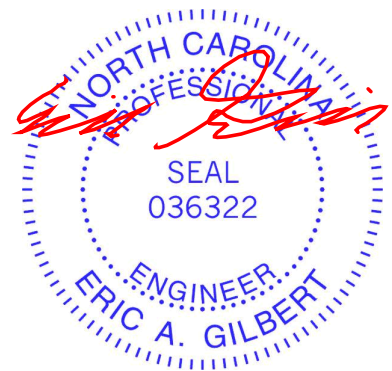
<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 *Except* 4-7: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-4-7 oc purlins, except end verticals, and 2-0-0 oc purlins (4-10-11 max.): 4-7.
BOT CHORD 2x10 SP DSS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 7-8: 2x6 SP No.2, 7-9: 2x4 SP No.2	

**REACTIONS.** (lb/size) 2=3539/0-3-8, 8=9130/0-3-8  
Max Horz 2=66(LC 24)  
Max Uplift 2=-469(LC 4), 8=-1059(LC 4)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-9028/1133, 3-4=-10085/1278, 4-5=-8787/1098, 5-6=-8764/1095, 6-7=-5459/678, 7-8=-8437/993  
BOT CHORD 2-12=-1063/8447, 11-12=-1063/8447, 10-11=-1229/9851, 9-10=-663/5459, 8-9=-79/567  
WEBS 3-12=-405/81, 3-11=-157/1252, 4-11=-400/3199, 4-10=-1304/534, 5-10=-1772/235, 6-10=-502/3979, 6-9=-3668/476, 7-9=-725/5958

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-3-0 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; TCDL=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
- 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.
- Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- Two HTS20 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8. This connection is for uplift only and does not consider lateral forces.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 21, 2018

Continued on page 2

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

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818 Soundside Road  
Edenton, NC 27932

Job 1621632	Truss M1G	Truss Type Half Hip Girder	Qty 1	Ply 2	STURTZ HOMES-ROLLINS ROOF Job Reference (optional)	E12546465
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Builders First Source,

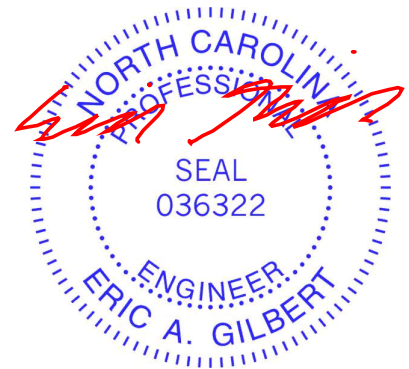
8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:09:00 2018 Page 2  
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**NOTES-**

- 13) Use Simpson Strong-Tie HTU28-2 (26-10d Girder, 14-10d Truss) or equivalent at 5-9-0 from the left end to connect truss(es) to front face of bottom chord.
- 14) Fill all nail holes where hanger is in contact with lumber.

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
  - Vert: 1-4=-60, 4-7=-645, 2-8=-20
- Concentrated Loads (lb)
  - Vert: 11=-3209(F) 7=-4195



December 21, 2018

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818 Soundside Road  
Edenton, NC 27932

Job 1621632	Truss M2	Truss Type Monopitch	Qty 3	Ply 1	STURTZ HOMES-ROLLINS ROOF E12546466
Builders First Source,					Job Reference (optional)

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:09:00 2018 Page 1  
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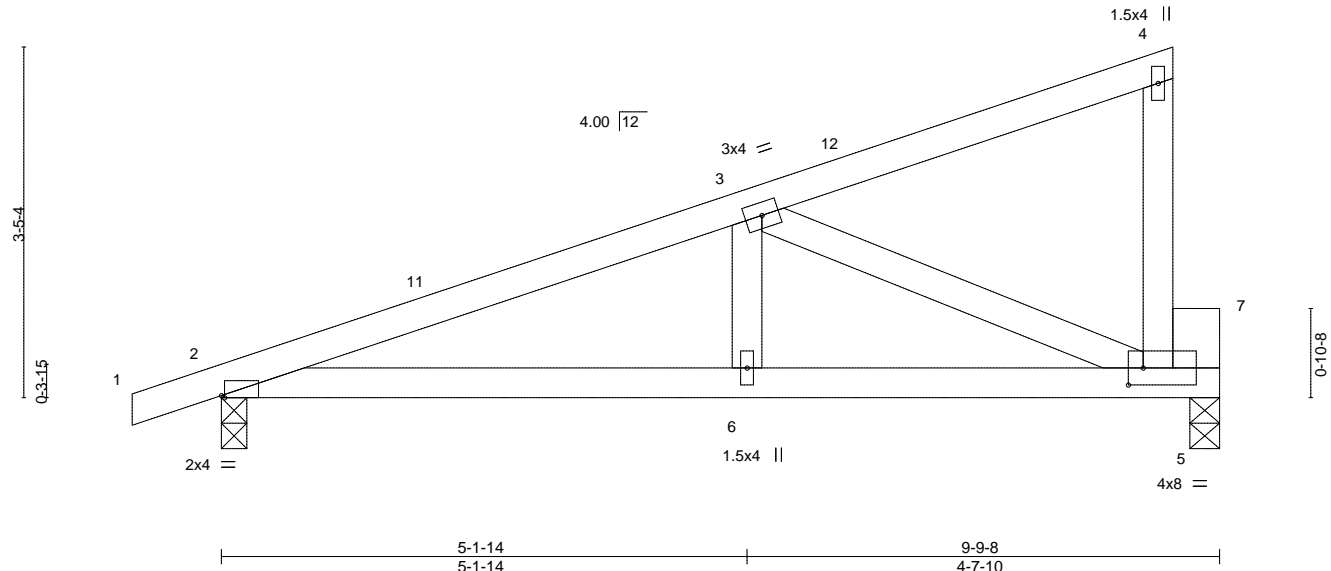


Plate Offsets (X,Y)--	[2:0-0-6,Edge], [5:0-1-12,0-2-0]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.26	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.34	Vert(LL) -0.02 6-10 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.25	Vert(CT) -0.05 6-10 >999 180		
BCDL 10.0	Code IBC2015/TPI2014	Matrix-MS	Horz(CT) 0.01 5 n/a n/a		
				Weight: 45 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.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 5-7: 2x6 SP No.2	

REACTIONS.	(lb/size)
	2=437/0-3-0, 5=358/0-3-8
	Max Horz 2=116(LC 11)
	Max Uplift 2=-64(LC 8), 5=-49(LC 12)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-669/61
BOT CHORD	2-6=-112/612, 5-6=-112/612
WEBS	3-5=-634/98

- NOTES-**
- 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 Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 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
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 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.
  - 4) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 5. This connection is for uplift only and does not consider lateral forces.



