

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: 20585A  
243.2939.D Ext CVP

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by 84 Components - #2383.

Pages or sheets covered by this seal: I36893752 thru I36893810

My license renewal date for the state of North Carolina is December 31, 2019.

North Carolina COA: C-0844



April 29, 2019

Sevier, Scott

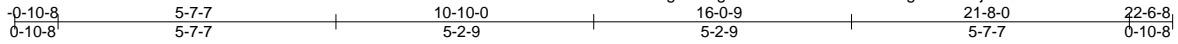
**IMPORTANT NOTE:** Truss Engineer's responsibility is solely for design of individual trusses based upon design parameters shown on referenced truss drawings. Parameters have not been verified as appropriate for any use. Any location identification specified is for file reference only and has not been 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 20585A	Truss A1	Truss Type COMMON	Qty 3	Ply 1	243.2939.D Ext CVP	136893752
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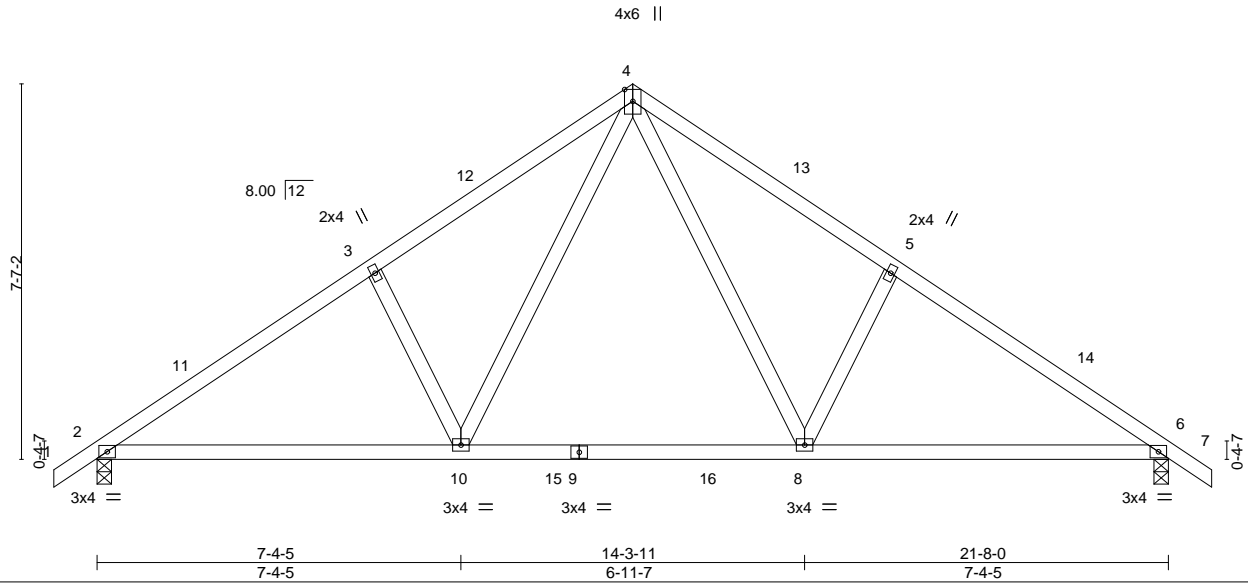
84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:53:21 2019 Page 1

ID:nWgOt4t5g4cSMBishLJF9DzZSKL-gU0k5MYjiiADtb12nmiNDXE3NO2fXv?8GtrjEzMQJS



Scale = 1:46.6



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15		TC 0.39	Vert(LL) -0.11 8-10 >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15		BC 0.55	Vert(CT) -0.17 2-10 >999 180		
BCLL 0.0 *	Rep Stress Incr YES		WB 0.20	Horz(CT) 0.03 6 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S			Weight: 109 lb FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-10-0 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	

**REACTIONS.** (lb/size) 2=916/0-3-8, 6=916/0-3-8  
 Max Horz 2=193(LC 11)  
 Max Uplift 2=-113(LC 12), 6=-113(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1236/151, 3-4=-1094/211, 4-5=-1094/211, 5-6=-1236/151  
 BOT CHORD 2-10=-148/1056, 8-10=0/683, 6-8=-38/952  
 WEBS 4-8=-127/549, 5-8=-317/221, 4-10=-127/549, 3-10=-317/221

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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 10-10-0, Exterior(2) 10-10-0 to 13-10-0, Interior(1) 13-10-0 to 22-6-8 zone; 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 RT7A USP 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.



April 29, 2019

**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/TP1 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 20585A	Truss AG1	Truss Type COMMON GIRDER	Qty 1	Ply 2	243.2939.D Ext CVP	I36893753
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84 Components (Dunn),

Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:53:23 2019 Page 1

ID:nWgOt4t5g4cSMBishLJF9DzZSKL-ct7UW2a\_pJYuSAIQ9BoASecRJAzO7JelcaMyo7zmqJQ



4x6 ||

Scale = 1:50.4

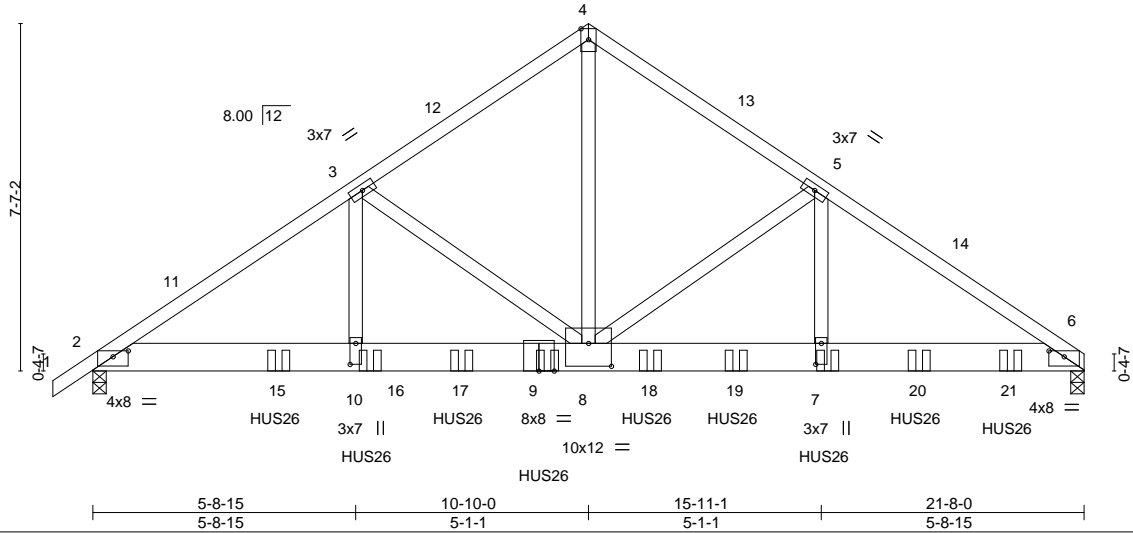


Plate Offsets (X,Y)--	[2:0-4-0,0-1-9], [6:0-4-0,0-1-9], [7:0-5-8,0-1-8], [8:0-6-0,0-6-0], [10:0-5-8,0-1-8]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-1-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.98	Vert(LL)	-0.11	8-10	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 1.00	Vert(CT)	-0.22	8-10	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.69	Horz(CT)	0.06	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 290 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-4-0 oc purlins.
BOT CHORD 2x8 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 4-8: 2x4 SP No.2	

**REACTIONS.** (lb/size) 6=5537/0-3-8, 2=4923/0-3-8  
 Max Horz 2=195(LC 32)  
 Max Uplift 6=-782(LC 13), 2=-958(LC 12)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-7974/1486, 3-4=-5459/953, 4-5=-5461/959, 5-6=-8050/1189  
 BOT CHORD 2-10=-1267/6562, 8-10=-1267/6562, 7-8=-910/6649, 6-7=-910/6649  
 WEBS 4-8=-941/5652, 5-8=-2715/457, 5-7=-237/2680, 3-8=-2607/768, 3-10=-599/2579

- 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: 2x8 - 2 rows staggered at 0-7-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; 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 10-10-0, Exterior(2) 10-10-0 to 13-10-0, Interior(1) 13-10-0 to 21-6-4 zone; 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=782, 2=958.
  - Use USP HUS26 (With 16d nails into Girder & 16d nails into Truss) or equivalent spaced at 2-3-0 oc max. starting at 4-0-12 from the left end to 20-0-12 to connect truss(es) to back 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: 1-4=-63, 4-6=-63, 2-6=-21



April 29, 2019

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 20585A	Truss AG1	Truss Type COMMON GIRDER	Qty 1	Ply <b>2</b>	243.2939.D Ext CVP Job Reference (optional)	I36893753
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84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:53:23 2019 Page 2  
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-ct7UW2a\_pJYuSAIQ9BoASecRJAzO7JelcaMyo7zMQJQ

**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 9=-915(B) 7=-915(B) 15=-1293(B) 16=-915(B) 17=-915(B) 18=-915(B) 19=-915(B) 20=-915(B) 21=-915(B)

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818 Soundside Road  
Edenton, NC 27932

Job 20585A	Truss AGE	Truss Type Common Girder	Qty 1	Ply 1	243.2939.D Ext CVP	136893754
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84 Components (Dunn),

Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:53:25 2019 Page 1

ID:nWgOt4t5g4cSMBishLJF9DzZSKL-ZGFFxjbELwociUvpHcqeX3irJ\_mPb9ha3ur3s0zMQJO



4x4 =

Scale = 1:51.0

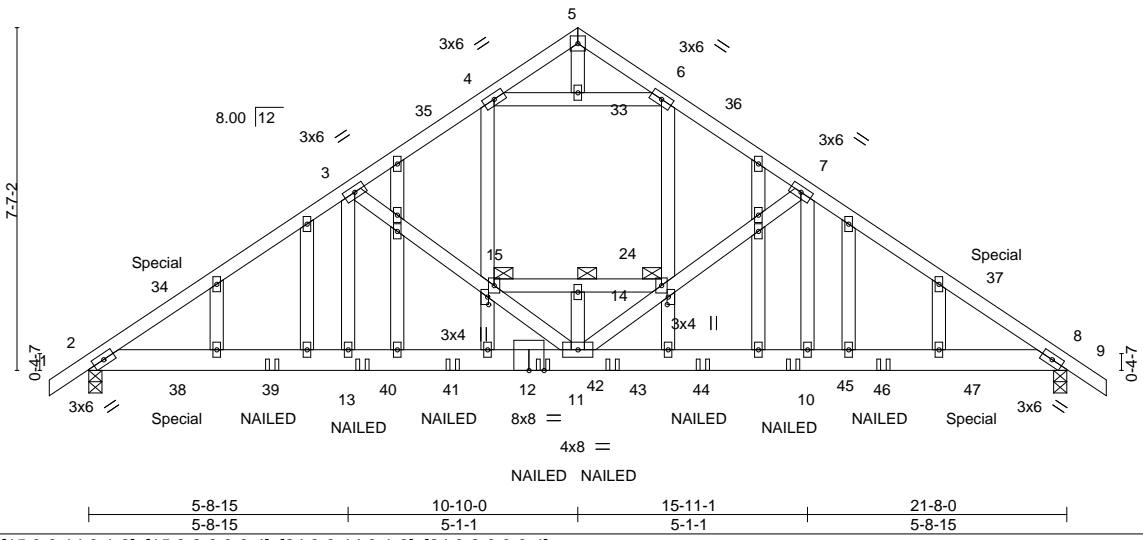


Plate Offsets (X, Y)--	[15:0-0-14,0-1-3], [15:0-2-0,0-0-4], [24:0-0-14,0-1-3], [24:0-2-0,0-0-4]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.76	Vert(LL) 0.31	11	>830	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.52	Vert(CT) -0.67	11	>383	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.91	Horz(CT) 0.02	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 177 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-5-11 oc purlins.
BOT CHORD 2x6 SP DSS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	JOINTS 1 Brace at Jt(s): 14, 15, 24
OTHERS 2x4 SP No.3	

**REACTIONS.** (lb/size) 2=916/0-3-8, 8=916/0-3-8  
 Max Horz 2=193(LC 34)  
 Max Uplift 2=-126(LC 12), 8=-126(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1288/149, 3-4=-673/147, 6-7=-673/147, 7-8=-1288/149  
 BOT CHORD 2-13=-138/976, 11-13=-138/976, 10-11=-38/947, 8-10=-38/947  
 WEBS 11-24=-275/146, 7-24=-423/167, 7-10=0/551, 3-15=-422/166, 11-15=-275/145,  
 3-13=0/551, 4-33=-830/153, 6-33=-830/153

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; 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 10-10-0, Exterior(2) 10-10-0 to 13-10-0, Interior(1) 13-10-0 to 22-6-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- 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 RT7A USP 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.
- "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) 82 lb down and 166 lb up at 2-0-0, and 82 lb down and 166 lb up at 19-7-4 on top chord, and 15 lb down at 2-0-0, and 15 lb down at 19-7-4 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).

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



April 29, 2019

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>ENGINEERING BY  <b>TRENCO</b>  <small>A MiTek Affiliate</small></p> <p>818 Soundside Road        Edenton, NC 27932</p>
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Job 20585A	Truss AGE	Truss Type Common Girder	Qty 1	Ply 1	243.2939.D Ext CVP  Job Reference (optional)	I36893754
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84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:53:25 2019 Page 2  
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-ZGFFxjbELwociUvpHcqeX3irJ\_mPb9ha3ur3s0zMQJO

**LOAD CASE(S)** Standard

Uniform Loads (plf)

Vert: 1-5=-60, 5-9=-60, 2-8=-20

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818 Soundside Road  
Edenton, NC 27932

Job 20585A	Truss BGE	Truss Type GABLE	Qty 1	Ply 2	243.2939.D Ext CVP	136893755
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84 Components (Dunn),

Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:53:27 2019 Page 1

ID:nWgOt4t5g4cSMBishLJF9DzZSKL-VeN?MPdUty2Kxo2BO1t6cUnlDoM737OtXCKAxuzMqJM



5x9 =

Scale = 1:33.1

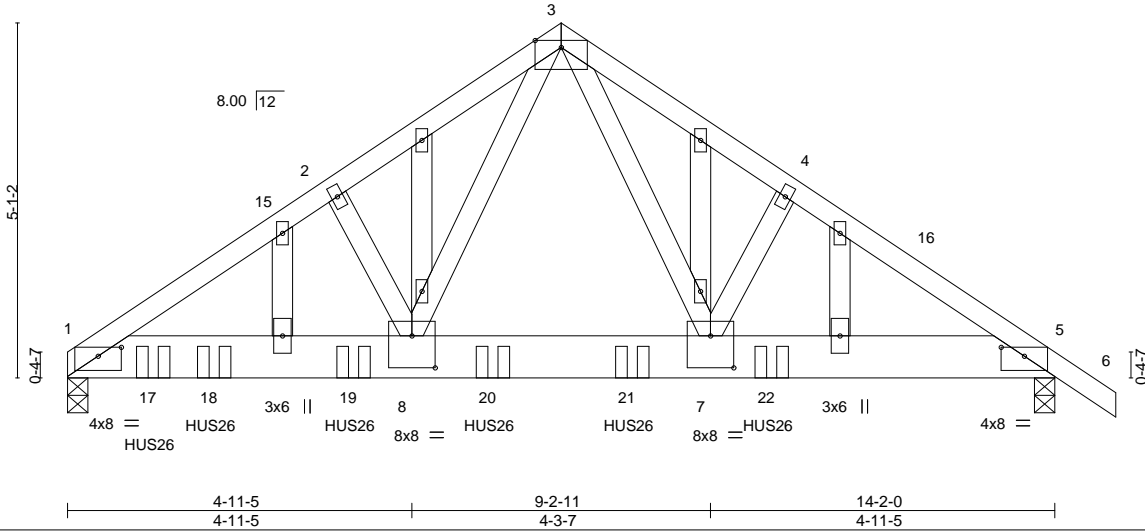


Plate Offsets (X,Y)-- [1:0-4-0,0-1-9], [5:0-4-0,0-1-9], [7:0-4-0,0-5-8], [8:0-4-0,0-5-8]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.29	Vert(LL)	-0.05	7-8	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.89	Vert(CT)	-0.10	7-8	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.64	Horz(CT)	0.02	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 208 lb	FT = 20%

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

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

**REACTIONS.** (lb/size) 1=4131/0-3-8, 5=2932/0-3-8  
 Max Horz 1=-125(LC 8)  
 Max Uplift 1=-580(LC 12), 5=-594(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-5025/794, 2-3=-4944/833, 3-4=-4573/971, 4-5=-4682/933  
 BOT CHORD 1-8=-646/4154, 7-8=-423/2763, 5-7=-712/3844  
 WEBS 3-7=-673/2408, 3-8=-385/3114

**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: 2x8 - 2 rows staggered at 0-6-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; 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 7-1-0, Exterior(2) 7-1-0 to 10-4-6, Interior(1) 10-4-6 to 15-0-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- 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 RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 5. This connection is for uplift only and does not consider lateral forces.
- Use USP HUS26 (With 16d nails into Girder & 16d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-2-12 from the left end to 10-1-4 to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

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



April 29, 2019

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818 Soundside Road  
 Edenton, NC 27932

Job 20585A	Truss BGE	Truss Type GABLE	Qty 1	Ply <b>2</b>	243.2939.D Ext CVP Job Reference (optional)	I36893755
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84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:53:27 2019 Page 2  
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-VeN?MPdUtY2Kxo2BO1t6cUnIDoM737OtXCKAxuzMqJM

**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, 1-5=-20  
Concentrated Loads (lb)  
Vert: 17=-920(B) 18=-920(B) 19=-920(B) 20=-920(B) 21=-917(B) 22=-1293(B)

**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

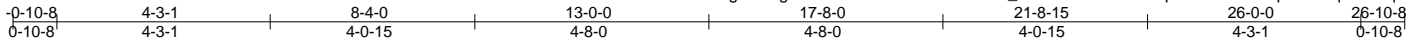




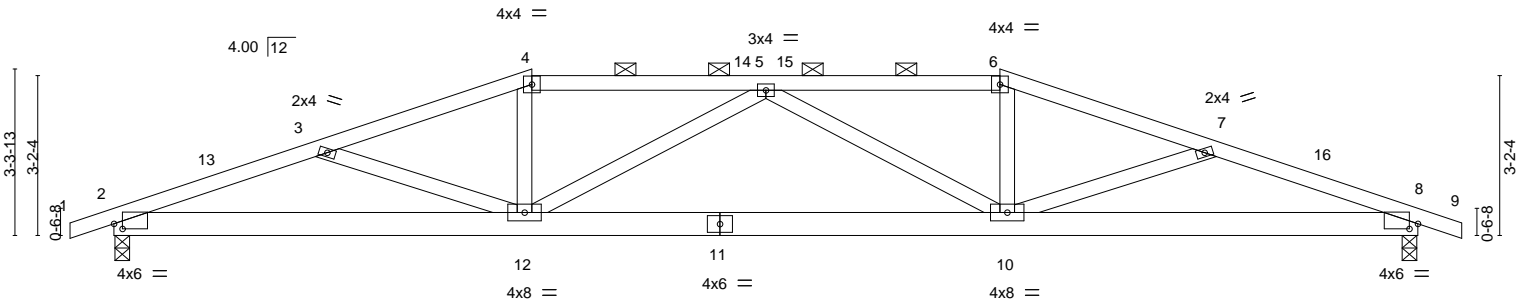
Job	Truss	Truss Type	Qty	Ply	243.2939.D Ext CVP	136893757
20585A	CP1	Hip	1	1		
84 Components (Dunn), Dunn, NC - 28334,						Job Reference (optional)

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:53:30 2019 Page 1

ID:nWgOt4t5g4cSMBishLJF9DzZSKL-vD28\_RfNASQuoFnm49QpE7PiX?RCGapKDAYqYDzMQJJ



Scale = 1:45.9



0-0-4	8-4-0	17-8-0	25-11-12	26-0-0
0-0-4	8-3-12	9-4-0	8-3-12	0-0-4
Plate Offsets (X,Y)-- [2-0-2-1,0-1-3], [8-0-2-1,0-1-3]				

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.67	Vert(LL)	0.21	10-12	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.67	Vert(CT)	-0.28	10-12	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.28	Horz(CT)	0.06	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 139 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-7-12 oc purlins, except
BOT CHORD 2x6 SP No.2	2-0-0 oc purlins (3-10-12 max.): 4-6.
WEBS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 5-10-15 oc bracing.

**REACTIONS.** (lb/size) 2=1090/0-3-8, 8=1090/0-3-8  
 Max Horz 2=-50(LC 17)  
 Max Uplift 2=-448(LC 8), 8=-448(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2397/1555, 3-4=-2188/1528, 4-5=-2027/1458, 5-6=-2027/1458, 6-7=-2188/1528, 7-8=-2397/1555  
 BOT CHORD 2-12=-1423/2198, 10-12=-1474/2334, 8-10=-1420/2198  
 WEBS 4-12=-375/446, 5-12=-460/192, 5-10=-460/192, 6-10=-375/446

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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 8-4-0, Exterior(2) 8-4-0 to 12-6-15, Interior(1) 12-6-15 to 17-8-0, Exterior(2) 17-8-0 to 21-11-13, Interior(1) 21-11-13 to 26-10-8 zone; porch 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 8=448.
  - One RT7A USP 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.



April 29, 2019

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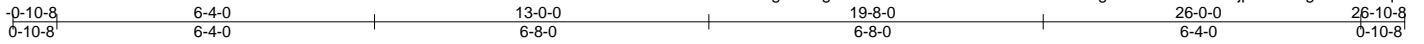
**TRENCO**  
ENGINEERING BY  
A MiTek Affiliate  
818 Soundside Road  
Edenton, NC 27932

Job 20585A	Truss CP2	Truss Type Hip	Qty 1	Ply 1	243.2939.D Ext CVP	136893758
					Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:53:32 2019 Page 1

ID:nWgOt4t5g4cSMBishLJF9DzZSKL-rcAuP7hdi4gc2Zx9BaSHJYU1jp56kTLcgU1xc6zMQJH



Scale = 1:45.9

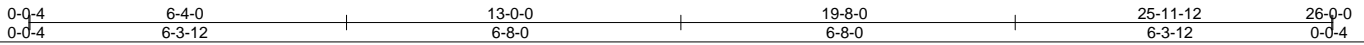
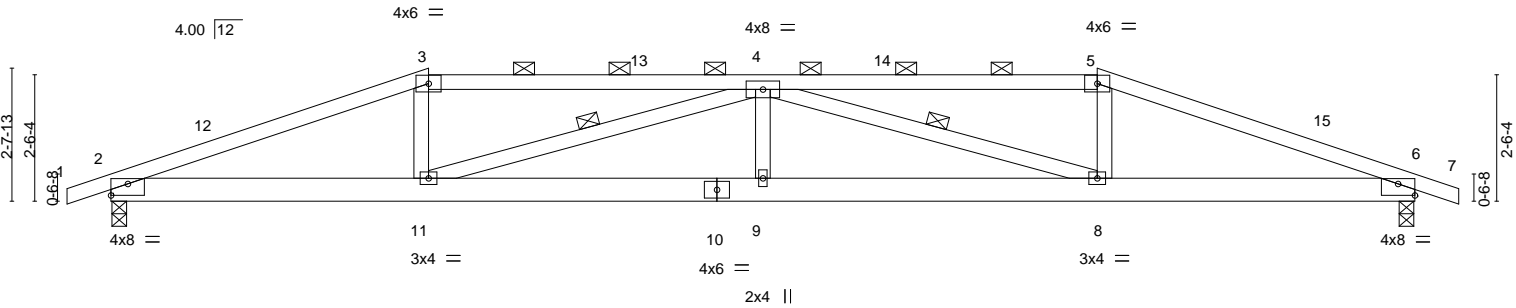


Plate Offsets (X,Y)-- [2:Edge,0-2-12], [6:Edge,0-2-12]						
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl L/d
TCLL 20.0	Plate Grip DOL	1.15	TC 0.75	Vert(LL) 0.25	9	>999 240
TCDL 10.0	Lumber DOL	1.15	BC 0.77	Vert(CT) -0.36	9	>854 180
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.34	Horz(CT) 0.07	6	n/a n/a
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S			
						<b>PLATES</b> MT20 <b>GRIP</b> 244/190
						Weight: 132 lb FT = 20%

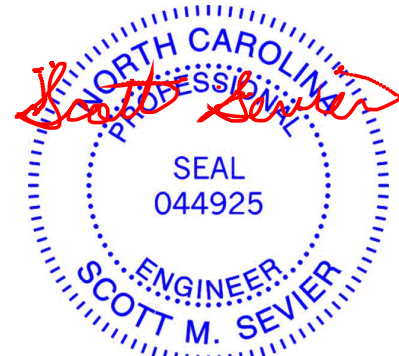
**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x6 SP No.2  
 WEBS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 2-9-1 oc purlins, except 2-0-0 oc purlins (2-11-15 max.): 3-5.  
 BOT CHORD Rigid ceiling directly applied or 5-0-15 oc bracing.  
 WEBS 1 Row at midpt 4-11, 4-8

**REACTIONS.** (lb/size) 2=1090/0-3-8, 6=1090/0-3-8  
 Max Horz 2=39(LC 12)  
 Max Uplift 2=-455(LC 8), 6=-455(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2454/1641, 3-4=-2221/1551, 4-5=-2221/1551, 5-6=-2454/1642  
 BOT CHORD 2-11=-1494/2249, 9-11=-2056/3166, 8-9=-2056/3166, 6-8=-1490/2249  
 WEBS 3-11=-413/506, 4-11=-1111/653, 4-9=-190/261, 4-8=-1111/653, 5-8=-413/506

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; 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 6-4-0, Exterior(2) 6-4-0 to 10-6-15, Interior(1) 10-6-15 to 19-8-0, Exterior(2) 19-8-0 to 23-10-15, Interior(1) 23-10-15 to 26-10-8 zone; porch 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=455.
  - 7) One RT7A USP 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.



April 29, 2019

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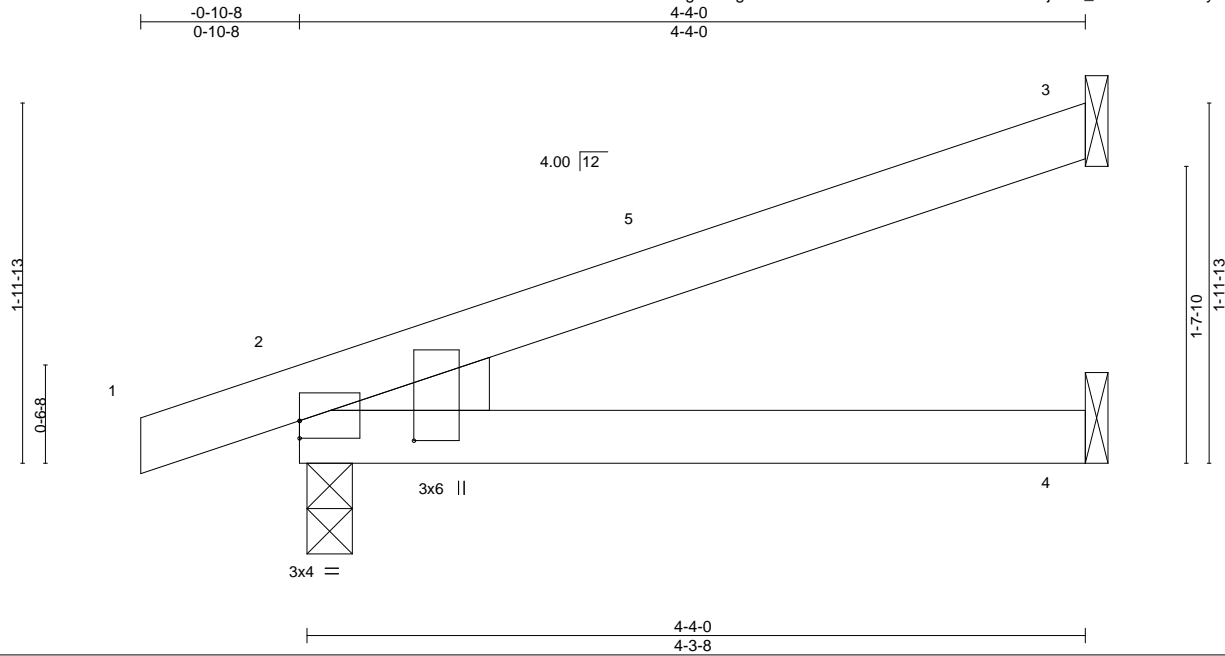
Job 20585A	Truss CP3	Truss Type Jack-Open	Qty 10	Ply 1	243.2939.D Ext CVP	I36893759
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84 Components (Dunn),

Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:53:33 2019 Page 1

ID:nWgOt4t5g4cSMBishLjF9DzZSKL-KokGdTfTNoTfjWLIi\_Wsl1HCCZ9T?ymv8nU8YzMQJG



Scale = 1:12.7

Plate Offsets (X,Y)--	[2:0-0-0,0-1-2], [2:0-1-5,0-7-9]				
<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 0.45	Vert(LL) 0.03 2-4 >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.21	Vert(CT) -0.04 2-4 >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 IRC2015/TPI2014	Matrix-P		Weight: 16 lb	FT = 20%

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

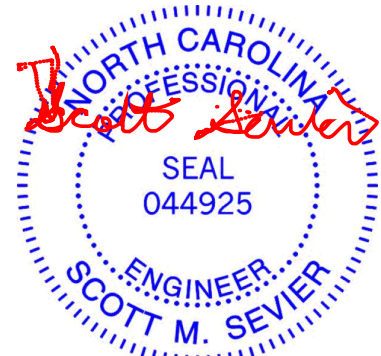
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-4-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 3=117/Mechanical, 2=233/0-3-0, 4=41/Mechanical  
 Max Horz 2=67(LC 8)  
 Max Uplift 3=66(LC 12), 2=-100(LC 8), 4=-13(LC 8)  
 Max Grav 3=117(LC 1), 2=233(LC 1), 4=83(LC 3)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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 4-3-4 zone; porch 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 connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4.
- 6) One RT7A USP 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.



April 29, 2019

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818 Soundside Road  
 Edenton, NC 27932

Job 20585A	Truss CP4	Truss Type Diagonal Hip Girder	Qty 2	Ply 1	243.2939.D Ext CVP	136893760
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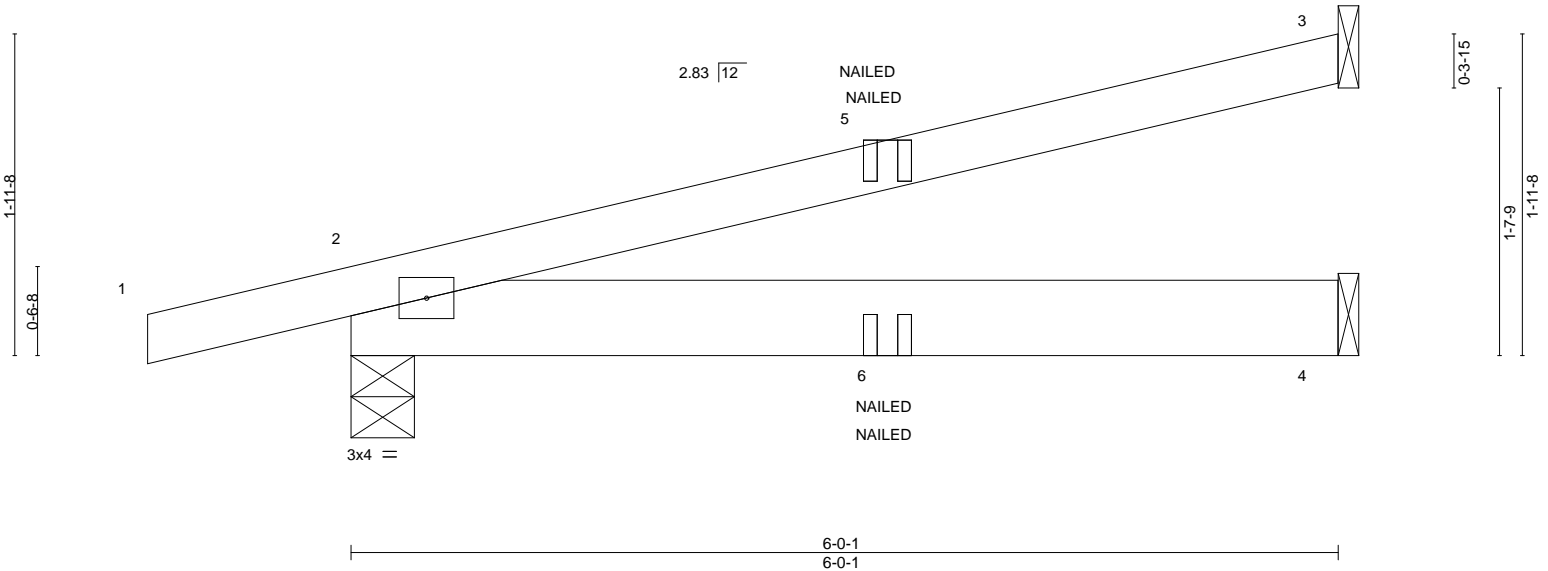
84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:53:35 2019 Page 1

ID:nWgOt4t5g4cSMBishLJF9DzZSKL-GBs118jV\_?3BvOgksj0\_xA6ZD0FWxvR3MSGbDRzMQjE



Scale = 1:14.0



<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 0.67	Vert(LL)	0.04	2-4	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.21	Vert(CT)	-0.03	2-4	>999	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P						Weight: 25 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.** (lb/size) 3=162/Mechanical, 2=326/0-4-10, 4=57/Mechanical  
Max Horz 2=67(LC 27)  
Max Uplift 3=-81(LC 12), 2=-150(LC 8), 4=-18(LC 8)  
Max Grav 3=162(LC 1), 2=326(LC 1), 4=115(LC 3)

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

**NOTES-**

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-2-14 to 3-0-1, Exterior(2) 3-0-1 to 5-11-5 zone; porch 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, 4.
- One RT7A USP 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.
- "NAILED" indicates 3-10d (0.148"x3") or 2-12d (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

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



April 29, 2019

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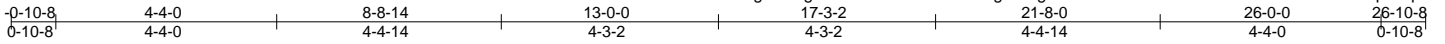


Job 20585A	Truss CPG	Truss Type Hip Girder	Qty 1	Ply 1	243.2939.D Ext CVP	136893762
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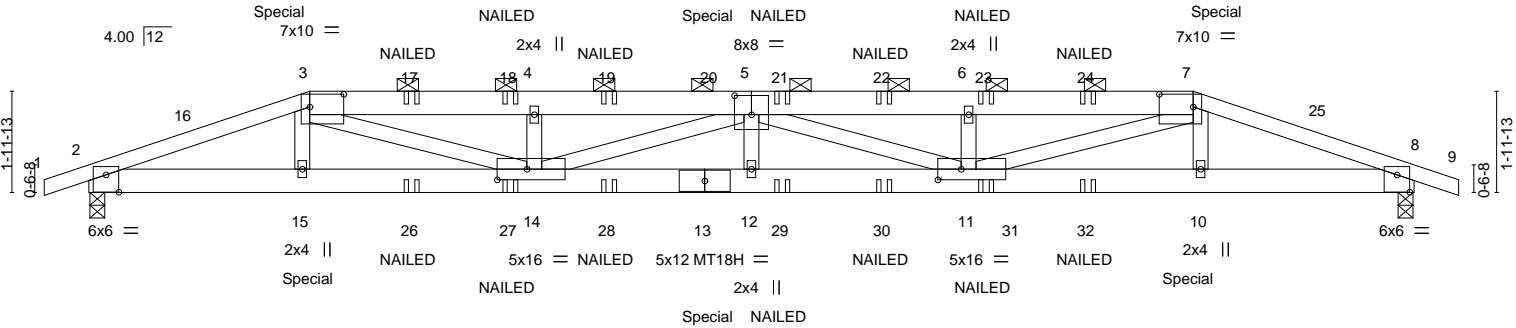
84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:53:38 2019 Page 1

ID:nWgOt4t5g4cSMBishLJF9DzZSKL-gmX9gAlOHwRmmUOIYrZhZok38DCs81wV2QUFqlzMQJB



Scale = 1:45.2



0-0-4	4-4-0	8-8-14	13-0-0	17-3-2	21-8-0	25-11-12	26-0-0
0-0-4	4-3-12	4-4-14	4-3-2	4-3-2	4-4-14	4-3-12	0-0-4

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

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.75	Vert(LL)	0.54	12	>572	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.56	Vert(CT)	-0.70	12	>441	180	MT18H	244/190
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.98	Horz(CT)	0.09	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S							
									Weight: 152 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 *Except* 3-5,5-7: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-8-1 oc purlins, except 2-0-0 oc purlins (2-8-5 max.): 3-7.
BOT CHORD 2x6 SP DSS	BOT CHORD Rigid ceiling directly applied or 4-5-14 oc bracing.
WEBS 2x4 SP No.3	

**REACTIONS.** (lb/size) 2=1591/0-3-8, 8=1587/0-3-8  
Max Horz 2=-28(LC 17)  
Max Uplift 2=-746(LC 8), 8=-744(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-3909/2168, 3-4=-5792/3248, 4-5=-5790/3247, 5-6=-5777/3244, 6-7=-5779/3245,  
7-8=-3898/2165  
BOT CHORD 2-15=-1990/3618, 14-15=-1979/3601, 12-14=-3645/6616, 11-12=-3645/6616,  
10-11=-1970/3591, 8-10=-1982/3608  
WEBS 3-15=-120/321, 3-14=-1301/2361, 4-14=-404/209, 5-14=-887/496, 5-12=-117/291,  
5-11=-901/500, 6-11=-400/207, 7-11=-1300/2357, 7-10=-121/320

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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 4-4-0, Exterior(2) 4-4-0 to 8-8-14, Interior(1) 8-8-14 to 21-8-0, Exterior(2) 21-8-0 to 25-10-4, Interior(1) 25-10-4 to 26-10-8 zone; porch 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) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=746, 8=744.
- 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) 181 lb down and 227 lb up at 4-4-0, and 57 lb down and 97 lb up at 12-2-8, and 181 lb down and 227 lb up at 21-8-0 on top chord, and 101 lb down and 80 lb up at 4-4-0, and 43 lb down and 33 lb up at 12-2-8, and 101 lb down and 80 lb up at 21-7-4 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



April 29, 2019

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/TP1 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 20585A	Truss CPG	Truss Type Hip Girder	Qty 1	Ply 1	243.2939.D Ext CVP  Job Reference (optional)	I36893762
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84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:53:38 2019 Page 2  
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-gmX9gAIOHwRmmUOIYrZhZok38DCs81wV2QUFqIzMQJB

**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, 7-9=-60, 2-8=-20

Concentrated Loads (lb)

Vert: 3=-134(F) 7=-134(F) 13=-21(F) 15=-51(F) 10=-51(F) 17=-57(F) 18=-57(F) 19=-57(F) 20=-57(F) 21=-57(F) 22=-57(F) 23=-57(F) 24=-57(F) 26=-21(F) 27=-21(F) 28=-21(F) 29=-21(F) 30=-21(F) 31=-21(F) 32=-21(F)