December 21,2018

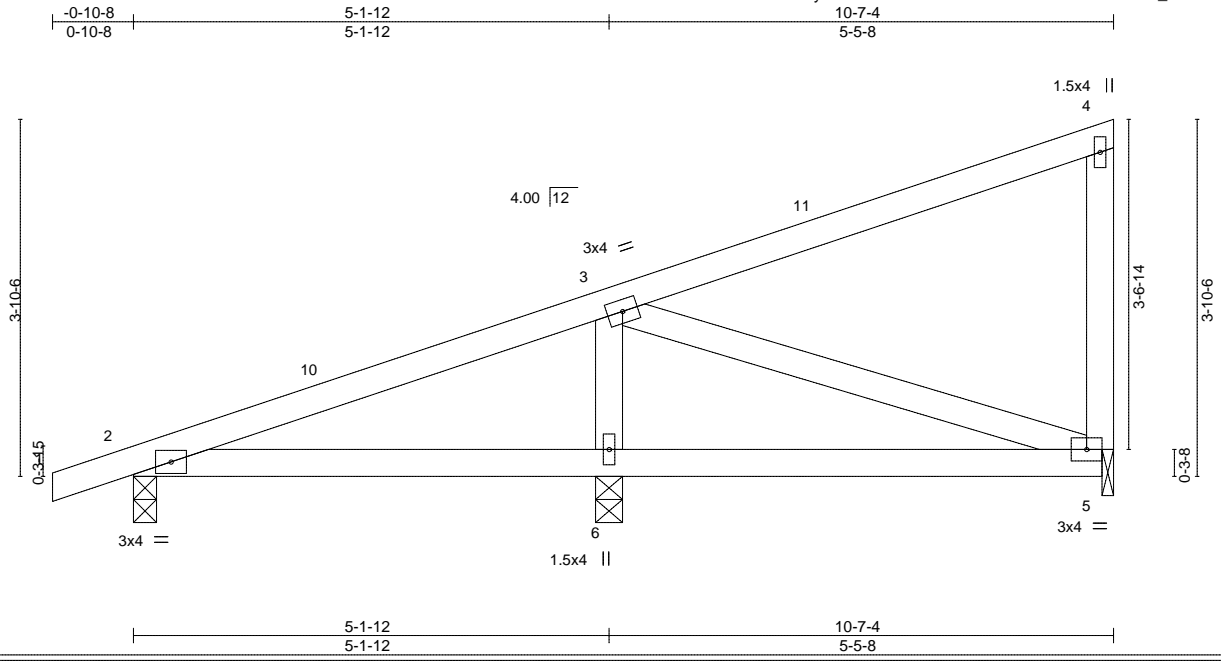
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>818 Soundside Road Edenton, NC 27932</p>
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Job 1621632	Truss M3	Truss Type Monopitch	Qty 7	Ply 1	STURTZ HOMES-ROLLINS ROOF	E12546467
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Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:09:01 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawyWRuY-wE30EvYvVEJ4QChaovXc60uYSz4C\_msY6Nm0hfY71eG



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 0.37	Vert(LL)	-0.02	5-6	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.25	Vert(CT)	-0.04	5-6	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IBC2015/TPI2014		Matrix-MS						Weight: 49 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.
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) 2=228/0-3-0, 6=483/0-3-8, 5=178/0-1-8  
 Max Horz 2=131(LC 11)  
 Max Uplift 2=-40(LC 8), 6=-55(LC 12), 5=-29(LC 12)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 3-6=-344/116

**NOTES-**

- 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 Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-5-8 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 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.
- 4) 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.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
- 6) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 6, and 5. This connection is for uplift only and does not consider lateral forces.



December 21, 2018

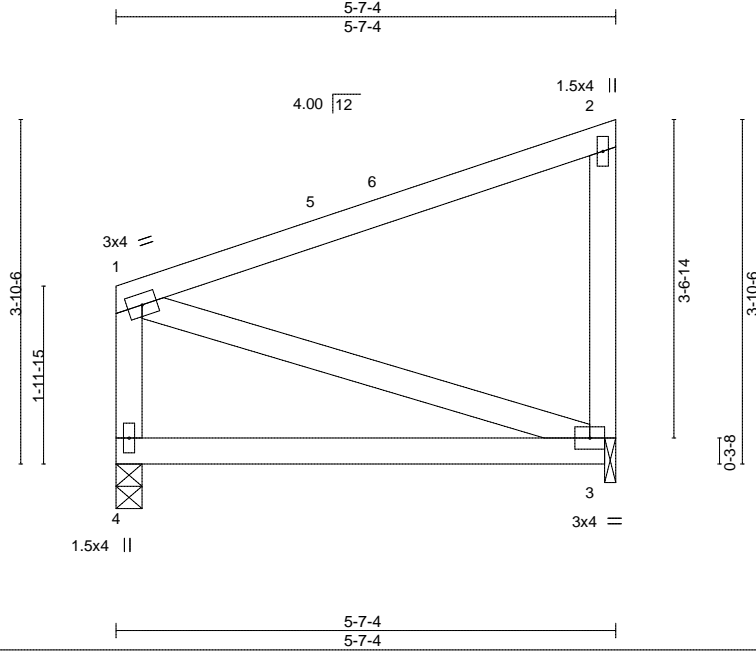
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>818 Soundside Road Edenton, NC 27932</p>
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Job 1621632	Truss M4	Truss Type Monopitch	Qty 1	Ply 1	STURTZ HOMES-ROLLINS ROOF E12546468 Job Reference (optional)
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Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:09:02 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawyWRuY-OQcOSFZXGYRx1MGmMc2rfEQgBNomjEEhL1VaE6y71eF



Scale = 1:25.8

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 0.56	Vert(LL)	-0.05 3-4	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.36	Vert(CT)	-0.10 3-4	>667	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	-0.00 3	n/a	n/a		
BCDL 10.0	Code IBC2015/TPI2014		Matrix-MP					Weight: 32 lb	FT = 20%

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

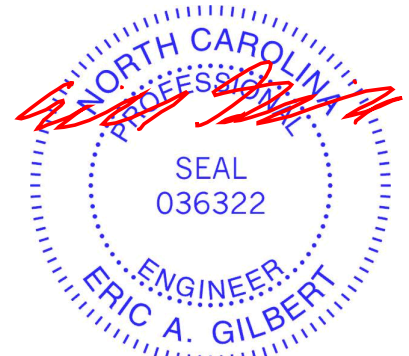
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-7-4 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 4=213/0-3-8, 3=213/0-1-8  
Max Horz 4=117(LC 9)  
Max Uplift 4=-19(LC 8), 3=-36(LC 9)

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

**NOTES-**

- 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 Exterior(2) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 5-5-8 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 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.
- 4) 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.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 3.
- 6) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 4 and 3. This connection is for uplift only and does not consider lateral forces.