**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



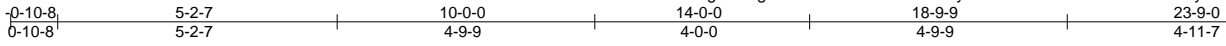
Job 20585A	Truss H1	Truss Type Hip	Qty 1	Ply 1	243.2939.D Ext CVP	136893763
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84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:53:39 2019 Page 1

ID:nWgOt4t5g4cSMBishLJF9DzZSKL-8y5YtWm02DZdNezV5Y4w60HKydSbtgFeH4EoMCzMQJA

Job Reference (optional)



Scale = 1:42.9

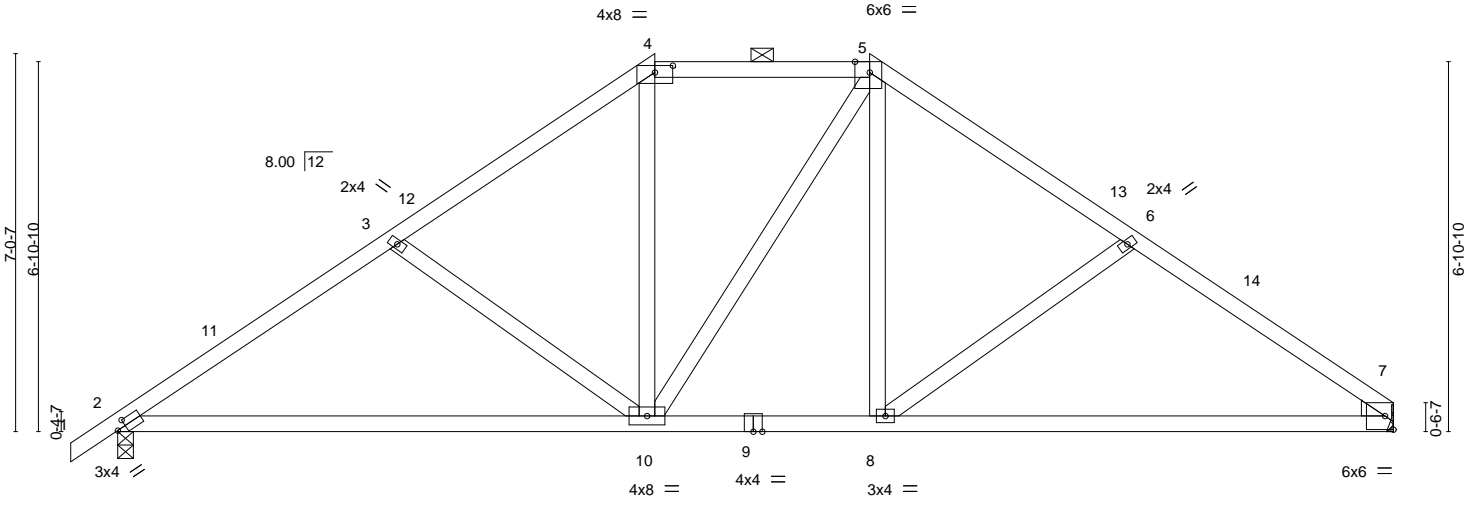


Plate Offsets (X,Y)--	[2:0-2-0,0-1-8], [4:0-4-0,0-1-9], [5:0-3-5,Edge], [7:0-0-15,0-0-10], [7:0-5-6,0-1-4], [7:Edge,0-3-1]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.37	Vert(LL)	-0.26	2-10	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.91	Vert(CT)	-0.55	2-10	>517		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.20	Horz(CT)	0.04	7	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								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 4-7-0 oc purlins, except
BOT CHORD 2x4 SP No.2	2-0-0 oc purlins (6-0-0 max.): 4-5.
WEBS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEDGE	
Right: 2x4 SP No.3	

**REACTIONS.** (lb/size) 2=1004/0-3-8, 7=940/Mechanical  
 Max Horz 2=173(LC 9)  
 Max Uplift 2=-112(LC 12), 7=-88(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1347/230, 3-4=-1099/207, 4-5=-835/214, 5-6=-1094/211, 6-7=-1330/230  
 BOT CHORD 2-10=-171/1067, 8-10=0/831, 7-8=-121/1044  
 WEBS 3-10=-315/207, 4-10=-17/353, 5-8=-38/343, 6-8=-294/209

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; 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 10-0-0, Exterior(2) 10-0-0 to 18-2-15, Interior(1) 18-2-15 to 23-8-4 zone; 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 except (jt=lb) 2=112.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 29, 2019

Job 20585A	Truss H1A	Truss Type Half Hip	Qty 1	Ply 1	243.2939.D Ext CVP	136893764
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84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:53:40 2019 Page 1

ID:nWgOt4t5g4cSMBishLJF9DzZSKL-c8fw5snepxhT?oYhfGc9eDpb1oac3roWkzMuezMqJ9

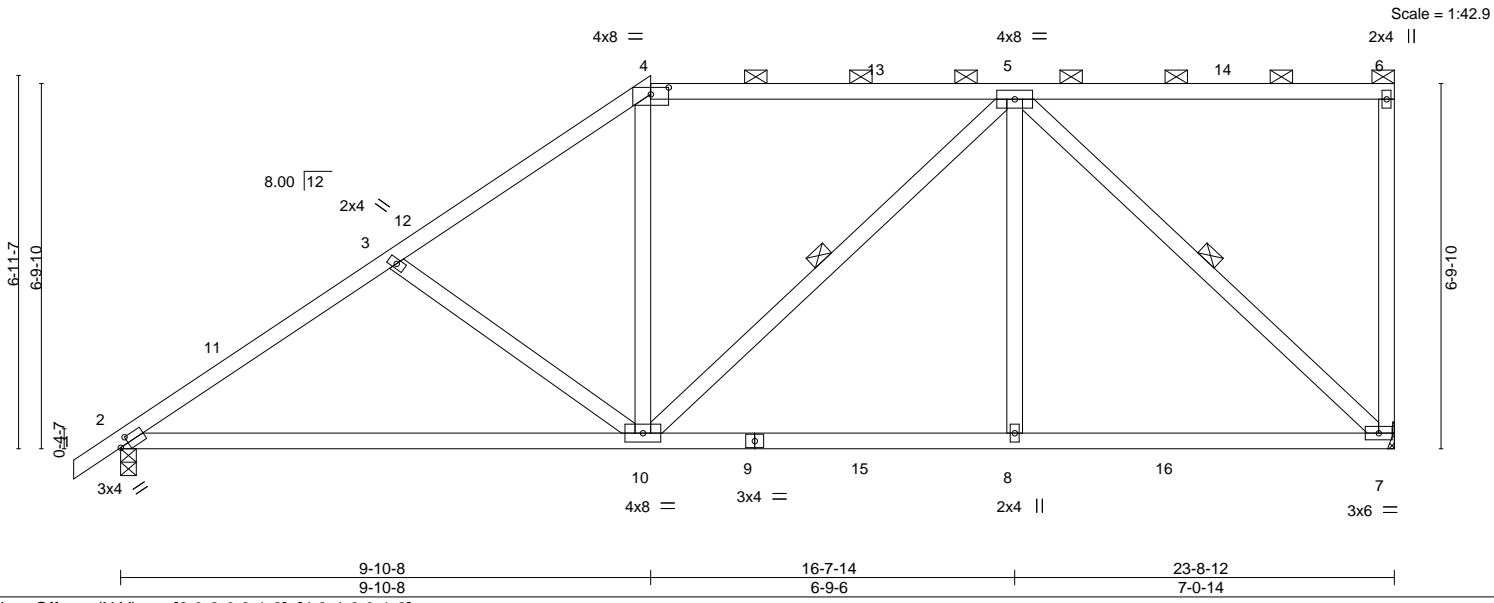


Plate Offsets (X,Y)--	[2:0-2-0,0-1-8], [4:0-4-0,0-1-9]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.69	Vert(LL)	-0.23	2-10	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.86	Vert(CT)	-0.48	2-10	>586		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.50	Horz(CT)	0.03	7	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								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 4-7-2 oc purlins, except end verticals, and 2-0-0 oc purlins (5-6-4 max.): 4-6.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 5-10, 5-7

**REACTIONS.** (lb/size) 7=936/Mechanical, 2=1000/0-3-8  
 Max Horz 2=270(LC 12)  
 Max Uplift 7=-157(LC 9), 2=-92(LC 12)  
 Max Grav 7=939(LC 2), 2=1000(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1344/167, 3-4=-1103/144, 4-5=-847/162  
 BOT CHORD 2-10=-288/1063, 8-10=-131/783, 7-8=-131/783  
 WEBS 3-10=-308/206, 4-10=0/344, 5-8=0/339, 5-7=-1054/177

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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 9-10-8, Exterior(2) 9-10-8 to 14-1-7, Interior(1) 14-1-7 to 23-7-0 zone; 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) 2 except (jt=lb) 7=157.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 29, 2019

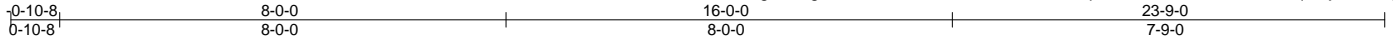
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss 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/TP1 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 20585A	Truss H2	Truss Type Hip	Qty 1	Ply 1	243.2939.D Ext CVP	136893765
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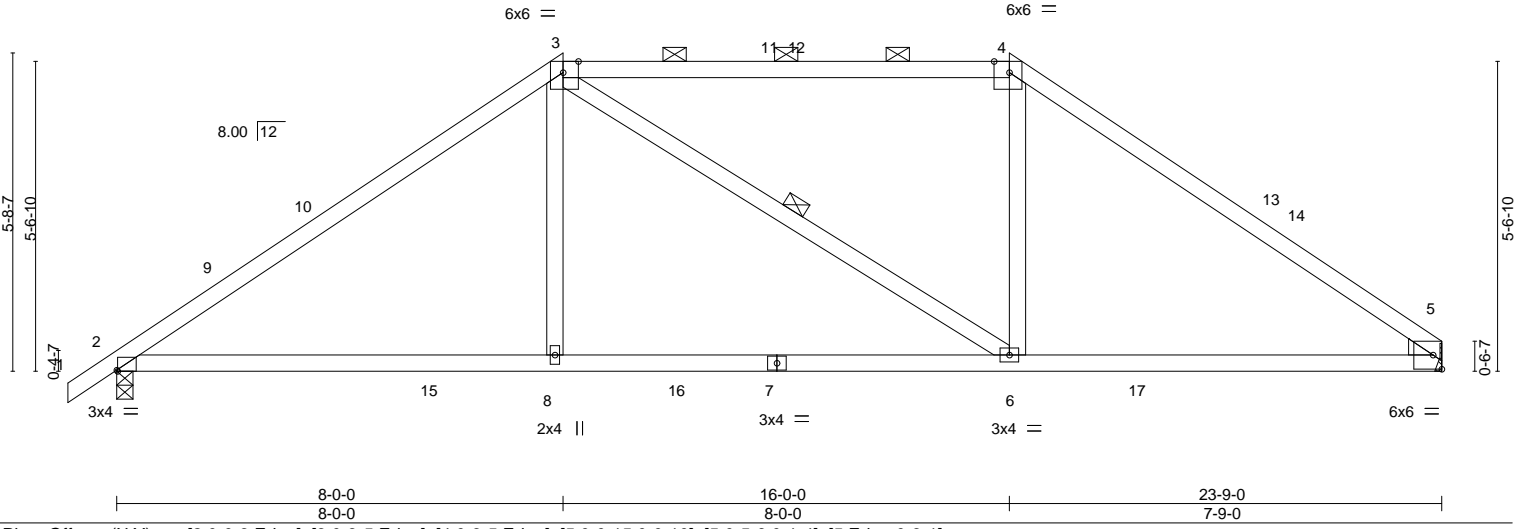
84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:53:41 2019 Page 1

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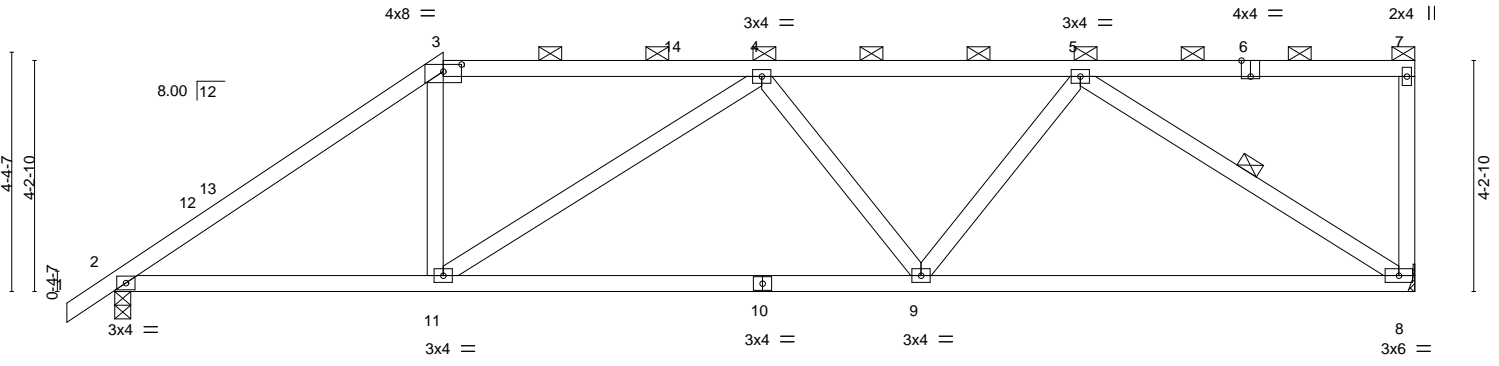




Job 20585A	Truss H3	Truss Type Half Hip	Qty 1	Ply 1	243.2939.D Ext CVP	136893767
84 Components (Dunn), Dunn, NC - 28334,					8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:53:43 2019 Page 1	
Job Reference (optional)					ID:nWgOt4t5g4cSMBishLJF9DzZSKL-1jL2jtpW6S32sFHGKO9sGsRySEqapPFEChCOVzzMqJ6	



Scale = 1:42.1



6-0-0	14-8-12	23-9-0
6-0-0	8-8-12	9-0-4
Plate Offsets (X,Y)-- [3:0-4-0,0-1-9], [6:0-2-0,Edge]		

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.59	Vert(LL) -0.15 8-9 >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.84	Vert(CT) -0.32 8-9 >875 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.50	Horz(CT) 0.05 8 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 119 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-11-0 oc purlins, except end verticals, and 2-0-0 oc purlins (4-9-3 max.): 3-7.
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 5-8

**REACTIONS.** (lb/size) 8=937/Mechanical, 2=1001/0-3-8  
 Max Horz 2=170(LC 12)  
 Max Uplift 8=-166(LC 9), 2=-84(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1410/164, 3-4=-1072/186, 4-5=-1333/196  
 BOT CHORD 2-11=-183/1085, 9-11=-265/1429, 8-9=-216/1094  
 WEBS 3-11=-4/462, 4-11=-499/189, 5-9=0/462, 5-8=-1273/259

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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 6-0-0, Exterior(2) 6-0-0 to 10-2-15, Interior(1) 10-2-15 to 23-7-4 zone;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) 2 except (jt=lb) 8=166.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 29, 2019

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Job	Truss	Truss Type	Qty	Ply	243.2939.D Ext CVP	136893768
20585A	H3A	Half Hip	1	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:53:43 2019 Page 1

ID:nWgOt4t5g4cSMBishLJF9DzZSKL-1jL2jtpW6S32sFHGKO9sGsRySEqcpPhEChCOVzzMqJ6



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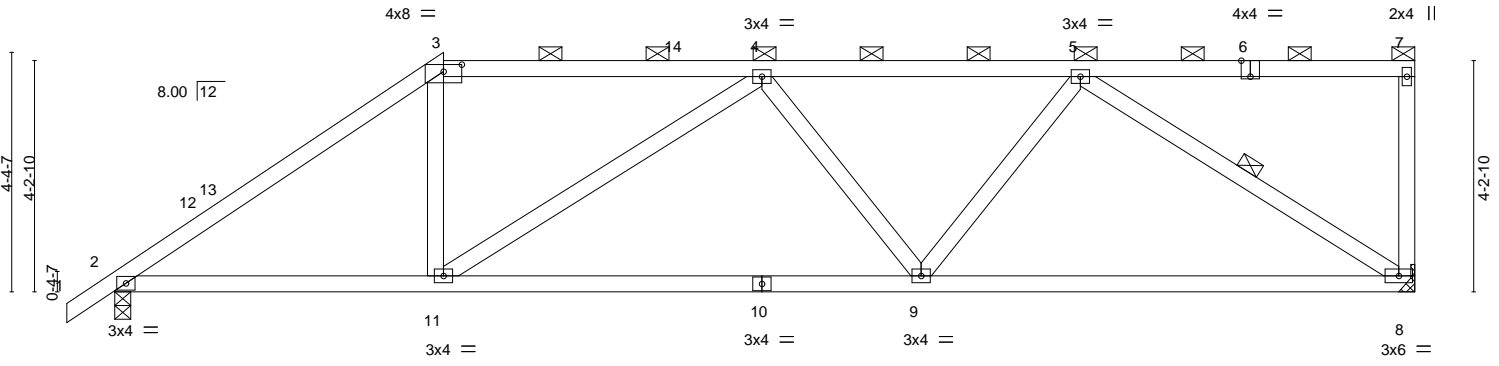


Plate Offsets (X,Y)-- [3:0-4-0,0-1-9], [6:0-2-0,Edge]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.59	Vert(LL)	-0.15	8-9	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.84	Vert(CT)	-0.32	8-9	>878		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.50	Horz(CT)	0.05	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 119 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 3-11-2 oc purlins, except end verticals, and 2-0-0 oc purlins (4-9-4 max.): 3-7.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 5-8

**REACTIONS.** (lb/size) 8=936/Mechanical, 2=1000/0-3-8  
 Max Horz 2=170(LC 12)  
 Max Uplift 8=166(LC 9), 2=84(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1409/164, 3-4=-1070/186, 4-5=-1330/196  
 BOT CHORD 2-11=-183/1083, 9-11=-265/1426, 8-9=-216/1092  
 WEBS 3-11=-4/461, 4-11=-497/189, 5-9=0/462, 5-8=-1271/259

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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 6-0-0, Exterior(2) 6-0-0 to 10-2-15, Interior(1) 10-2-15 to 23-7-0 zone;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) 2 except (jt=lb) 8=166.
  - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 29, 2019

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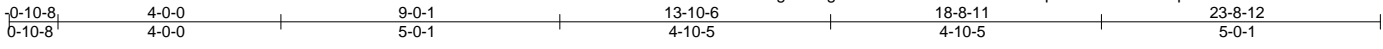
818 Soundside Road  
 Edenton, NC 27932

Job 20585A	Truss HG4	Truss Type HALF HIP GIRDER	Qty 1	Ply 1	243.2939.D Ext CVP	136893769
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84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:53:45 2019 Page 1

ID:nWgOt4t5g4cSMBishLJF9DzZSKL-z6Sp8Zrne3Jm5ZRfSpBKLHXGt2ZCHCaXf?h7ZrzMqJ4



Scale = 1:41.3

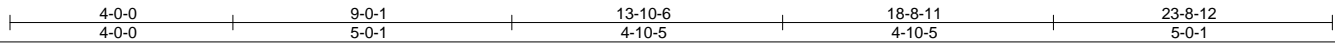
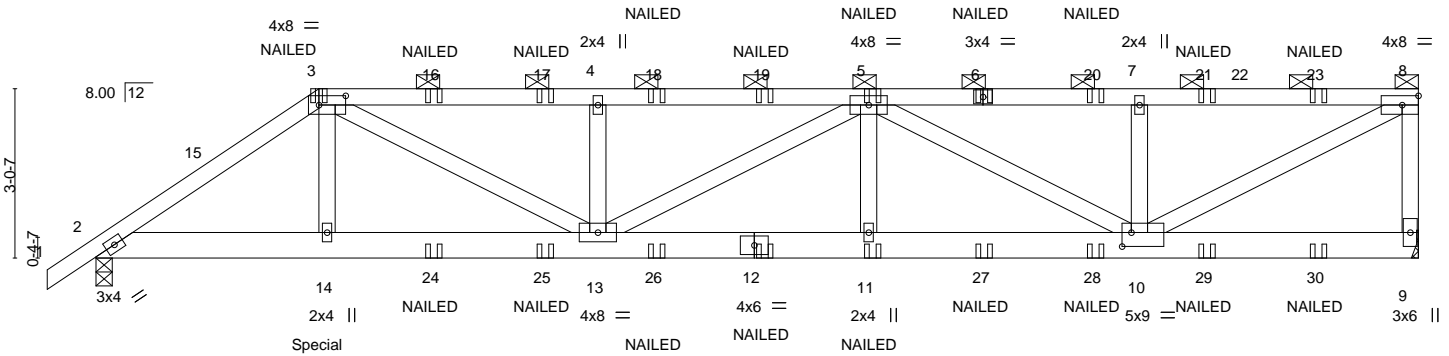


Plate Offsets (X, Y)-- [3:0-5-12,0-2-0], [10:0-2-0,0-3-0]

<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 0.72	Vert(LL)	0.16	11-13	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.64	Vert(CT)	-0.25	11-13	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.92	Horz(CT)	0.05	9	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 141 lb	FT = 20%

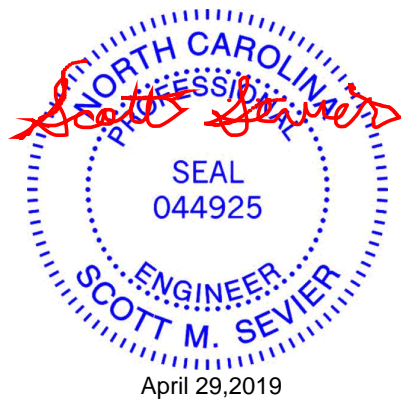
<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-9-11 oc purlins, except end verticals, and 2-0-0 oc purlins (2-9-12 max.): 3-8.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 7-5-0 oc bracing.
WEBS 2x4 SP No.3	

**REACTIONS.** (lb/size) 9=1313/Mechanical, 2=1431/0-3-8  
 Max Horz 2=123(LC 31)  
 Max Uplift 9=433(LC 9), 2=390(LC 12)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2237/699, 3-4=-2889/973, 4-5=-2889/973, 5-7=-1991/666, 7-8=-1991/666, 8-9=-1233/454  
 BOT CHORD 2-14=-610/1791, 13-14=-611/1809, 11-13=-991/2946, 10-11=-991/2946  
 WEBS 3-14=-15/373, 3-13=-456/1222, 4-13=-425/293, 5-11=0/288, 5-10=-1088/370, 7-10=-426/286, 8-10=-738/2219

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; 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 4-0-0, Exterior(2) 4-0-0 to 8-2-15, Interior(1) 8-2-15 to 23-7-0 zone; 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) 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) 9=433.
  - 7) One RT7A USP 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) 192 lb down and 85 lb up at 4-0-0 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, 3-8=-60, 2-9=-20



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><b>ENGINEERING BY</b>  <b>TRENCO</b>  <small>A MiTek Affiliate</small></p> <p>818 Soundside Road        Edenton, NC 27932</p>
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Job 20585A	Truss HG4	Truss Type HALF HIP GIRDER	Qty 1	Ply 1	243.2939.D Ext CVP  Job Reference (optional)	I36893769
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84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:53:45 2019 Page 2  
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-z6Sp8Zme3Jm5ZRfSpBKLHXGt2ZCHCaXf?h7ZrzMqJ4

**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 3=-46(B) 6=-46(B) 12=-18(B) 14=-192(B) 11=-18(B) 5=-46(B) 16=-46(B) 17=-46(B) 18=-46(B) 19=-46(B) 20=-46(B) 21=-46(B) 23=-46(B) 24=-18(B) 25=-18(B)  
26=-18(B) 27=-18(B) 28=-18(B) 29=-18(B) 30=-18(B)

**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/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



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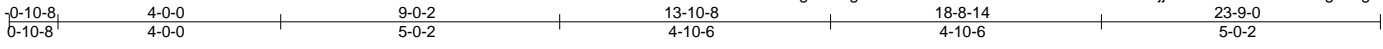


Job 20585A	Truss HG5	Truss Type HALF HIP GIRDER	Qty 1	Ply 1	243.2939.D Ext CVP	136893770
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84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:53:46 2019 Page 1

ID:nWgOt4t5g4cSMBishLJF9DzZSKL-Rl0BLvsPPNRdij?r0XiZu3QaSuQ0foguQg6lzMqJ3



Scale = 1:41.4

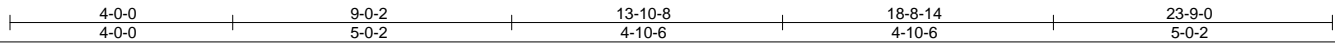
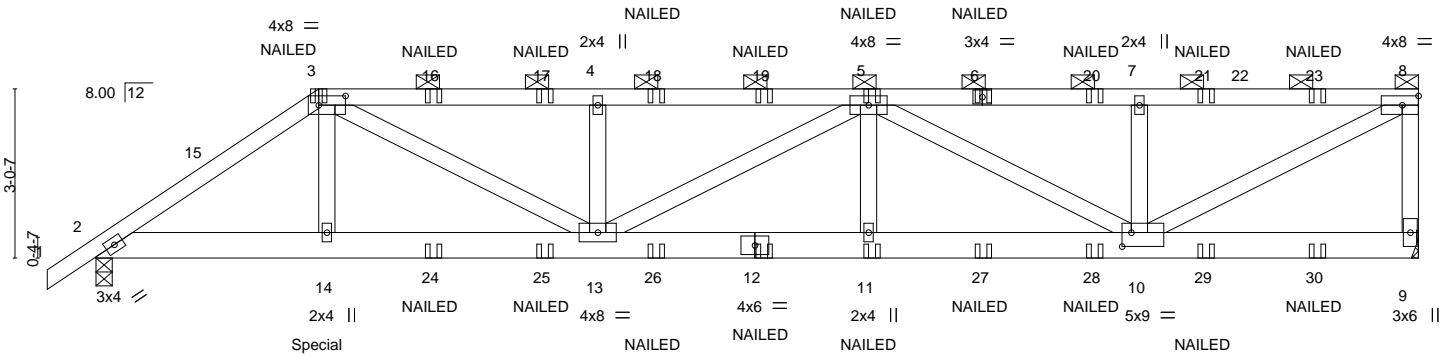


Plate Offsets (X,Y)-- [3:0-5-12,0-2-0], [10:0-2-0,0-3-0]

<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 0.72	Vert(LL)	0.16	11-13	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.64	Vert(CT)	-0.25	11-13	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.92	Horz(CT)	0.05	9	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 141 lb	FT = 20%

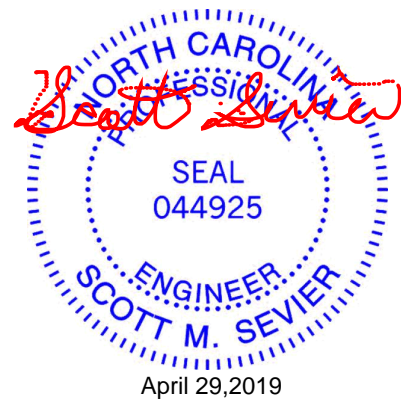
<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-9-11 oc purlins, except end verticals, and 2-0-0 oc purlins (2-9-10 max.): 3-8.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 7-4-15 oc bracing.
WEBS 2x4 SP No.3	

**REACTIONS.** (lb/size) 9=1314/Mechanical, 2=1432/0-3-8  
 Max Horz 2=123(LC 12)  
 Max Uplift 9=433(LC 9), 2=390(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2239/700, 3-4=-2894/974, 4-5=-2893/975, 5-7=-1995/668, 7-8=-1995/668, 8-9=-1234/453  
 BOT CHORD 2-14=-611/1793, 13-14=-612/1811, 11-13=-993/2951, 10-11=-993/2951  
 WEBS 3-14=-15/374, 3-13=-457/1225, 4-13=-425/293, 5-11=0/288, 5-10=-1090/371, 7-10=-427/286, 8-10=-739/2223

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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 4-0-0, Exterior(2) 4-0-0 to 8-2-15, Interior(1) 8-2-15 to 23-7-4 zone; 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) 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) 9=433.
  - 7) One RT7A USP 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) 192 lb down and 85 lb up at 4-0-0 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, 3-8=-60, 2-9=-20



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><b>ENGINEERING BY</b>  <b>TRENCO</b>  <small>A MiTek Affiliate</small></p> <p>818 Soundside Road        Edenton, NC 27932</p>
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Job 20585A	Truss HG5	Truss Type HALF HIP GIRDER	Qty 1	Ply 1	243.2939.D Ext CVP  Job Reference (optional)	I36893770
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84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:53:47 2019 Page 2  
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-vVaZZFs1AhZULsa1ZEEoQicbJsEfl61q7JADekzMqJ2

**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 3=-46(F) 6=-46(F) 12=-18(F) 14=-192(F) 11=-18(F) 5=-46(F) 16=-46(F) 17=-46(F) 18=-46(F) 19=-46(F) 20=-46(F) 21=-46(F) 23=-46(F) 24=-18(F) 25=-18(F)  
26=-18(F) 27=-18(F) 28=-18(F) 29=-18(F) 30=-18(F)

**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.



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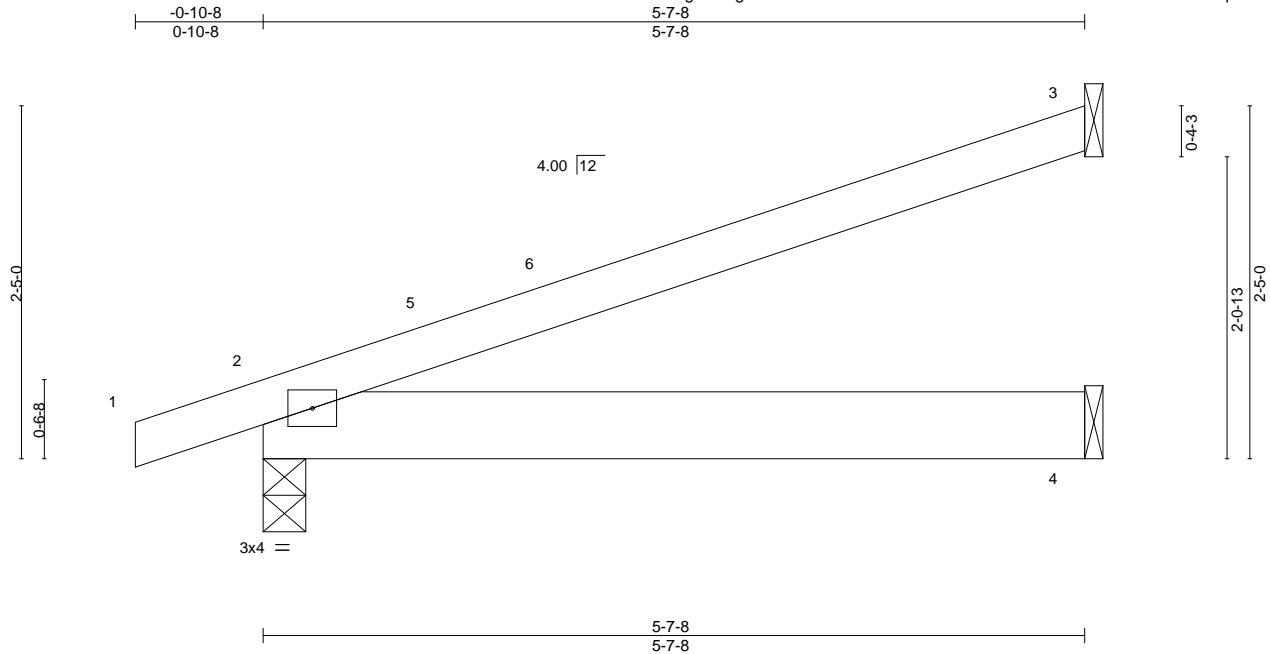
Job 20585A	Truss J1	Truss Type Jack-Open	Qty 6	Ply 1	243.2939.D Ext CVP	136893771
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84 Components (Dunn),

Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:53:47 2019 Page 1

ID:nWgOt4t5g4cSMBishLJF9DzZSKL-vVaZZFs1AhZULsa1ZEEOqice8sMIIKPq7JADekzMQJ2



Scale = 1:15.8

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 0.54	Vert(LL)	-0.01	2-4	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	-0.03	2-4	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					Weight: 23 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

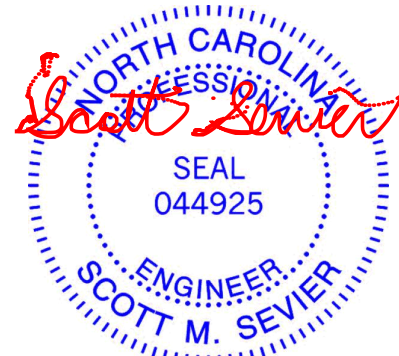
TOP CHORD Structural wood sheathing directly applied or 5-7-8 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 3=157/Mechanical, 2=284/0-3-8, 4=54/Mechanical  
Max Horz 2=85(LC 8)  
Max Uplift 3=85(LC 12), 2=69(LC 8)  
Max Grav 3=157(LC 1), 2=284(LC 1), 4=108(LC 3)

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

**NOTES-**

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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 5-6-12 zone; 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.
- One RT7A USP 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.



April 29, 2019

**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.



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Job 20585A	Truss J3	Truss Type Jack-Open Girder	Qty 1	Ply 1	243.2939.D Ext CVP	136893773
					Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:53:51 2019 Page 1

ID:nWgOt4t5g4cSMBishLJF9DzZSKL-oGq4OcvYDv4wpUuoo4IkbYnJZTguh8PP2x8RnVzMQJ\_



Scale = 1:14.5

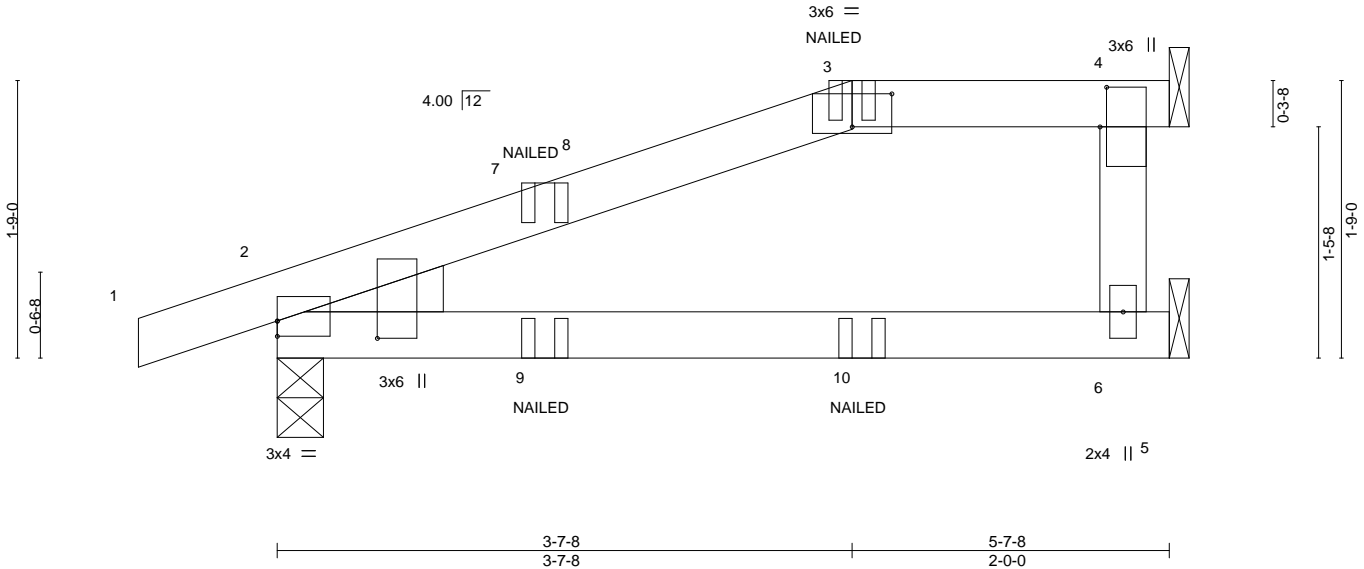


Plate Offsets (X,Y)--	[2:0-1-5,0-7-9], [2:0-0-0,0-1-2], [3:0-3-0,0-2-8], [4:0-3-0,0-0-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.58	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.43	Vert(LL) -0.04 2-6 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.10 2-6 >632 180		
BCDL 10.0	Rep Stress Incr NO	Matrix-P	Horz(CT) 0.05 4 n/a n/a		
	Code IRC2015/TPI2014			Weight: 22 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
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=323/0-3-8, 4=166/Mechanical, 6=87/Mechanical  
 Max Horz 2=59(LC 8)  
 Max Uplift 2=-80(LC 8), 4=-77(LC 8)  
 Max Grav 2=323(LC 1), 4=166(LC 1), 6=134(LC 3)

**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=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; 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 5-4-0 zone; 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) 4.
  - One RT7A USP 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.
  - Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
  - "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

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

Uniform Loads (plf)

Vert: 1-3=-60, 3-4=-60, 2-5=-20

Concentrated Loads (lb)

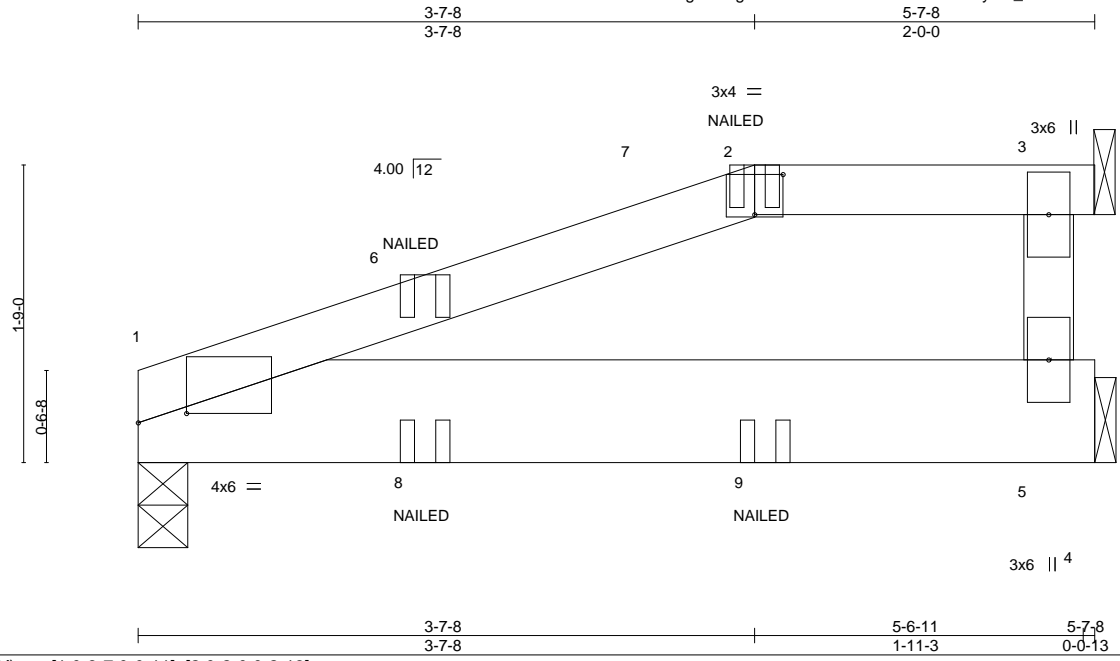
Vert: 3=-33(F) 7=-22(F) 9=-25(F) 10=-14(F)