December 21, 2018

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



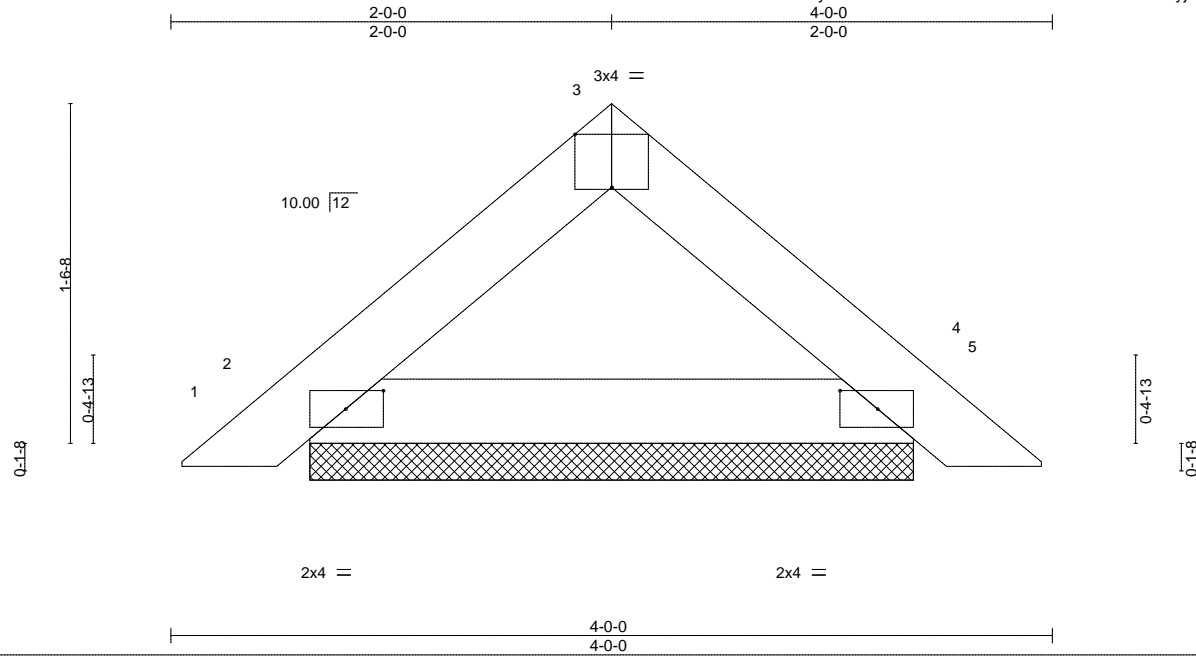
818 Soundside Road  
Edenton, NC 27932

Job 1621632	Truss PB1	Truss Type Piggyback	Qty 4	Ply 1	STURTZ HOMES-ROLLINS ROOF Job Reference (optional)	E12546469
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Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:09:02 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawyWRuY-OQcOSFZXGYRx1MGmMc2rfEQoVNSyjEChL1VaE6y71eF



Scale = 1:10.5

Plate Offsets (X,Y)--	[2:0-2-1,0-1-0], [3:0-2-0,Edge], [4:0-2-1,0-1-0]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.03	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.09	Vert(LL) 0.00 4 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) 0.00 4 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 4 n/a n/a		
	Code IBC2015/TPI2014			Weight: 12 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 2=131/2-8-14, 4=131/2-8-14  
 Max Horz 2=-30(LC 10)  
 Max Uplift 2=-10(LC 12), 4=-10(LC 13)

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; 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) 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) Gable requires continuous bottom chord bearing.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 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.
  - 6) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.
  - 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



December 21, 2018

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job 1621632	Truss R1	Truss Type Common	Qty 3	Ply 1	STURTZ HOMES-ROLLINS ROOF E12546470
Builders First Source,					Job Reference (optional)

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:09:03 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawyWRuY-sdAmfba91rZnfVrvkZ4BRznsmsgASYKrZhf7mYy71eE



Scale: 1/4"=1'

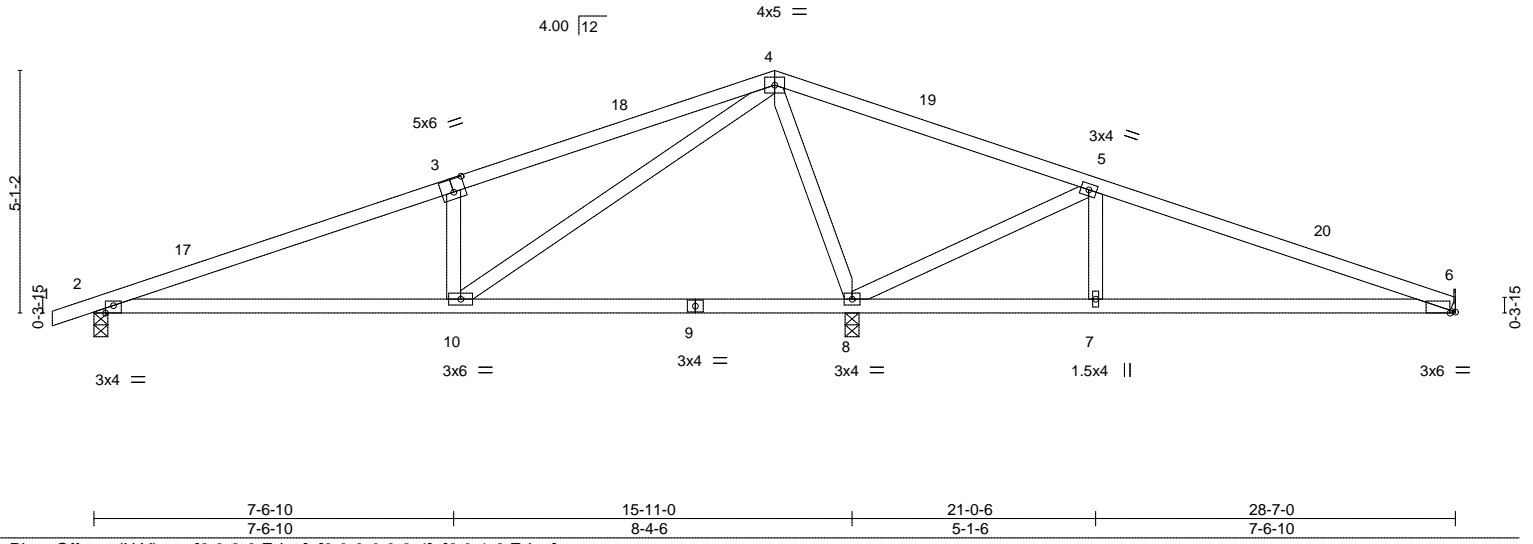


Plate Offsets (X,Y)--	[2:0-2-0,Edge], [3:0-3-0,0-3-4], [6:0-1-6,Edge]
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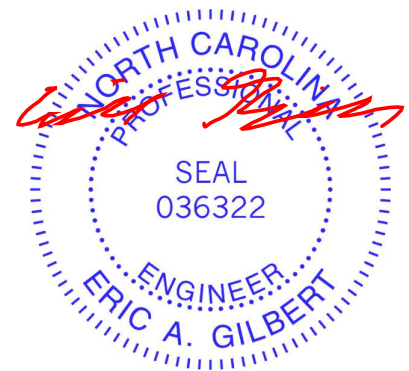
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.82	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.60	Vert(LL) -0.10 8-10 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.58	Vert(CT) -0.20 7-13 >762 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.01 8 n/a n/a		
	Code IBC2015/TPI2014			Weight: 123 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-5-12 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:
WEBS 2x4 SP No.3	10-0-0 oc bracing; 2-10.

**REACTIONS.** (lb/size) 6=281/Mechanical, 2=511/0-3-8, 8=1547/0-3-8  
 Max Horz 2=76(LC 12)  
 Max Uplift 6=56(LC 13), 2=83(LC 8), 8=70(LC 8)  
 Max Grav 6=345(LC 24), 2=545(LC 23), 8=1547(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-819/105, 3-4=-848/187, 4-5=-25/767, 5-6=-358/180  
 BOT CHORD 2-10=-113/742, 8-10=-324/87, 7-8=-144/307, 6-7=-144/307  
 WEBS 3-10=-482/188, 4-10=-168/1181, 4-8=-1097/147, 5-8=-891/176, 5-7=0/263

- NOTES-**
- 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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 14-3-8, Exterior(2) 14-3-8 to 17-3-8, Interior(1) 17-3-8 to 28-7-0 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
  - 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) 6.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 8. This connection is for uplift only and does not consider lateral forces.



December 21, 2018

Job 1621632	Truss R2	Truss Type Common	Qty 1	Ply 1	STURTZ HOMES-ROLLINS ROOF	E12546471
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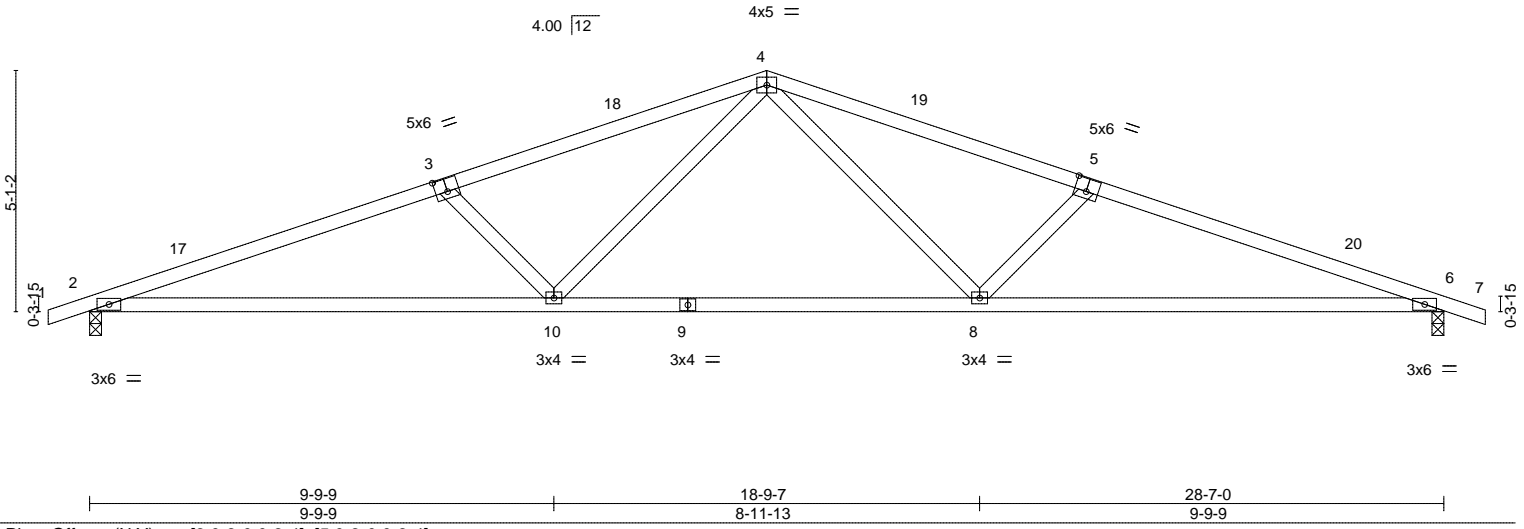
Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:09:04 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawyWRuY-Kpk8txbno9heHfQ9T14Jkfy7AzgB3U\_oL\_hL\_y71eD

0-10-8	7-6-10	14-3-8	21-0-6	28-7-0	29-5-8
0-10-8	7-6-10	6-8-14	6-8-14	7-6-10	0-10-8

Scale = 1:48.6



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 0.79	Vert(LL)	-0.20 10-13	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.78	Vert(CT)	-0.49 10-13	>702	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.33	Horz(CT)	0.09 6	n/a	n/a		
BCDL 10.0	Code IBC2015/TPI2014		Matrix-MS					Weight: 119 lb	FT = 20%

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

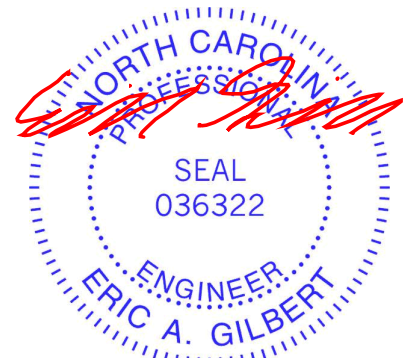
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 2=1196/0-3-0, 6=1196/0-3-0  
 Max Horz 2=72(LC 12)  
 Max Uplift 2=-114(LC 8), 6=-114(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2765/226, 3-4=-2450/176, 4-5=-2450/176, 5-6=-2765/226  
 BOT CHORD 2-10=-202/2590, 8-10=-47/1714, 6-8=-145/2590  
 WEBS 4-8=-47/807, 5-8=-511/189, 4-10=-47/807, 3-10=-511/189

**NOTES-**

- 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; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-10-8 to 2-1-8, Interior(1) 2-1-8 to 14-3-8, Exterior(2) 14-3-8 to 17-3-8, Interior(1) 17-3-8 to 29-5-8 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
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 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.
- 5) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.



December 21, 2018

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Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES-ROLLINS ROOF	E12546472
1621632	R3	Roof Special	7	1		

Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:09:05 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawyWRuY-p?IX4HbPZTqVup?L1kbYHs28?al3wRk81?kEqRy71eC

0-10-8	5-1-12	11-6-0	17-10-0	24-2-0	30-6-0	37-4-1	44-2-0	45-0-8
0-10-8	5-1-12	6-4-4	6-4-0	6-4-0	6-4-0	6-10-1	6-9-15	0-10-8

Scale = 1:77.9

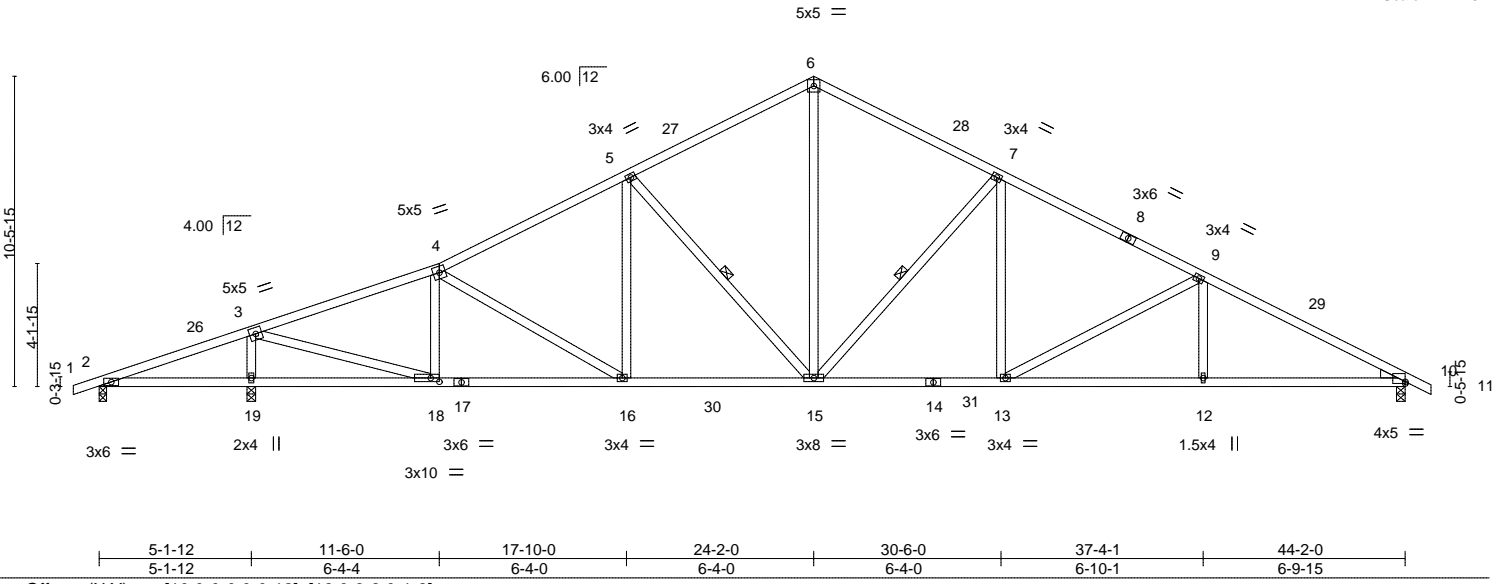


Plate Offsets (X,Y)--	[10:0-0-0,0-0-12], [18:0-3-8,0-1-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.71	Vert(LL)	-0.16	13-15	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.83	Vert(CT)	-0.34	12-13	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.65	Horz(CT)	0.09	10	n/a		
BCDL 10.0	Code IBC2015/TPI2014		Matrix-MS						
								Weight: 247 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-10-12 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS 2x4 SP No.3 *Except*	6-0-0 oc bracing: 2-19,18-19.
3-18: 2x4 SP No.2	WEBS 1 Row at midpt 5-15, 7-15
WEDGE	
Right: 2x4 SP No.3	