Job 20585A	Truss J3B	Truss Type Jack-Open Girder	Qty 1	Ply 1	243.2939.D Ext CVP	136893774
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84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:53:52 2019 Page 1  
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-GSOScywA\_DCNreT?Mnpz7IJWft4rQbfZHbu\_lxzMqlz



Scale = 1:13.5

Plate Offsets (X,Y)--	[1:0-3-7,0-0-11], [2:0-2-0,0-2-13]				
<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 0.49	Vert(LL) -0.01 1-5 >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.13	Vert(CT) -0.01 1-5 >999 180		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.00	Horz(CT) 0.01 3 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-R		Weight: 27 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-7-8 oc purlins, except end verticals, and 2-0-0 oc purlins: 2-3.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 1=257/0-3-8, 3=139/Mechanical, 5=120/Mechanical  
Max Horz 1=50(LC 8)  
Max Uplift 1=-38(LC 8), 3=-73(LC 8)  
Max Grav 1=257(LC 1), 3=139(LC 1), 5=162(LC 3)

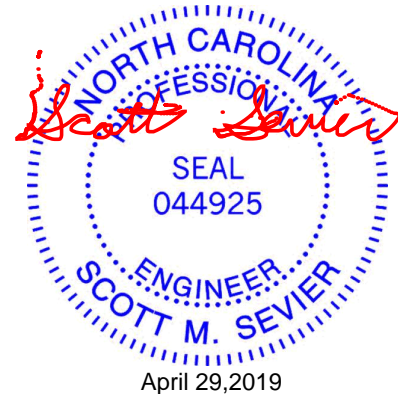
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-254/81

**NOTES-**

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=30ft; 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 5-4-4 zone;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) 3.
- One RT7A USP 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- "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

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-2=-60, 2-3=-60, 1-4=-20  
Concentrated Loads (lb)  
Vert: 2=-33(B) 6=-22(B) 8=-25(B) 9=-14(B)



**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 20585A	Truss J4	Truss Type Jack-Open	Qty 2	Ply 1	243.2939.D Ext CVP	136893775
84 Components (Dunn), Dunn, NC - 28334,					8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:53:52 2019 Page 1	
					Job Reference (optional)	

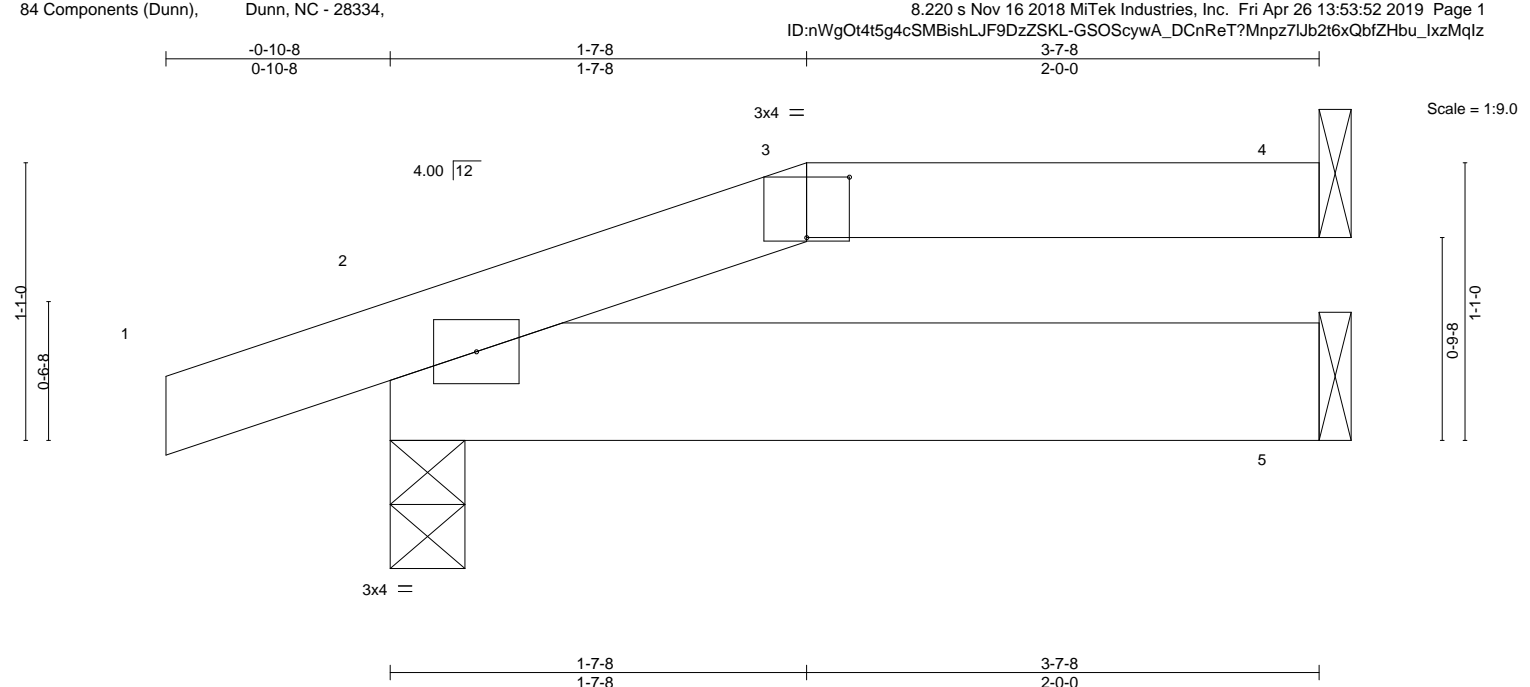


Plate Offsets (X,Y)--	[3:0-2-0,0-2-13]
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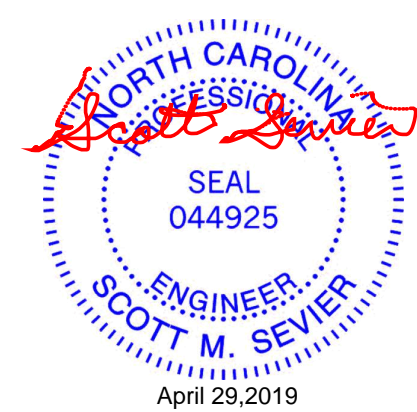
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.15	Vert(LL)	-0.00	2-5	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	-0.00	2-5	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	4	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					Weight: 16 lb	FT = 20%

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

**REACTIONS.** (lb/size) 4=82/Mechanical, 2=207/0-3-8, 5=45/Mechanical  
 Max Horz 2=34(LC 8)  
 Max Uplift 4=-36(LC 8), 2=-69(LC 8)  
 Max Grav 4=82(LC 1), 2=207(LC 1), 5=69(LC 3)

**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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 1-7-8, Interior(1) 1-7-8 to 3-6-12 zone; 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 connections.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4.
  - 8) One RT7A USP 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.



April 29, 2019



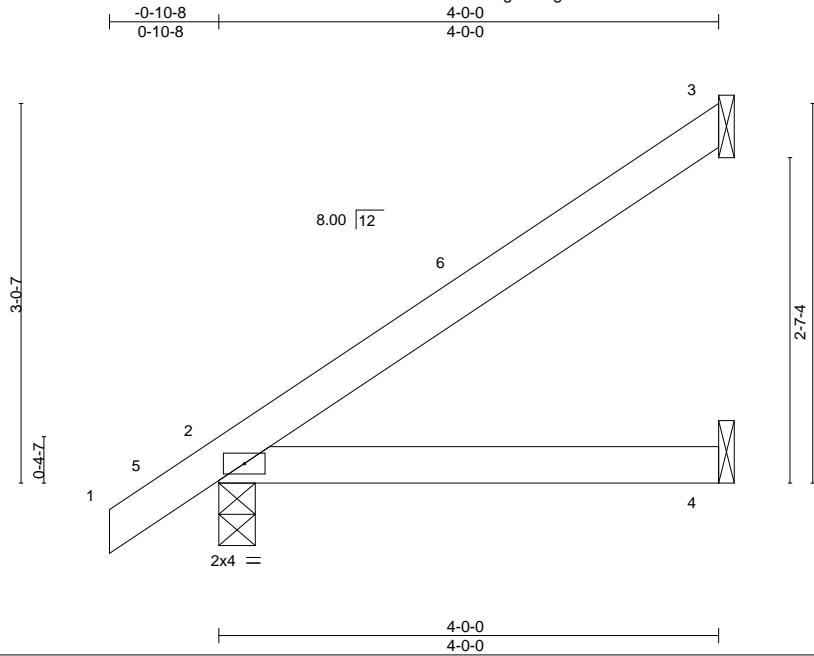


Job 20585A	Truss J20	Truss Type Jack-Open	Qty 20	Ply 1	243.2939.D Ext CVP Job Reference (optional)	136893777
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84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:53:48 2019 Page 1

ID:nWgOt4t5g4cSMBishLJF9DzZSKL-Oh8xmbtfx\_hLy09D7x1z9uWFiUnfzMzvnAAzMqJ1



Scale = 1:18.4

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 0.25	Vert(LL)	-0.01	2-4	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.17	Vert(CT)	-0.02	2-4	>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 IRC2015/TPI2014		Matrix-P							
								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 4-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 3=106/Mechanical, 2=221/0-3-8, 4=38/Mechanical  
Max Horz 2=121(LC 12)  
Max Uplift 3=-83(LC 12), 2=-17(LC 12)  
Max Grav 3=116(LC 19), 2=221(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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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 3-11-4 zone; 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 RT7A USP 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.



April 29, 2019

**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/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

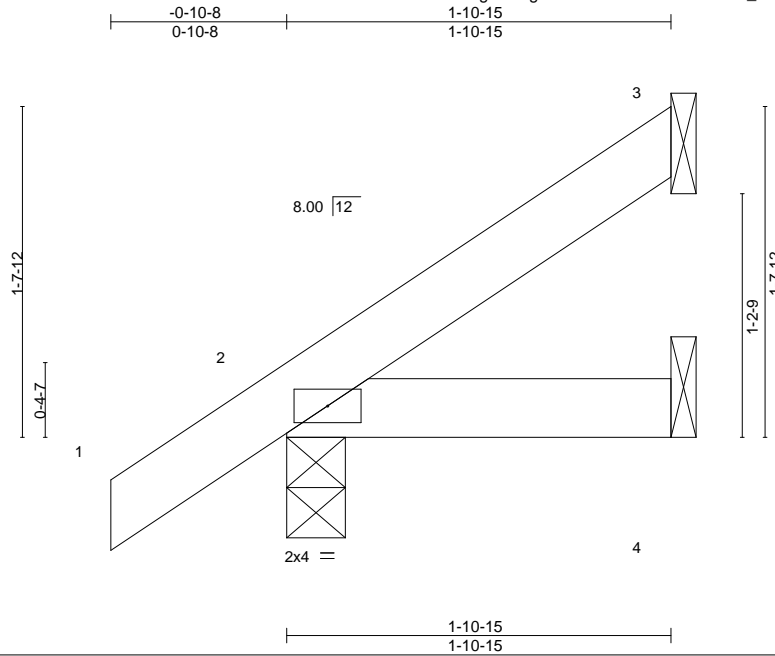


818 Soundside Road  
Edenton, NC 27932

Job 20585A	Truss J21	Truss Type Jack-Open	Qty 4	Ply 1	243.2939.D Ext CVP Job Reference (optional)	136893778
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84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:53:49 2019 Page 1  
ID:nWgQt4t5g4cSMBishLJF9DzZSKL-stiK\_xuHhIqCaAkQhfGGW7h6Bf4aDEv6adfKidzMQJ0



Scale = 1:11.5

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.06	Vert(LL)	-0.00	2	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	2-4	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					Weight: 8 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 1-10-15 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 3=43/Mechanical, 2=142/0-3-8, 4=19/Mechanical  
Max Horz 2=69(LC 12)  
Max Uplift 3=-36(LC 12), 2=-22(LC 12)  
Max Grav 3=49(LC 19), 2=142(LC 1), 4=37(LC 3)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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 RT7A USP 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.



April 29, 2019

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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.



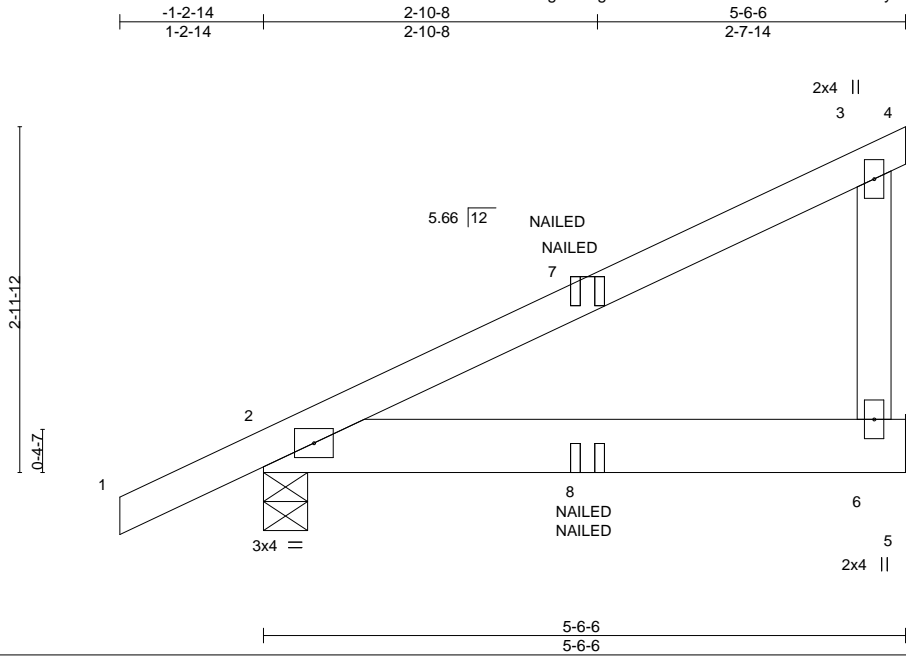
818 Soundside Road  
Edenton, NC 27932

Job 20585A	Truss J22	Truss Type Diagonal Hip Girder	Qty 2	Ply 1	243.2939.D Ext CVP	136893779
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84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:53:50 2019 Page 1

ID:nWgOt4t5g4cSMBishLJF9DzZSKL-K4GiBHvScy3CKJcFMnV2KEA83O6yh9GpHPtF3zMQJ?



Scale = 1:19.9

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 0.50	Vert(LL)	-0.01 2-6	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	-0.02 2-6	>999	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	0.00	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					Weight: 27 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 5-6-6 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 6=202/Mechanical, 2=300/0-4-9  
 Max Horz 2=119(LC 31)  
 Max Uplift 6=-59(LC 12), 2=-47(LC 12)

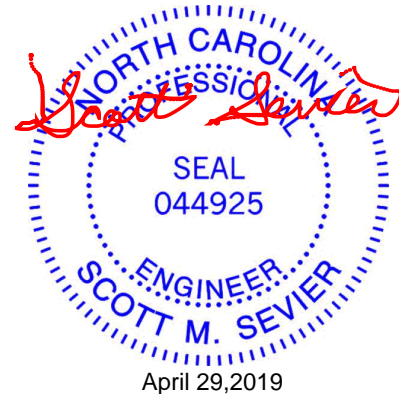
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES-**

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-2-14 to 3-0-1, Exterior(2) 3-0-1 to 5-6-6 zone;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 RT7A USP 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.
- "NAILED" indicates 3-10d (0.148"x3") or 2-12d (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

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=-60, 3-4=-20, 2-5=-20



**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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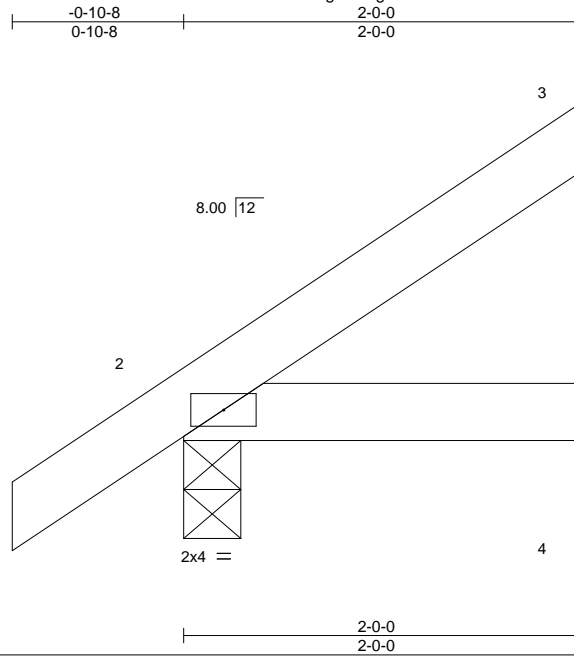
818 Soundside Road  
 Edenton, NC 27932

Job 20585A	Truss JA1	Truss Type Jack-Open	Qty 10	Ply 1	243.2939.D Ext CVP Job Reference (optional)	136893780
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84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:53:54 2019 Page 1

ID:nWgOt4t5g4cSMBishLJF9DzZSKL-CrVC1eyQWqSUgxdNUCsRDAPyrghuV8skvN5NqzMqlx



Scale = 1:11.8

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 0.07	Vert(LL)	-0.00	2	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	2-4	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					Weight: 8 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 2-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 3=46/Mechanical, 2=145/0-3-8, 4=20/Mechanical  
Max Horz 2=71(LC 12)  
Max Uplift 3=-38(LC 12), 2=-22(LC 12)  
Max Grav 3=52(LC 19), 2=145(LC 1), 4=39(LC 3)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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 connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
- 6) One RT7A USP 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.



April 29, 2019

**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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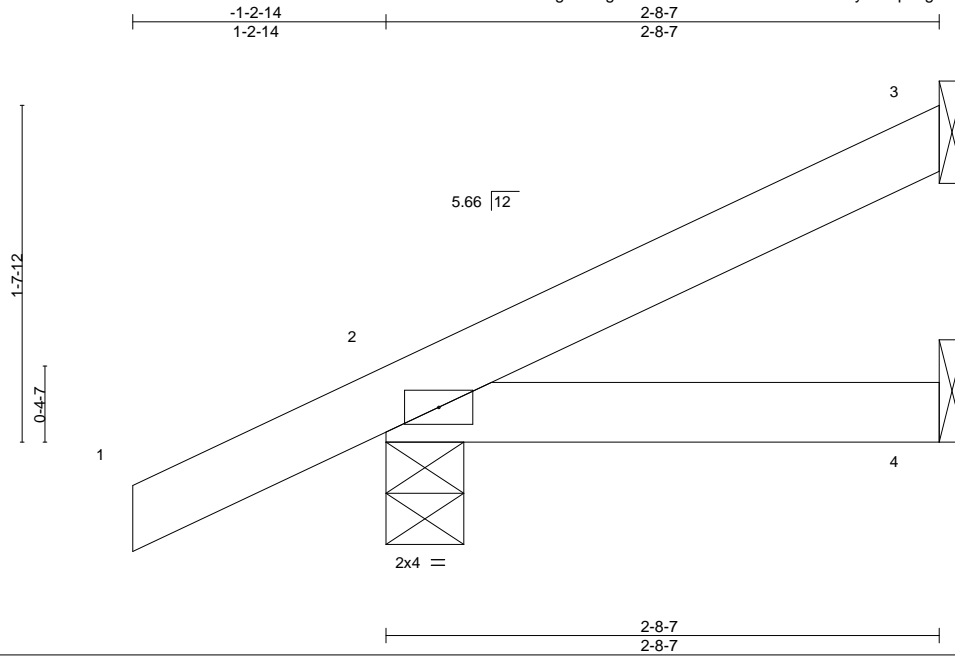
818 Soundside Road  
Edenton, NC 27932

Job 20585A	Truss JA2	Truss Type Jack-Open	Qty 2	Ply 1	243.2939.D Ext CVP Job Reference (optional)	136893781
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84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:53:54 2019 Page 1

ID:nWgOt4t5g4cSMBishLJF9DzZSKL-CrVC1eyQWqSUGxdNUCsRDAPx?gmHuV8skvN5NqzMqlx



Scale = 1:11.3

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 0.18	Vert(LL)	-0.00	2-4	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	-0.00	2-4	>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	IRC2015/TPI2014	Matrix-P							
									Weight: 11 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 2-8-7 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 3=49/Mechanical, 2=209/0-4-9, 4=25/Mechanical  
Max Horz 2=68(LC 12)  
Max Uplift 3=-36(LC 12), 2=-45(LC 12)  
Max Grav 3=49(LC 1), 2=209(LC 1), 4=49(LC 3)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; 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 RT7A USP 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.