REACTIONS.	(lb/size)
	2=-74/0-3-0, 19=2143/0-3-8, 10=1570/0-3-8
	Max Horz 2=150(LC 12)
	Max Uplift 2=-129(LC 19), 19=-156(LC 12), 10=-108(LC 13)
	Max Grav 2=7(LC 12), 19=2143(LC 1), 10=1570(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-116/886, 3-4=-1946/119, 4-5=-2064/173, 5-6=-1684/212, 6-7=-1685/216, 7-9=-2247/185, 9-10=-2792/175
BOT CHORD	2-19=-783/82, 18-19=-783/82, 16-18=-119/1804, 15-16=-62/1780, 13-15=0/1932, 12-13=-73/2413, 10-12=-73/2413
WEBS	3-19=-1983/217, 3-18=-107/2663, 4-18=-612/109, 5-16=0/276, 5-15=-585/157, 6-15=-64/1085, 7-15=-771/176, 7-13=0/463, 9-13=-560/138, 9-12=0/255

- NOTES-**
- 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) -0-10-8 to 3-6-8, Interior(1) 3-6-8 to 24-2-0, Exterior(2) 24-2-0 to 28-7-0, Interior(1) 28-7-0 to 45-0-8 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
  - 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.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 19, and 10. This connection is for uplift only and does not consider lateral forces.



December 21, 2018

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>818 Soundside Road Edenton, NC 27932</p>
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Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES-ROLLINS ROOF	E12546473
1621632	R3E	Roof Special Supported Gable	1	1	Job Reference (optional)	

Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:09:07 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawWYRuY-IOQHvYdg544D879k89d0MH7diO9VOUZRUJDLvJy71eA  
 44-2-0 45-0-8  
 20-0-0 0-10-8

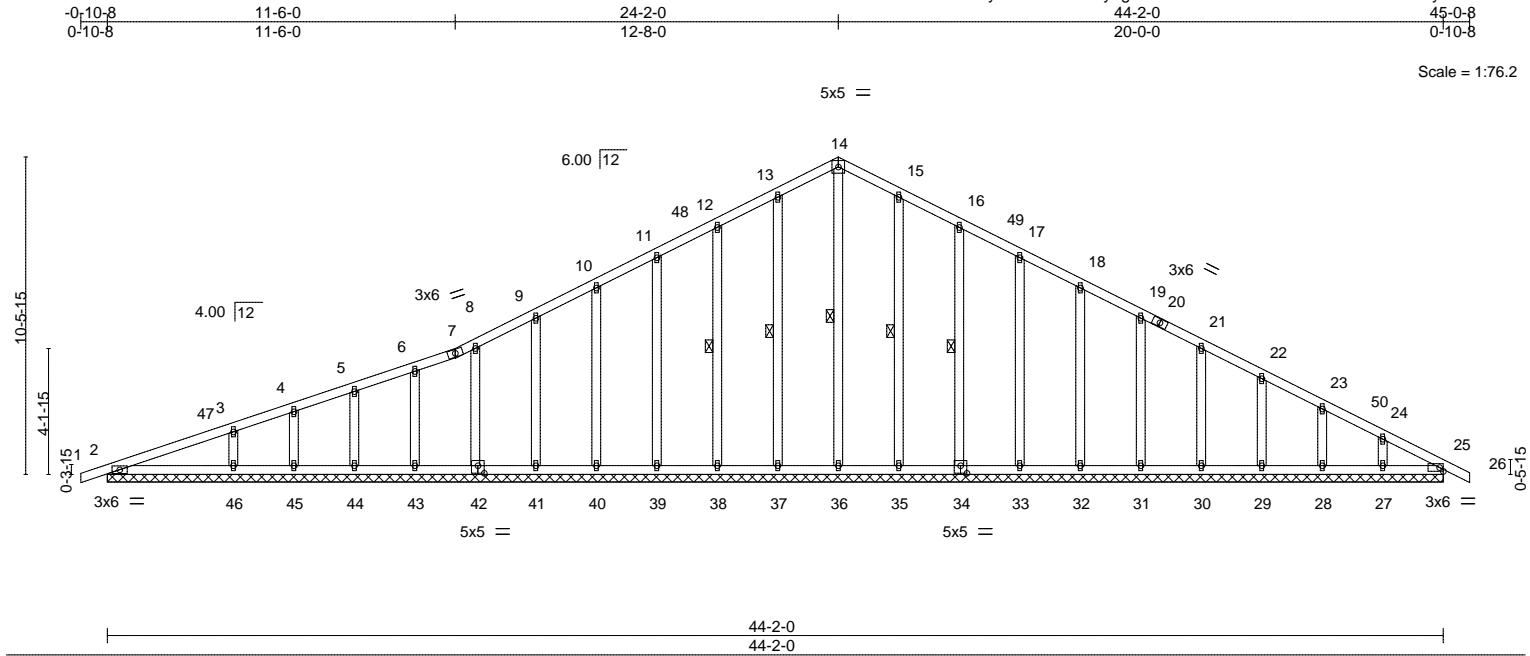


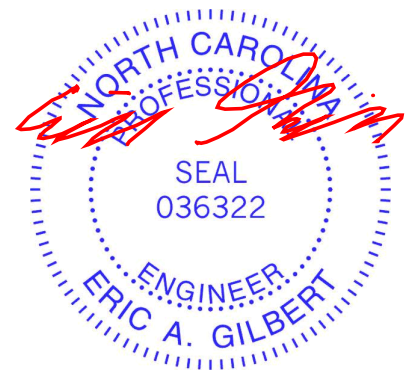
Plate Offsets (X,Y)--	[34:0-2-8,0-3-0], [42:0-2-8,0-3-0]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.19	Vert(LL) -0.00 25 n/r 120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.13	Vert(CT) -0.00 25 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.12	Horz(CT) 0.01 25 n/a n/a		
BCDL 10.0	Code IBC2015/TPI2014	Matrix-S		Weight: 293 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.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	WEBS 1 Row at midpt 14-36, 13-37, 12-38, 15-35, 16-34

**REACTIONS.** All bearings 44-2-0.  
 (lb) - Max Horz 2=149(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 35, 34, 33, 32, 31, 30, 29, 28, 27  
 Max Grav All reactions 250 lb or less at joint(s) 2, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 35, 34, 33, 32, 31, 30, 29, 28, 27, 25 except 46=330(LC 23)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 12-13=-90/262, 13-14=-103/297, 14-15=-103/300, 15-16=-90/265

- NOTES-**
- 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) -0-10-8 to 3-6-8, Exterior(2) 3-6-8 to 24-2-0, Corner(3) 24-2-0 to 28-7-0, Exterior(2) 28-7-0 to 45-0-8 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
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 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.
  - One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 35, 34, 33, 32, 31, 30, 29, 28, and 27. This connection is for uplift only and does not consider lateral forces.



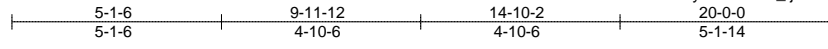
December 21, 2018

Job 1621632	Truss R4	Truss Type Common	Qty 1	Ply 1	STURTZ HOMES-ROLLINS ROOF	E12546474
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Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:09:08 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawyWRuY-Da\_fjlelsOC4IHjwit9FuVgmAnST7ulajzyuRly71e9



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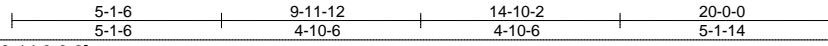
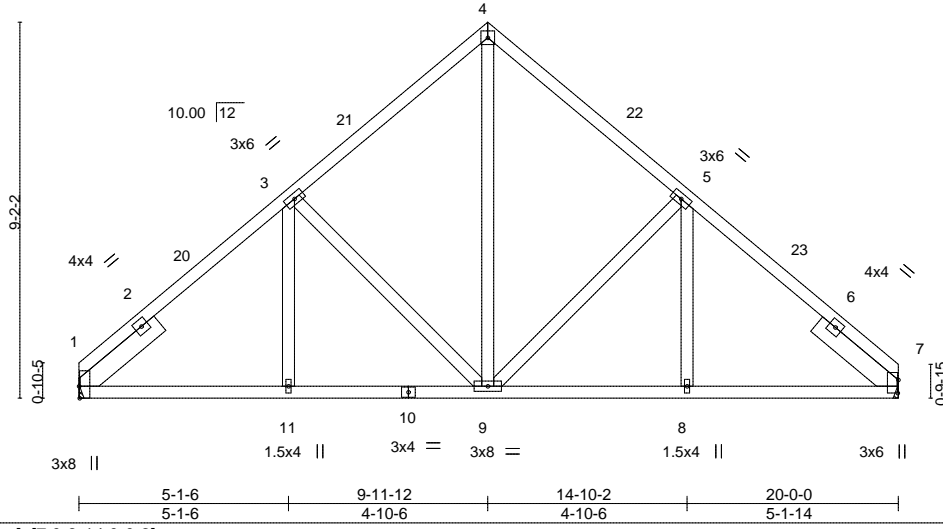


Plate Offsets (X,Y)--	[1:0-3-8,Edge], [7:0-3-14,0-0-3]
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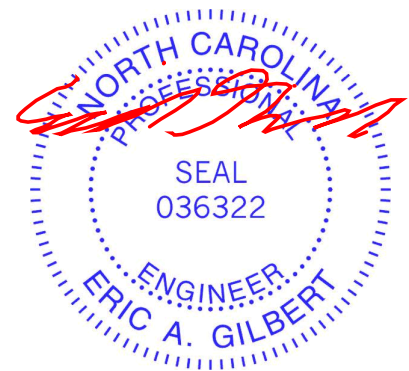
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.27	Vert(LL)	-0.02	9	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.27	Vert(CT)	-0.05	9-11	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.28	Horz(CT)	0.02	7	n/a		
BCDL 10.0	Code IBC2015/TPI2014		Matrix-MS						
								Weight: 126 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.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	
SLIDER Left 2x6 SP No.2 2-6-0, Right 2x6 SP No.2 2-6-0	

**REACTIONS.** (lb/size) 1=800/Mechanical, 7=800/Mechanical  
 Max Horz 1=-176(LC 8)  
 Max Uplift 1=-26(LC 12), 7=-26(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-3=-918/87, 3-4=-703/139, 4-5=-704/139, 5-7=-923/87  
 BOT CHORD 1-11=-80/699, 9-11=-80/699, 8-9=0/667, 7-8=0/667  
 WEBS 3-9=-314/158, 4-9=-80/542, 5-9=-321/158

- NOTES-**
- 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) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 9-11-12, Exterior(2) 9-11-12 to 12-11-12, Interior(1) 12-11-12 to 20-0-0 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
  - 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) 1, 7.



December 21, 2018

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>818 Soundside Road Edenton, NC 27932</p>
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Job 1621632	Truss R5	Truss Type Common	Qty 2	Ply 1	STURTZ HOMES-ROLLINS ROOF	E12546475
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Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:09:09 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawyWRuY-hmY1wefwdhKxNRi6GagURiD\_EBrEsP7jydiSzCy71e8



4x4 =

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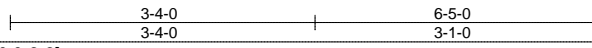
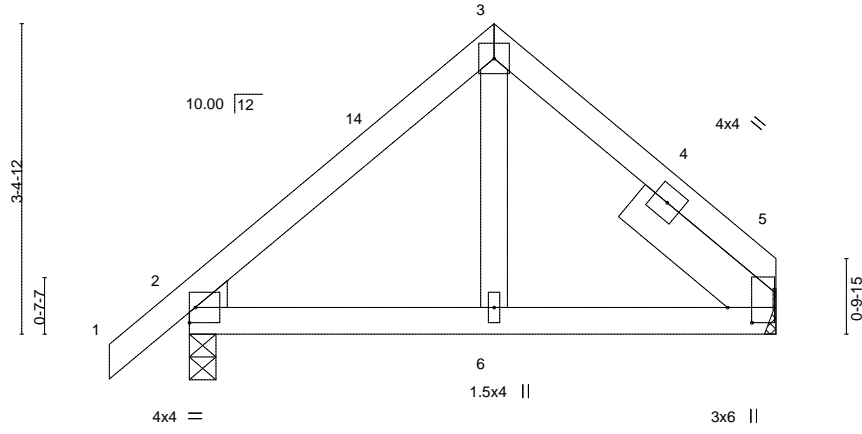


Plate Offsets (X,Y)--	[2:0-3-9,0-0-10], [2:0-0-6,0-0-5], [5:0-2-0,0-3-3]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.12	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.11	Vert(LL) 0.01 6-13 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.05	Vert(CT) -0.01 6-13 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MP	Horz(CT) 0.00 5 n/a n/a		
	Code IBC2015/TPI2014			Weight: 34 lb	FT = 20%

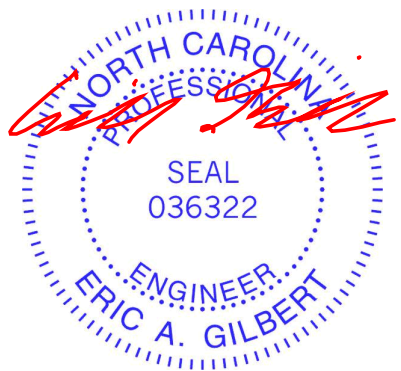
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	
WEDGE	
Left: 2x4 SP No.3	
SLIDER Right 2x6 SP No.2 1-11-8	

**REACTIONS.** (lb/size) 5=253/Mechanical, 2=313/0-3-8  
 Max Horz 2=68(LC 9)  
 Max Uplift 5=-6(LC 13), 2=-23(LC 12)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; 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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-4-0, Exterior(2) 3-4-0 to 6-5-0 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
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 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.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5.
- 7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.