April 29, 2019

**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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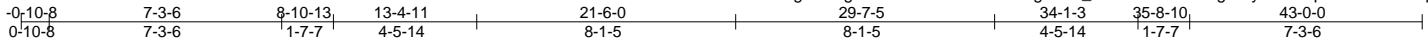


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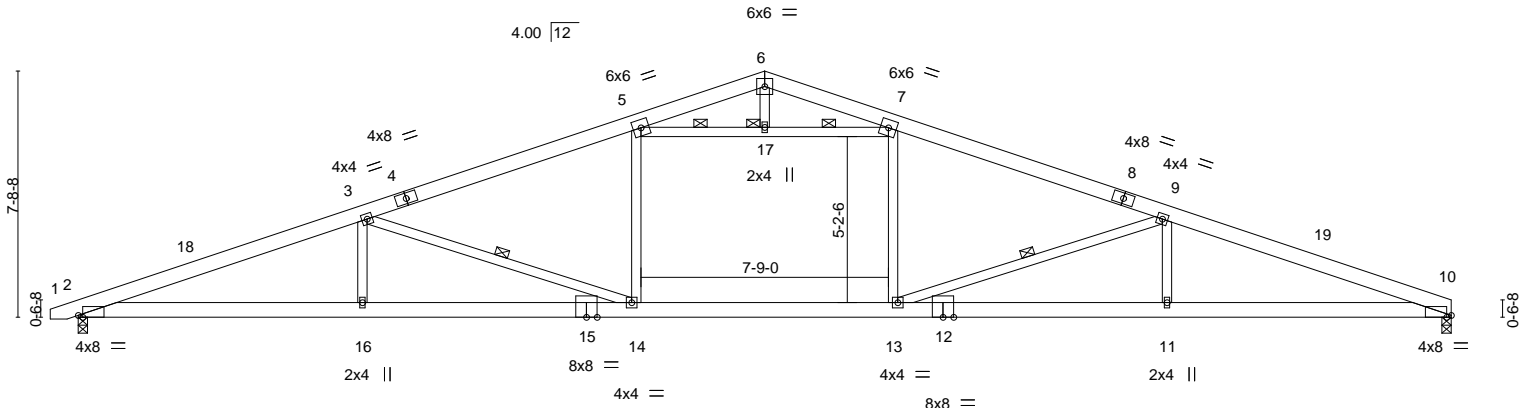
Job	Truss	Truss Type	Qty	Ply	243.2939.D Ext CVP	136893782
20585A	L8	ROOF TRUSS	1	1		
84 Components (Dunn), Dunn, NC - 28334,						Job Reference (optional)

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:53:55 2019 Page 1

ID:nWgOt4t5g4cSMBishLJF9DzZSKL-g13bE\_z2H8aL15Ba1wNglOxyU4uxdqU?zZ6evGzMqlw



Scale = 1:72.2



	8-10-13	17-2-13	25-9-3	34-1-3	43-0-0
Plate Offsets (X,Y)--	8-10-13	8-4-0	8-6-6	8-4-0	8-10-13
	[2:0-1-11,Edge], [10:0-1-11,Edge]				

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.78	Vert(LL)	-0.47	11-13	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 1.00	Vert(CT)	-0.74	11-13	>690		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.57	Horz(CT)	0.17	10	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Attic	-0.29	13-14	338	Weight: 272 lb	FT = 20%

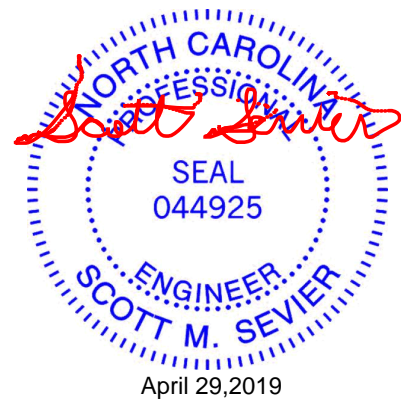
LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-3-11 oc purlins.
BOT CHORD 2x6 SP No.2 *Except* 12-15: 2x6 SP DSS	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. Except: 10-0-0 oc bracing: 13-14.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 9-13, 3-14, 5-17, 7-17
	JOINTS 1 Brace at Jt(s): 17

**REACTIONS.** (lb/size) 2=1794/0-3-8, 10=1748/0-3-8  
 Max Horz 2=125(LC 16)  
 Max Uplift 2=-246(LC 8), 10=-216(LC 9)  
 Max Grav 2=1814(LC 2), 10=1776(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-4626/537, 3-5=-3780/348, 5-6=-1026/131, 6-7=-1026/132, 7-9=-3780/348,  
 9-10=-4629/540  
 BOT CHORD 2-16=-526/4324, 14-16=-526/4324, 13-14=-200/3518, 11-13=-442/4328, 10-11=-442/4328  
 WEBS 9-13=-1292/378, 3-14=-1287/375, 5-14=0/728, 7-13=0/730, 5-17=-2594/292,  
 7-17=-2594/292, 6-17=-18/479, 3-16=0/374, 9-11=0/376

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-7-5 to 3-8-4, Interior(1) 3-8-4 to 21-6-0, Exterior(2) 21-6-0 to 25-6-4, Interior(1) 25-6-4 to 42-10-4 zone; 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). 5-17, 7-17
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 13-14
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=216.
- One RT7A USP 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.
- ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.



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

Job 20585A	Truss LG	Truss Type Hip Girder	Qty 1	Ply 2	243.2939.D Ext CVP	136893783
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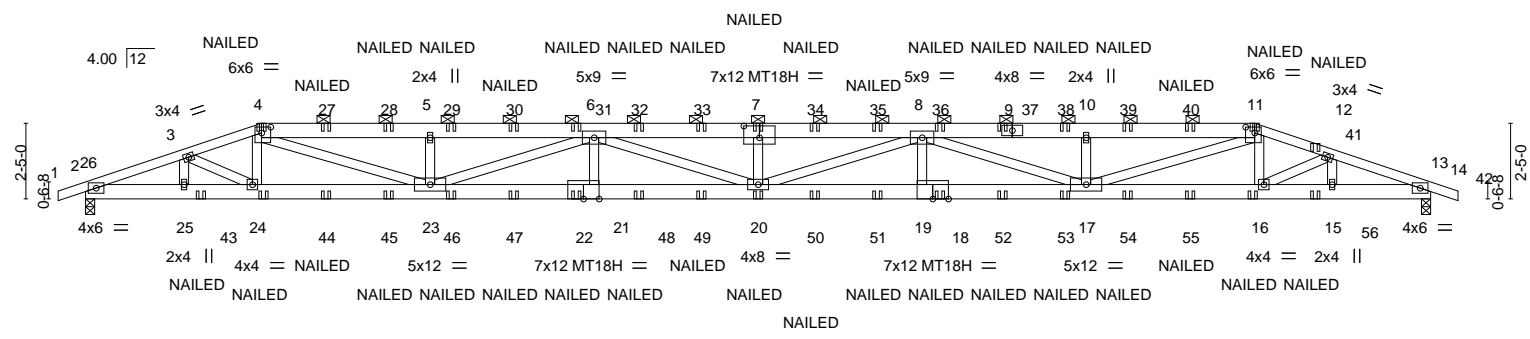
84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:54:01 2019 Page 1

ID:nWgOt4t5g4cSMBishLJF9DzZSKL-VBQsV11pt\_KV00fjOAU5?fb\_RV0x1VHuLVZz7wzMqlq



Scale = 1:73.7



3-1-13	5-7-8	11-0-3	16-3-1	21-6-0	26-8-15	31-11-13	37-4-8	39-10-3	43-0-0
3-1-13	2-5-11	5-4-11	5-2-15	5-2-15	5-2-15	5-2-15	5-4-11	2-5-11	3-1-13

Plate Offsets (X,Y)-- [4:0-3-8,0-2-4], [7:0-6-0,0-4-8], [11:0-3-8,0-2-4], [18:0-0-0,0-2-12], [19:0-1-12,0-0-0], [21:0-1-12,0-0-0], [22:0-0-0,0-2-12]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.81	Vert(LL)	0.91	20	>562	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.64	Vert(CT)	-1.74	20	>295	MT18H	244/190
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.68	Horz(CT)	0.19	13	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 535 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.2 *Except* 1-4,11-14: 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-1-11 oc purlins, except
BOT CHORD 2x6 SP DSS	2-0-0 oc purlins (2-10-13 max.): 4-11.
WEBS 2x4 SP No.3 *Except* 4-23,11-17: 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 9-11-7 oc bracing.

**REACTIONS.** (lb/size) 2=3029/0-3-8, 13=3073/0-3-8  
 Max Horz 2=-36(LC 40)  
 Max Uplift 2=-646(LC 8), 13=-690(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-7001/1424, 3-4=-7970/1701, 4-5=-12745/2857, 5-6=-12743/2856, 6-7=-16880/3809,  
 7-8=-16891/3815, 8-10=-12738/2879, 10-11=-12740/2880, 11-12=-8046/1774,  
 12-13=-7111/1536  
 BOT CHORD 2-25=-1311/6450, 24-25=-1311/6450, 23-24=-1592/7591, 21-23=-3569/16051,  
 20-21=-3569/16051, 19-20=-3564/16036, 17-19=-3564/16036, 16-17=-1626/7640,  
 15-16=-1387/6555, 13-15=-1387/6555  
 WEBS 3-25=-462/171, 3-24=-334/1381, 4-24=0/259, 4-23=-1310/5531, 5-23=-635/325,  
 6-23=-3559/836, 6-21=0/452, 6-20=-217/919, 7-20=-531/292, 8-20=-210/936,  
 8-19=0/452, 8-17=-3541/813, 10-17=-616/319, 11-17=-1269/5461, 11-16=0/264,  
 12-16=-283/1296, 12-15=-504/173

- 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: 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=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-10-8 to 3-1-13, Interior(1) 3-1-13 to 5-7-8, Exterior(2) 5-7-8 to 11-8-8, Interior(1) 11-8-8 to 37-4-8, Exterior(2) 37-4-8 to 43-5-8, Interior(1) 43-5-8 to 43-10-8 zone; 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)



April 29, 2019

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

Job 20585A	Truss LG	Truss Type Hip Girder	Qty 1	Ply 2	243.2939.D Ext CVP Job Reference (optional)	I36893783
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84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:54:01 2019 Page 2  
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-VBQsV11pt\_KV00fjOAU5?fB\_RV0x1VHuLVZz7wzMqlq

**NOTES-**

- 10) One RT7A USP 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.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-4=-60, 4-11=-60, 11-14=-60, 2-13=-20

Concentrated Loads (lb)

Vert: 4=-103(F) 11=-97(F) 22=-34(F) 24=-34(F) 20=-34(F) 7=-103(F) 16=-34(F) 18=-34(F) 27=-103(F) 28=-103(F) 29=-103(F) 30=-103(F) 31=-103(F) 32=-103(F) 33=-103(F) 34=-103(F) 35=-103(F) 36=-97(F) 37=-97(F) 38=-97(F) 39=-97(F) 40=-97(F) 41=-106(F) 43=-100(F) 44=-34(F) 45=-34(F) 46=-34(F) 47=-34(F) 48=-34(F) 49=-34(F) 50=-34(F) 51=-34(F) 52=-34(F) 53=-34(F) 54=-34(F) 55=-34(F) 56=-67(F)

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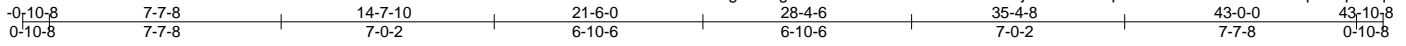


Job 20585A	Truss LH1	Truss Type Hip	Qty 1	Ply 1	243.2939.D Ext CVP	136893784
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84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:54:03 2019 Page 1

ID:nWgOt4t5g4cSMBishLJF9DzZSKL-RaYcwj33ObaDGKp6VbWZ44GJfIlwVMOAop24BpzMqlo



Scale = 1:75.8

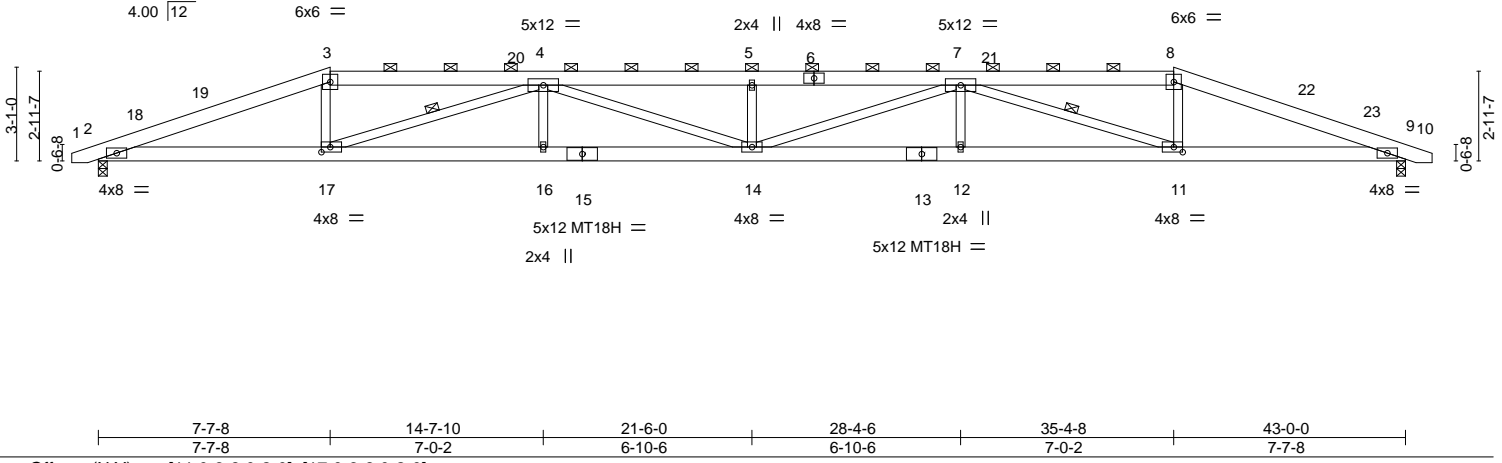


Plate Offsets (X, Y)--	[11:0-3-8,0-2-0], [17:0-3-8,0-2-0]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.79	Vert(LL) -0.63 14 >810 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.48	Vert(CT) -1.27 14 >405 180	MT18H	244/190
BCLL 0.0 *	Rep Stress Incr YES	WB 0.90	Horz(CT) 0.19 9 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S			Weight: 265 lb FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-10-11 oc purlins, except
BOT CHORD 2x6 SP DSS	2-0-0 oc purlins (2-2-0 max.): 3-8.
WEBS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 8-0-15 oc bracing.
	WEBS 1 Row at midpt 4-17, 7-11

**REACTIONS.** (lb/size) 2=1754/0-3-8, 9=1754/0-3-8  
 Max Horz 2=45(LC 16)  
 Max Uplift 2=-334(LC 8), 9=-334(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-4521/787, 3-4=-4153/775, 4-5=-7303/1305, 5-7=-7303/1305, 7-8=-4153/775, 8-9=-4521/787  
 BOT CHORD 2-17=-709/4210, 16-17=-1136/6593, 14-16=-1136/6593, 12-14=-1101/6593, 11-12=-1101/6593, 9-11=-674/4210  
 WEBS 3-17=-86/1056, 4-17=-2696/521, 4-16=0/271, 4-14=-155/823, 5-14=-391/174, 7-14=-156/823, 7-12=0/271, 7-11=-2696/520, 8-11=-85/1056

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-7-5 to 3-8-4, Interior(1) 3-8-4 to 7-7-8, Exterior(2) 7-7-8 to 13-8-8, Interior(1) 13-8-8 to 35-4-8, Exterior(2) 35-4-8 to 41-5-8, Interior(1) 41-5-8 to 43-7-5 zone; 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=334.
  - One RT7A USP 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.



April 29, 2019

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

818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	243.2939.D Ext CVP	136893785
20585A	LH2	Hip	1	1		
Job Reference (optional)						

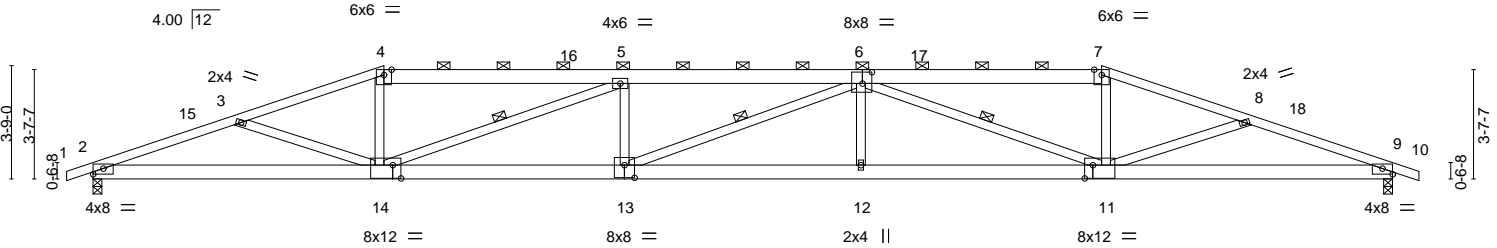
84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:54:04 2019 Page 1

ID:nWgOt4t5g4cSMBishLJF9DzZSKL-wm6\_734h9vi4tUNI31ocHpWJi?AEqnK1TodjFzMqIn

-0-10-8	4-10-13	9-7-8	17-7-1	25-4-15	33-4-8	38-1-3	43-0-0	43-10-8
0-10-8	4-10-13	4-8-11	7-11-9	7-9-13	7-11-9	4-8-11	4-10-13	0-10-8

Scale = 1:76.2



	9-7-8	17-7-1	25-4-15	33-4-8	43-0-0
	9-7-8	7-11-9	7-9-13	7-11-9	9-7-8
Plate Offsets (X,Y)--	[2:Edge,0-2-4], [6:0-3-12,0-4-8], [9:Edge,0-2-4], [11:0-3-4,0-5-4], [13:0-4-0,0-5-0], [14:0-3-4,0-5-4]				

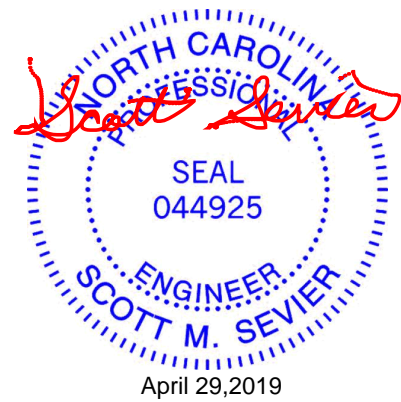
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.64	Vert(LL)	-0.47	12-13	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.86	Vert(CT)	-0.94	12-13	>545		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.82	Horz(CT)	0.18	9	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 257 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 *Except* 4-6,6-7: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-3-9 oc purlins, except 2-0-0 oc purlins (2-9-3 max.): 4-7.
BOT CHORD 2x6 SP No.2 *Except* 11-13,13-14: 2x6 SP DSS	BOT CHORD Rigid ceiling directly applied or 8-5-13 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 5-14, 6-13, 6-11

**REACTIONS.** (lb/size) 2=1770/0-3-8, 9=1770/0-3-8  
 Max Horz 2=57(LC 12)  
 Max Uplift 2=-339(LC 8), 9=-339(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-4264/810, 3-4=-4150/715, 4-5=-3884/700, 5-6=-5645/1018, 6-7=-3882/700, 7-8=-4148/714, 8-9=-4263/810  
 BOT CHORD 2-14=-751/3943, 13-14=-933/5645, 12-13=-900/5652, 11-12=-901/5650, 9-11=-707/3942  
 WEBS 4-14=-58/899, 5-14=-2005/420, 5-13=0/298, 6-12=0/301, 6-11=-2012/424, 7-11=-59/903

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-5-2, Interior(1) 3-5-2 to 9-7-8, Exterior(2) 9-7-8 to 15-8-8, Interior(1) 15-8-8 to 33-4-8, Exterior(2) 33-4-8 to 39-5-8, Interior(1) 39-5-8 to 43-10-8 zone;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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=339.
  - One RT7A USP 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.