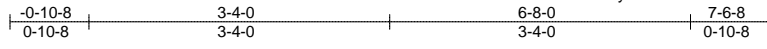


December 21, 2018

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job 1621632	Truss R5E	Truss Type Common Supported Gable	Qty 1	Ply 1	STURTZ HOMES-ROLLINS ROOF E12546476
Builders First Source,					Job Reference (optional)

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:09:09 2018 Page 1  
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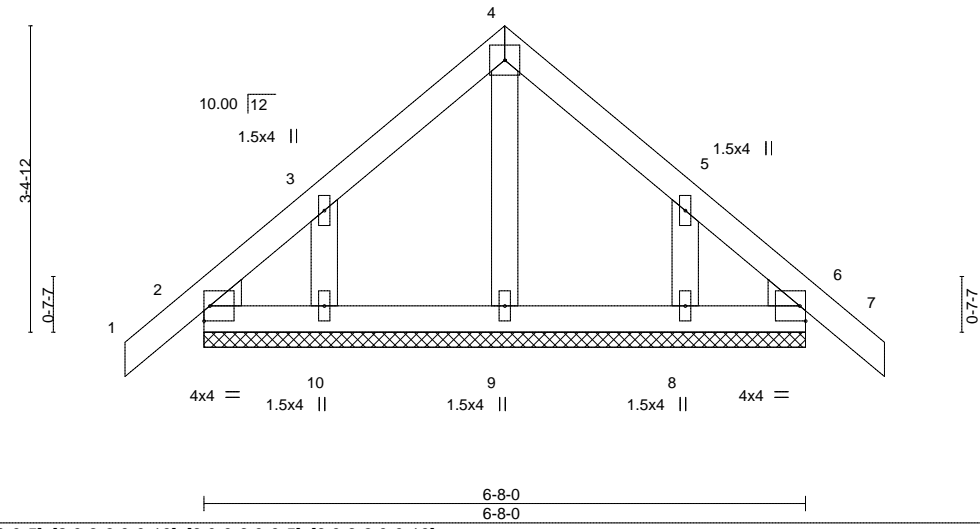


Plate Offsets (X,Y)--	[2:0-0-6,0-0-5], [2:0-3-9,0-0-10], [6:0-0-6,0-0-5], [6:0-3-9,0-0-10]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/def	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	-0.00	7	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	7	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	6	n/a		
BCDL 10.0	Code IBC2015/TPI2014		Matrix-P					Weight: 36 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	
WEDGE	
Left: 2x4 SP No.3, Right: 2x4 SP No.3	

**REACTIONS.** All bearings 6-8-0.  
 (lb) - Max Horz 2=-74(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 8  
 Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9, 10, 8

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=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) 0-10-8 to 2-1-8, Exterior(2) 2-1-8 to 3-4-0, Corner(3) 3-4-0 to 6-4-0, Exterior(2) 6-4-0 to 7-6-8 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
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 10, and 8. This connection is for uplift only and does not consider lateral forces.
- 9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 6.



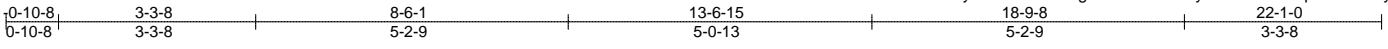
December 21, 2018

Job 1621632	Truss R5G	Truss Type Hip Girder	Qty 1	Ply 2	STURTZ HOMES-ROLLINS ROOF	E12546477
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Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:09:11 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawYWRuY-d9foLkgA8JafdkSVN?iyW7I89?Q7K8p0PxBY24y71e6



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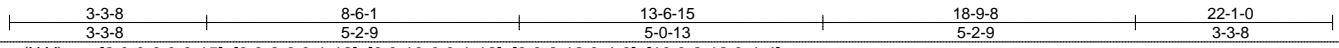
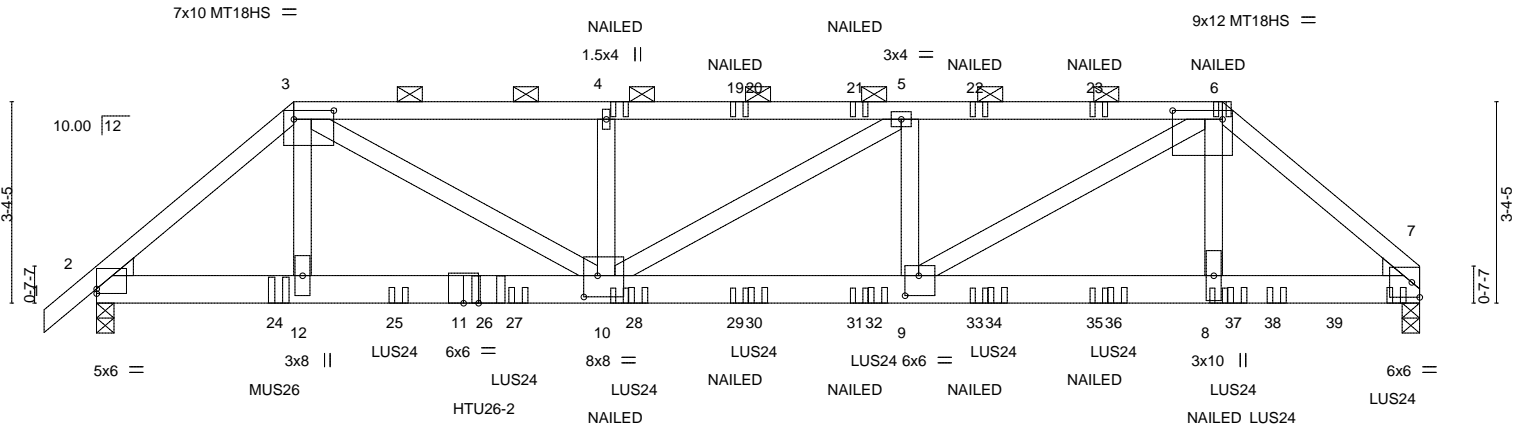


Plate Offsets (X, Y)-- [2:0-0-0,0-0-15], [3:0-8-0,0-1-12], [6:0-10-0,0-1-12], [9:0-2-12,0-4-0], [10:0-2-12,0-4-4]

<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 0.86	Vert(LL)	-0.17	9-10	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.53	Vert(CT)	-0.34	9-10	>789	MT18HS	244/190
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.68	Horz(CT)	0.05	7	n/a		
BCDL 10.0	Code IBC2015/TPI2014		Matrix-MS						
								Weight: 261 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2 \*Except\*  
3-6: 2x4 SP No.1  
BOT CHORD 2x6 SP DSS  
WEBS 2x4 SP No.3 \*Except\*  
3-10,5-10,6-9: 2x4 SP No.2  
**WEDGE**  
Left: 2x4 SP No.3, Right: 2x4 SP No.3

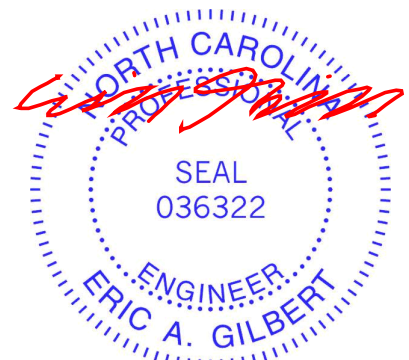
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-3-6 oc purlins, except 2-0-0 oc purlins (3-6-0 max.): 3-6.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 7=6242/0-3-8, 2=5072/0-3-8  
Max Horz 2=69(LC 5)  
Max Uplift 7=548(LC 9), 2=660(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-7264/916, 3-4=-10336/1083, 4-5=-10336/1083, 5-6=-10258/1021, 6-7=-7596/695  
BOT CHORD 2-12=-704/5470, 10-12=-719/5553, 9-10=-1019/10258, 8-9=-508/5841, 7-8=-507/5739  
WEBS 3-12=-316/1714, 3-10=-469/5535, 4-10=-343/172, 5-9=-435/262, 6-9=-590/5112, 6-8=-55/2089

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-8-0 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; 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
- 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.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 7. This connection is for uplift only and does not consider lateral forces.
- Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 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 at 3-0-8 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the left, sloping 0.0 deg. down.