April 29, 2019

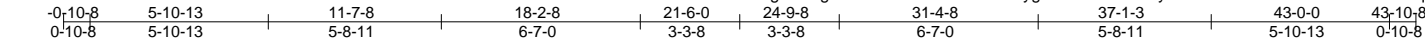
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**

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 20585A	Truss LH3	Truss Type Hip	Qty 1	Ply 1	243.2939.D Ext CVP	136893786
84 Components (Dunn), Dunn, NC - 28334,					8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:54:05 2019 Page 1	
-0-10-8 5-10-13 11-7-8 18-2-8 21-6-0 24-9-8 31-4-8 37-1-3 43-0-0 43-10-8					ID:nWgQt4t5g4cSMBishLJF9DzZSKL-OygNKP4KwDrwVdyVd0Y19VMf66ltzGBTG6XAGhMqlm	
0-10-8 5-10-13 5-8-11 6-7-0 3-3-8 3-3-8 6-7-0 5-8-11 5-10-13 0-10-8					Job Reference (optional)	



Scale = 1:76.2

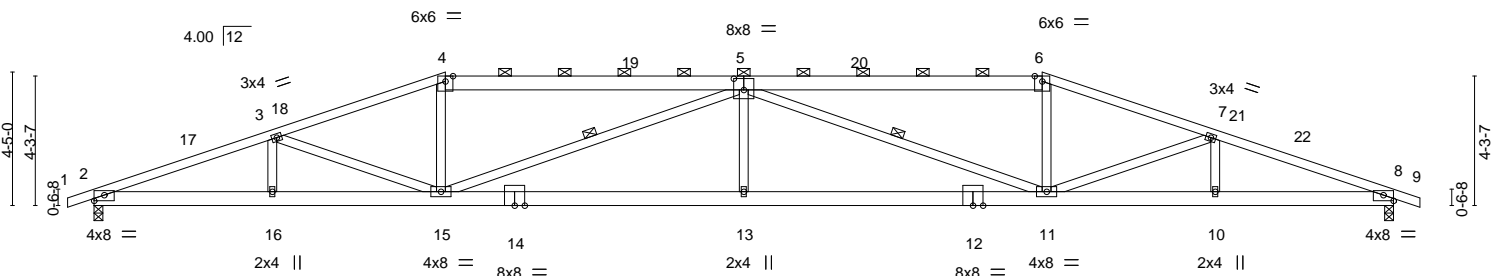


Plate Offsets (X,Y)--	[2:Edge,0-2-4], [5:0-4-0,0-4-8], [8:Edge,0-2-4]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.83	Vert(LL)	-0.42	13	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.96	Vert(CT)	-0.84	13-15	>609		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.88	Horz(CT)	0.20	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 254 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 *Except* 4-5,5-6: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (2-7-11 max.): 4-6.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 5-15, 5-11

**REACTIONS.** (lb/size) 2=1770/0-3-8, 8=1770/0-3-8  
 Max Horz 2=-68(LC 17)  
 Max Uplift 2=-332(LC 8), 8=-332(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-4308/738, 3-4=-3954/685, 4-5=-3697/675, 5-6=-3697/675, 6-7=-3954/684, 7-8=-4308/738  
 BOT CHORD 2-16=-686/3986, 15-16=-686/3986, 13-15=-761/4922, 11-13=-761/4922, 10-11=-634/3986, 8-10=-634/3986  
 WEBS 3-15=-303/189, 4-15=-28/786, 5-15=-1490/322, 5-11=-1490/321, 6-11=-28/786, 7-11=-303/191, 5-13=0/407

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-5-2, Interior(1) 3-5-2 to 11-7-8, Exterior(2) 11-7-8 to 17-8-8, Interior(1) 17-8-8 to 31-4-8, Exterior(2) 31-4-8 to 37-5-8, Interior(1) 37-5-8 to 43-10-8 zone; 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=332.
  - One RT7A USP 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.



April 29, 2019

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

818 Soundside Road  
 Edenton, NC 27932

Job 20585A	Truss LH4	Truss Type Hip	Qty 1	Ply 1	243.2939.D Ext CVP	136893787
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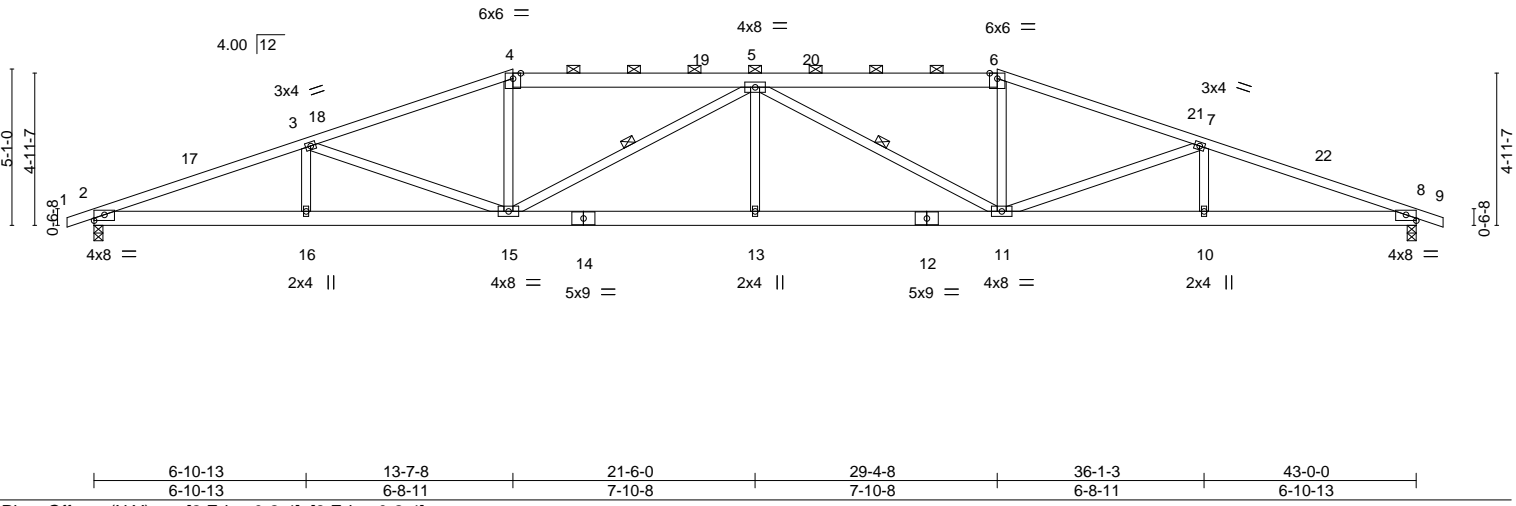
84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:54:06 2019 Page 1

ID:nWgOt4t5g4cSMBishLJF9DzZSKL-s9EiYI5yhWzn7nXhBj3Giuuq4WgYiobdVmHko8zMQll



Scale = 1:74.9



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 0.82	Vert(LL)	-0.33	13	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.87	Vert(CT)	-0.67	13	>762		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.55	Horz(CT)	0.18	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 254 lb	FT = 20%

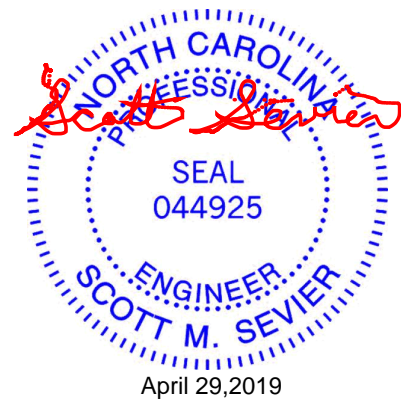
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1 *Except* 4-6: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-6-12 max.): 4-6.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 9-0-4 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 5-15, 5-11

**REACTIONS.** (lb/size) 2=1770/0-3-8, 8=1770/0-3-8  
Max Horz 2=79(LC 12)  
Max Uplift 2=-324(LC 8), 8=-324(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-4329/717, 3-4=-3719/634, 4-5=-3462/629, 5-6=-3462/629, 6-7=-3719/634,  
7-8=-4329/717  
BOT CHORD 2-16=-668/4007, 15-16=-668/4007, 13-15=-588/4133, 11-13=-588/4133, 10-11=-609/4007,  
8-10=-609/4007  
WEBS 3-16=0/254, 3-15=-582/216, 4-15=-32/753, 5-15=-954/215, 5-13=0/317, 5-11=-954/214,  
6-11=-32/753, 7-11=-582/217, 7-10=0/254

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-5-2, Interior(1) 3-5-2 to 13-7-8, Exterior(2) 13-7-8 to 19-8-8, Interior(1) 19-8-8 to 29-4-8, Exterior(2) 29-4-8 to 35-5-8, Interior(1) 35-5-8 to 43-10-8 zone; 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=324.
- One RT7A USP 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.



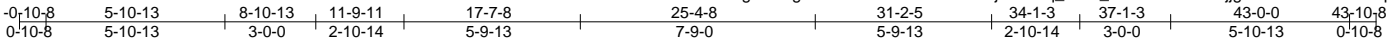


Job	Truss	Truss Type	Qty	Ply	243.2939.D Ext CVP	136893789
20585A	LH6	ROOF TRUSS	1	1		
Job Reference (optional)						

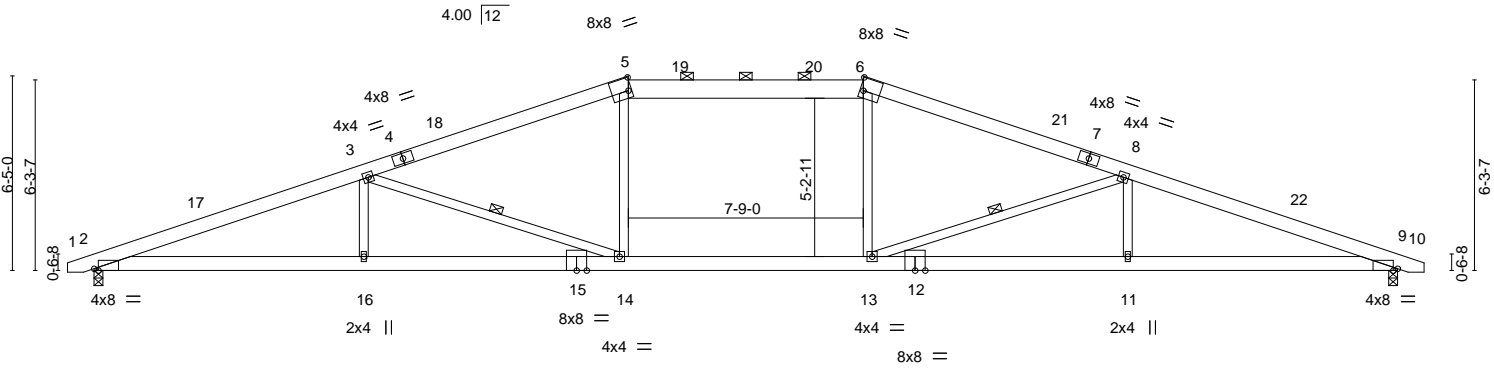
84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:54:09 2019 Page 1

ID:nWgOt4t5g4cSMBishJF9DzZSKL-GjvtAm7q\_RLM\_FGGssdzJLWNjigEv9a3BkVOPSzMqli



Scale = 1:76.0



	8-10-13	17-7-8	25-4-8	34-1-3	43-0-0
	8-10-13	8-8-11	7-9-0	8-8-11	8-10-13
Plate Offsets (X,Y)--	[2:0-1-11,Edge], [5:0-1-5,0-5-2], [6:0-1-5,0-5-2], [9:0-1-11,Edge]				

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.66	Vert(LL)	-0.47	14-16	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 1.00	Vert(CT)	-0.74	14-16	>696		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.53	Horz(CT)	0.17	9	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Attic	-0.26	13-14	365	360	
								Weight: 266 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2 *Except* 5-6: 2x8 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-7-4 oc purlins, except 2-0-0 oc purlins (4-2-6 max.): 5-6.
BOT CHORD 2x6 SP No.2 *Except* 12-15: 2x6 SP DSS	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing, Except: 10-0-0 oc bracing: 13-14.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 3-14, 8-13

**REACTIONS.** (lb/size) 2=1793/0-3-8, 9=1793/0-3-8  
 Max Horz 2=-100(LC 17)  
 Max Uplift 2=-271(LC 8), 9=-271(LC 9)  
 Max Grav 2=1813(LC 2), 9=1813(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-4617/611, 3-5=-3816/457, 5-6=-3546/461, 6-8=-3816/457, 8-9=-4617/612  
 BOT CHORD 2-16=-576/4315, 14-16=-576/4315, 13-14=-261/3546, 11-13=-501/4315, 9-11=-501/4315  
 WEBS 3-14=-1202/375, 5-14=0/709, 6-13=0/709, 3-16=0/375, 8-11=0/375, 8-13=-1201/376

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-7-5 to 3-8-4, Interior(1) 3-8-4 to 17-7-8, Exterior(2) 17-7-8 to 23-8-8, Interior(1) 23-8-8 to 25-4-8, Exterior(2) 25-4-8 to 31-5-8, Interior(1) 31-5-8 to 43-7-5 zone; 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.
  - Ceiling dead load (5.0 psf) on member(s). 5-6
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 13-14
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=271.
  - One RT7A USP 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.
  - ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.



April 29, 2019

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818 Soundside Road  
Edenton, NC 27932

Job 20585A	Truss LH7	Truss Type Hip	Qty 1	Ply 1	243.2939.D Ext CVP	136893790
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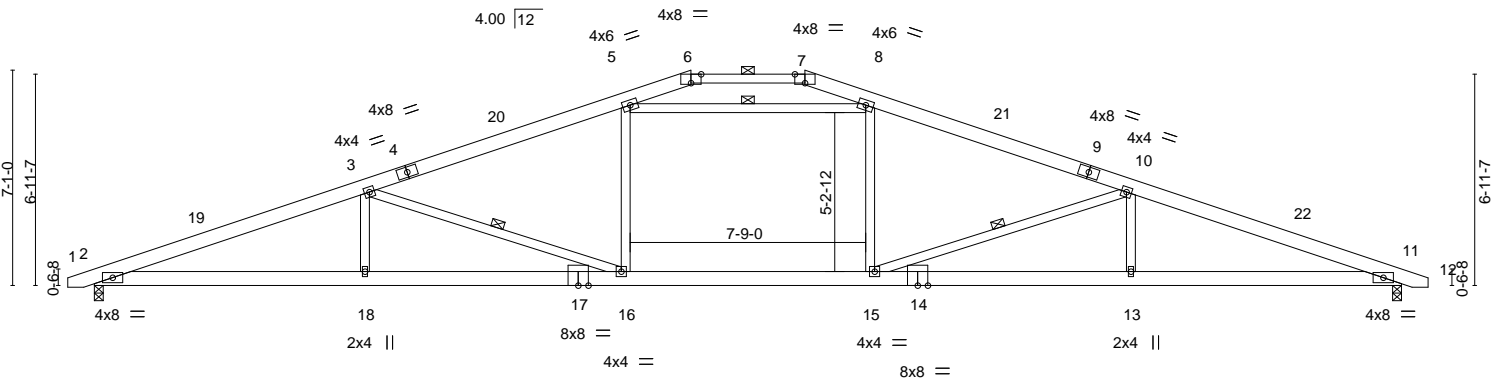
84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:54:10 2019 Page 1

ID:nWgOt4t5g4cSMBishLJF9DzZSKL-kwTGO68SIITDbPrSQZ8CsY3aY79DeV1CPOFxxvzMqIh

-0-10-8	8-10-13	13-1-11	19-7-8	23-4-8	29-10-5	34-1-3	37-5-3	43-0-0	43-10-8
0-10-8	8-10-13	4-2-14	6-5-13	3-9-0	6-5-13	4-2-14	3-4-0	5-6-13	0-10-8

Scale = 1:75.8



	8-10-13	19-7-8	23-4-8	34-1-3	43-0-0
Plate Offsets (X,Y)--	[6:0-4-0,Edge], [7:0-4-0,Edge]	10-8-11	3-9-0	10-8-11	8-10-13

<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 0.53	Vert(LL)	-0.45	16-18	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.44	Vert(CT)	-0.69	16-18	>747		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.97	Horz(CT)	0.13	11	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 269 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.2 *Except* 6-7: 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-11-2 oc purlins, except 2-0-0 oc purlins (6-0-0 max.); 6-7.
BOT CHORD 2x6 SP DSS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 10-15, 5-8, 3-16

**REACTIONS.** (lb/size) 2=1754/0-3-8, 11=1754/0-3-8  
Max Horz 2=112(LC 12)  
Max Uplift 2=282(LC 8), 11=282(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-4361/646, 3-5=-3279/499, 5-6=-486/149, 6-7=-440/137, 7-8=-486/149,  
8-10=-3279/499, 10-11=-4361/647  
BOT CHORD 2-18=-617/4048, 16-18=-617/4048, 15-16=-298/3025, 13-15=-533/4048, 11-13=-533/4048  
WEBS 5-16=0/615, 10-15=-1295/373, 8-15=0/615, 5-8=-2607/384, 3-18=0/363, 3-16=-1295/372,  
10-13=0/363

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-7-5 to 3-8-4, Interior(1) 3-8-4 to 19-7-8, Exterior(2) 19-7-8 to 29-5-8, Interior(1) 29-5-8 to 43-7-5 zone; 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=282.
- One RT7A USP 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.