December 21, 2018

Continued on page 2

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road  
Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES-ROLLINS ROOF	E12546477
1621632	R5G	Hip Girder	1	2	Job Reference (optional)	

Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:09:12 2018 Page 2  
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**NOTES-**

- 13) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 5-0-8 from the left end to 15-0-8 to connect truss(es) to front face of bottom chord.
- 14) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 17-0-8 from the left end to 21-8-6 to connect truss(es) to front face of bottom chord.
- 15) Use Simpson Strong-Tie HTU26-2 (20-10d Girder, 14-10d Truss, Single Ply Girder) or equivalent at 6-6-8 from the left end to connect truss(es) to back face of bottom chord.
- 16) Fill all nail holes where hanger is in contact with lumber.
- 17) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 18) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 99 lb down and 40 lb up at 20-8-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

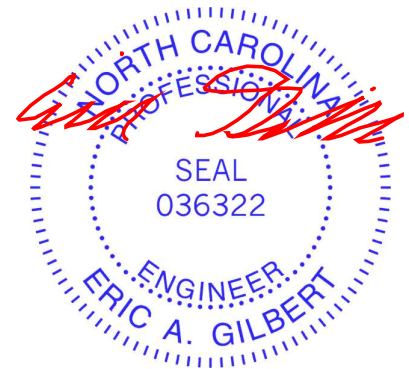
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-60, 3-6=-60, 6-7=-60, 13-16=-20

Concentrated Loads (lb)

Vert: 6=-20(B) 10=-22(B) 4=-20(B) 8=-22(B) 15=-780(F) 19=-20(B) 21=-20(B) 22=-20(B) 23=-20(B) 24=-931(F) 25=-785(F) 26=-418(B) 27=-785(F) 28=-785(F) 29=-22(B) 30=-785(F) 31=-22(B) 32=-774(F) 33=-22(B) 34=-774(F) 35=-22(B) 36=-774(F) 37=-780(F) 38=-774(F) 39=-99



December 21, 2018

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



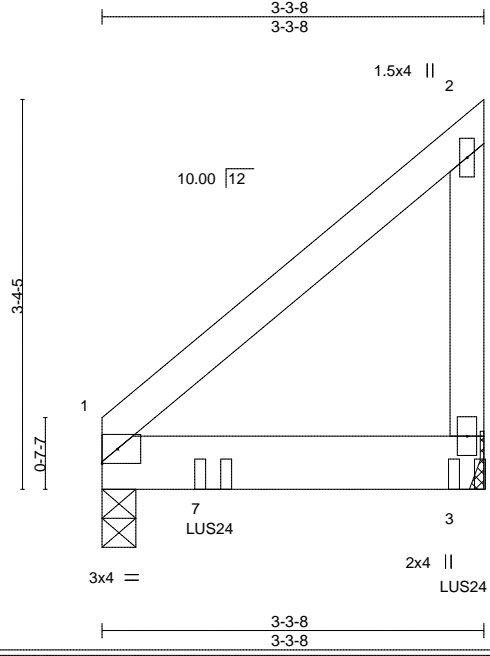
818 Soundside Road  
 Edenton, NC 27932

Job 1621632	Truss R6G	Truss Type Monopitch Girder	Qty 1	Ply 2	STURTZ HOMES-ROLLINS ROOF Job Reference (optional)	E12546478
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Builders First Source,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:09:12 2018 Page 1

ID:o4ssQVnCuCZBoXusHbZGawyWRuY-5LDAYghovciWEU1hxjDB3LrVAPss3lgAebw6aXy71e5



Scale = 1:19.9

<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 0.08	Vert(LL)	-0.00 3-6	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	-0.01 3-6	>999	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	0.00 1	n/a	n/a		
BCDL 10.0	Code IBC2015/TPI2014		Matrix-MP					Weight: 36 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-3-8 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	

**REACTIONS.** (lb/size) 1=288/0-3-8, 3=438/Mechanical  
 Max Horz 1=89(LC 7)  
 Max Uplift 1=-5(LC 8), 3=-54(LC 8)

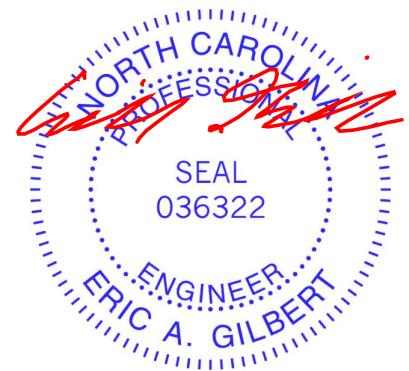
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES-**

- 2-ply truss to be connected together as follows:  
 Top chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected with 10d (0.131"x3") nails as follows: 2x6 - 2 rows staggered 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; TCDL=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
- 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) 3.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1. This connection is for uplift only and does not consider lateral forces.
- Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-2-4 oc max. starting at 0-11-8 from the left end to 3-1-12 to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-2=-60, 3-4=-20  
 Concentrated Loads (lb)  
 Vert: 3=-241(F) 7=-234(F)

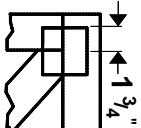


December 21, 2018

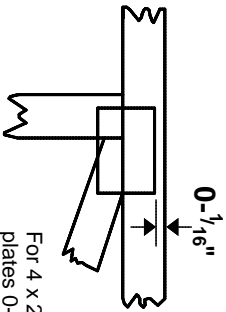
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY  <b>TRENCO</b>      A MiTek Affiliate</p> <p>818 Soundside Road      Edenton, NC 27932</p>
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# Symbols

## PLATE LOCATION AND ORIENTATION



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



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



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

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

## PLATE SIZE

4 X 4

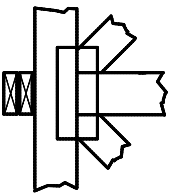
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

## BEARING



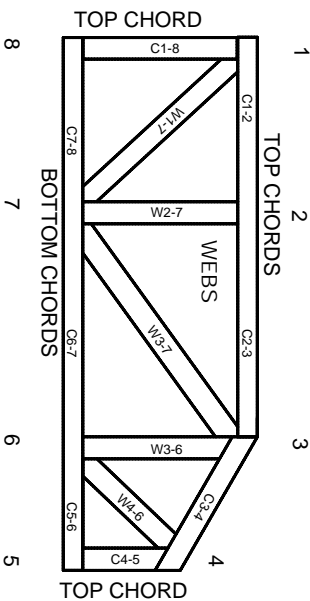
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TPI 1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing.  
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System

6-4-8  
dimensions shown in ft-in-sixteenths  
(Drawings not to scale)



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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

# General Safety Notes

## Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.