April 29, 2019

**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.

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Edenton, NC 27932

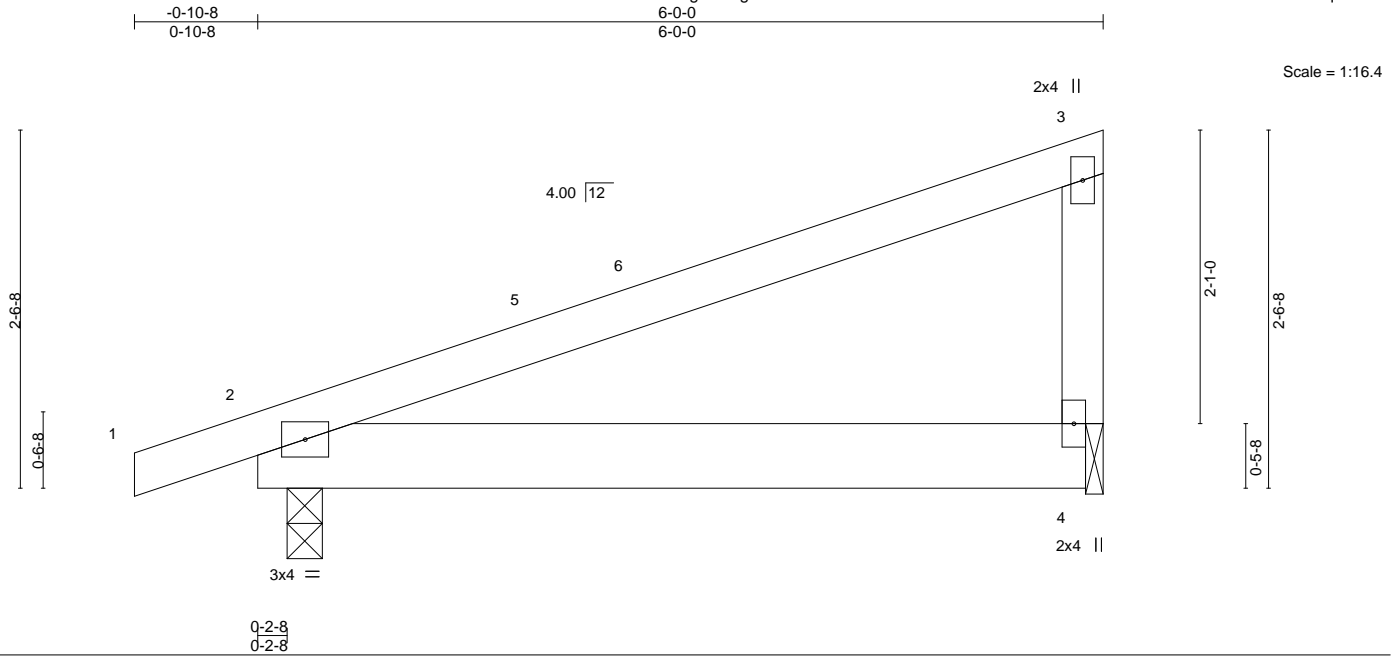
Job 20585A	Truss P1	Truss Type MONOPITCH	Qty 3	Ply 1	243.2939.D Ext CVP	136893791
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84 Components (Dunn),

Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:54:10 2019 Page 1

ID:nWgOt4t5g4cSMBishLJF9DzZSKL-kwTGO68SIITDbPrSQZ8CsY3Z977oek6CPOFxxvzMqJh  
6-0-0  
6-0-0



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.62	Vert(LL)	0.03	2-4	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.53	Vert(CT)	-0.03	2-4	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00		n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P							
									Weight: 27 lb	FT = 20%

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

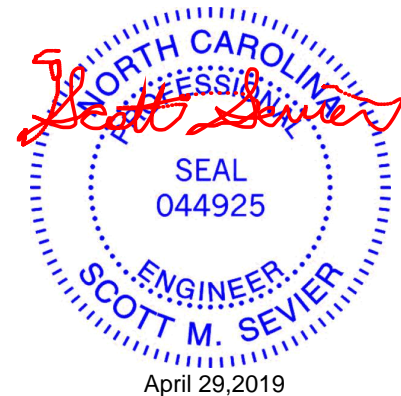
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 2=294/0-3-0, 4=224/0-1-8  
Max Horz 2=88(LC 8)  
Max Uplift 2=-123(LC 8), 4=-106(LC 8)

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

**NOTES-**

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; 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 5-10-4 zone; porch left 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.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=106.
- One RT7A USP 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.



April 29, 2019

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

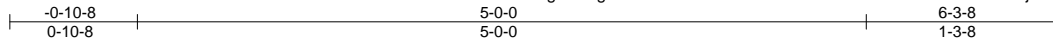
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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.



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Job 20585A	Truss P2	Truss Type HALF HIP	Qty 6	Ply 1	243.2939.D Ext CVP	136893792
84 Components (Dunn), Dunn, NC - 28334,					8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:54:11 2019 Page 1	
					ID:nWgOt4t5g4cSMBishLJF9DzZSKL-C61ebS94W3b4DYQezHfRPmcj3XPJNBMMe2_VTLzMqlg	
Job Reference (optional)						



Scale = 1:15.8

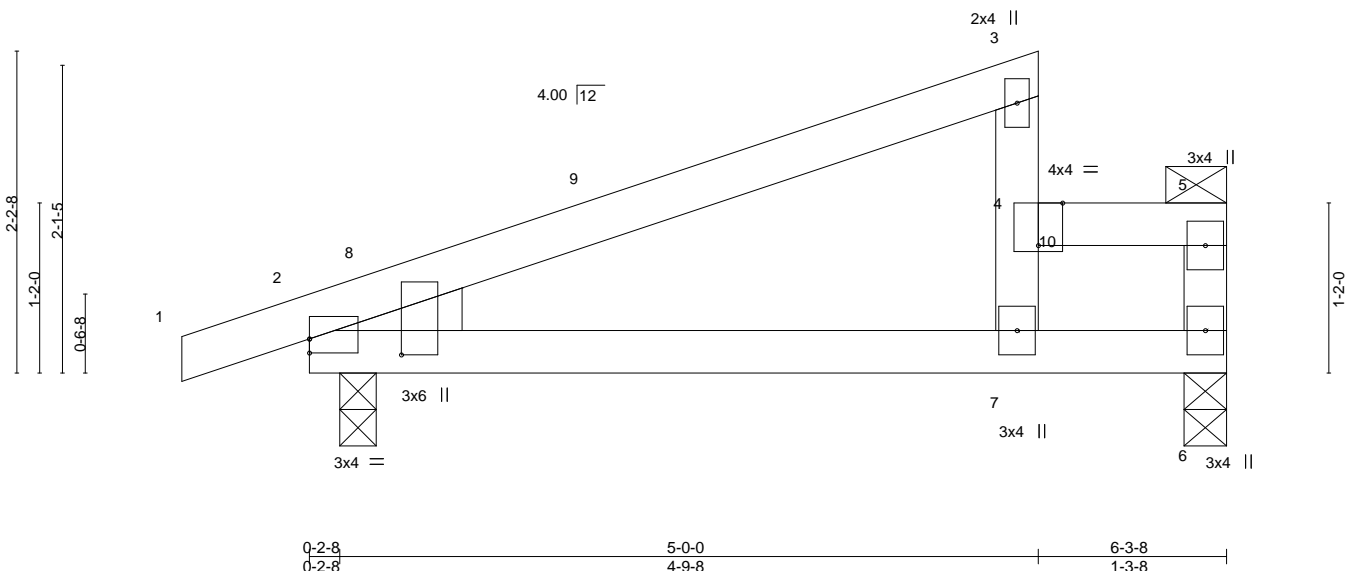


Plate Offsets (X,Y)--	[2:0-1-5,0-7-9], [2:0-0-0,0-1-2], [4:0-2-0,Edge]
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<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.67	Vert(LL) 0.07 2-7 >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.83	Vert(CT) -0.05 2-7 >999 180		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.00	Horz(CT) -0.00 6 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-R		Weight: 25 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.): 4-7, 4-5.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 9-9-9 oc bracing.
WEBS 2x4 SP No.3	
WEDGE	
Left: 2x4 SP No.3	

**REACTIONS.** (lb/size) 6=404/0-3-8, 2=338/0-3-0  
 Max Horz 2=117(LC 12)  
 Max Uplift 6=-155(LC 8), 2=-144(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-322/244, 5-6=-264/300  
 BOT CHORD 2-7=-319/254

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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 6-1-12 zone; porch left 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=155.
  - One RT7A USP 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.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) . 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).

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 4-5=-60, 2-6=-20
Concentrated Loads (lb)
Vert: 10=-200(F)



**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.

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**TRENCO**  
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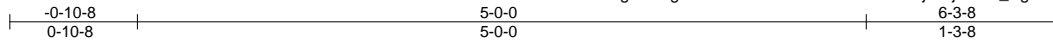
818 Soundside Road  
 Edenton, NC 27932

Job 20585A	Truss P3	Truss Type HALF HIP GIRDER	Qty 1	Ply 1	243.2939.D Ext CVP	136893793
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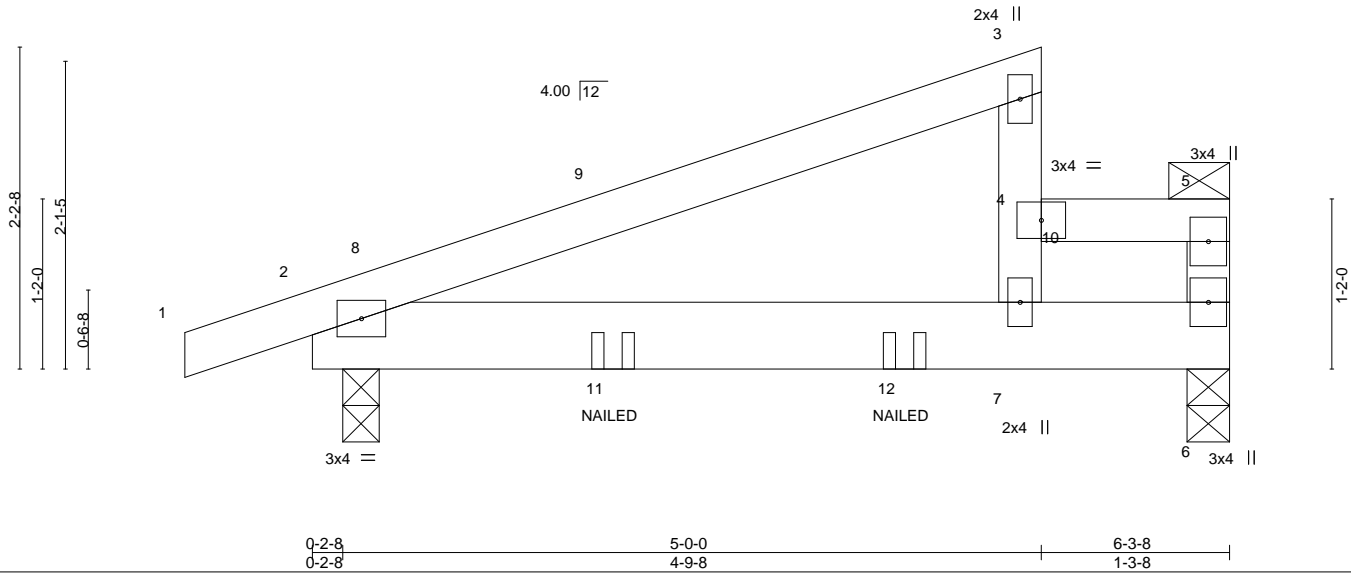
84 Components (Dunn),

Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:54:12 2019 Page 1  
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Scale = 1:15.8



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 0.63	Vert(LL)	0.04	2-7	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.52	Vert(CT)	-0.04	2-7	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.00	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-R					Weight: 29 lb	FT = 20%

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

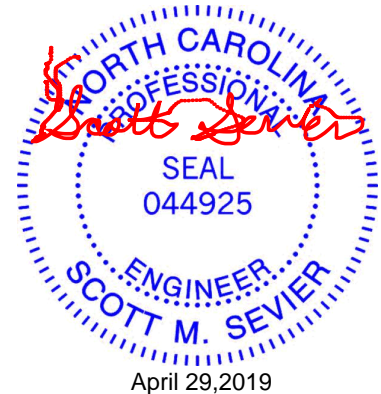
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-7, 4-5.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 6=434/0-3-8, 2=372/0-3-0  
 Max Horz 2=117(LC 12)  
 Max Uplift 6=-181(LC 8), 2=-172(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-300/183  
 BOT CHORD 2-7=-257/234

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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 6-1-12 zone; porch left 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 RT7A USP 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.
  - "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) . 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).

**LOAD CASE(S)** Standard  
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=-60, 4-5=-60, 2-6=-20  
 Concentrated Loads (lb)  
 Vert: 10=-200(F) 11=-37(F) 12=-27(F)



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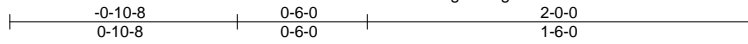
ENGINEERING BY  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

Job 20585A	Truss P4	Truss Type HALF HIP	Qty 1	Ply 1	243.2939.D Ext CVP	136893794
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84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:54:13 2019 Page 1

ID:nWgOt4t5g4cSMBishLJF9DzZSKL-9V9O08BL2groSsa15hhvUBhCiKGRH5rf6MTbYEzMQle



Scale = 1:8.9

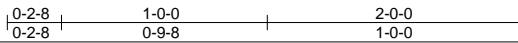
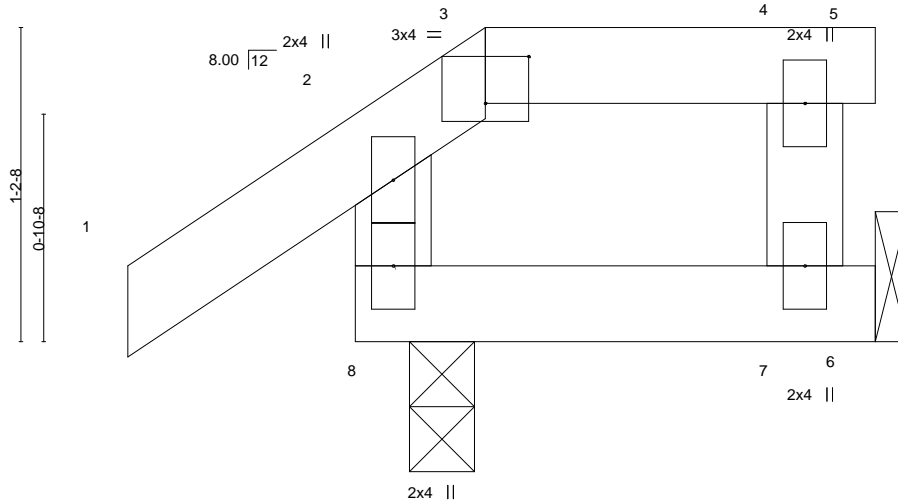


Plate Offsets (X,Y)--	[3:0-2-0,0-2-3]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	0.00	8	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	8	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-R						
								Weight: 10 lb	FT = 20%

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

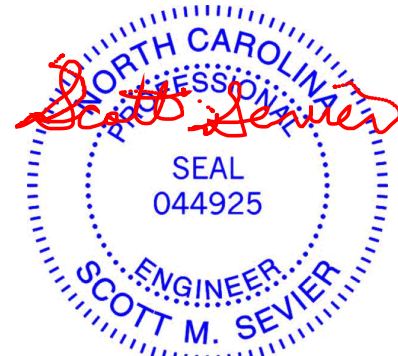
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 2-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-5.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 6=47/Mechanical, 8=151/0-3-0  
 Max Horz 8=33(LC 12)  
 Max Uplift 6=-32(LC 9), 8=-26(LC 9)  
 Max Grav 6=57(LC 24), 8=151(LC 1)

**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=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-0-0 zone; porch 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) 6, 8.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 29, 2019

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 Edenton, NC 27932

Job 20585A	Truss P5	Truss Type HALF HIP	Qty 1	Ply 1	243.2939.D Ext CVP	136893795
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84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:54:13 2019 Page 1

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Scale = 1:12.3

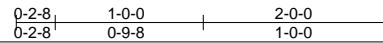
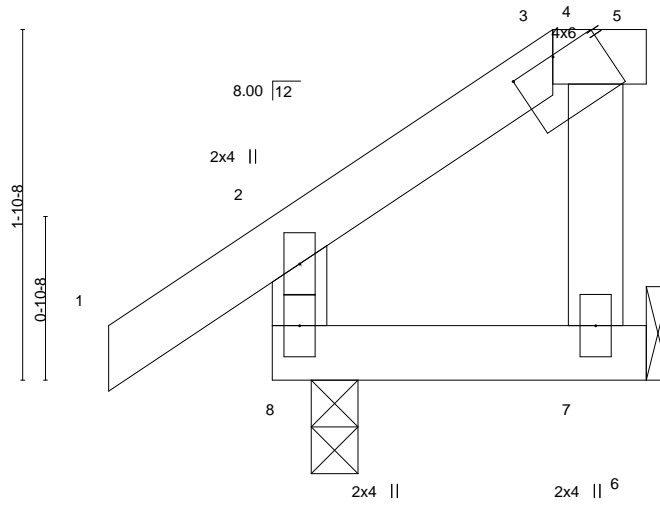


Plate Offsets (X,Y)-- [3:0-3-0,0-0-2], [4:0-1-7,0-1-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.11	Vert(LL)	0.00	8	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	8	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-R						
								Weight: 11 lb	FT = 20%

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

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

**REACTIONS.** (lb/size) 6=47/Mechanical, 8=151/0-3-0  
 Max Horz 8=59(LC 12)  
 Max Uplift 6=-34(LC 9), 8=-14(LC 12)  
 Max Grav 6=50(LC 3), 8=151(LC 1)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-0-0 zone; porch 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) 6, 8.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 29, 2019

**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 20585A	Truss T2	Truss Type COMMON	Qty 4	Ply 1	243.2939.D Ext CVP	I36893797
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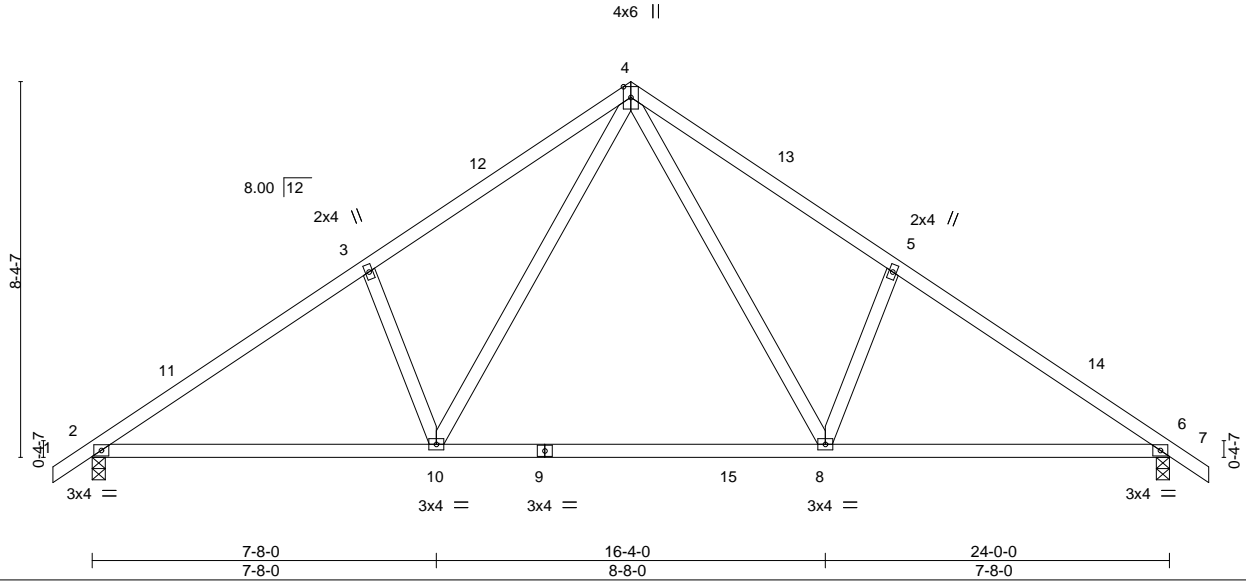
84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:54:15 2019 Page 1

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Scale = 1:51.3



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.49	Vert(LL)	-0.24	8-10	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.70	Vert(CT)	-0.35	8-10	>805	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.25	Horz(CT)	0.04	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S							
									Weight: 121 lb	FT = 20%

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

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

**REACTIONS.** (lb/size) 2=1010/0-3-8, 6=1010/0-3-8  
Max Horz 2=212(LC 11)  
Max Uplift 2=-123(LC 12), 6=-123(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1390/161, 3-4=-1284/252, 4-5=-1287/252, 5-6=-1390/161  
BOT CHORD 2-10=-163/1205, 8-10=-1/764, 6-8=-39/1073  
WEBS 4-8=-155/672, 5-8=-356/251, 4-10=-155/666, 3-10=-356/251

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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 12-0-0, Exterior(2) 12-0-0 to 15-0-0, Interior(1) 15-0-0 to 24-10-8 zone; 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 RT7A USP 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.



April 29, 2019

**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/TP1 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 20585A	Truss T3	Truss Type Common	Qty 2	Ply 1	243.2939.D Ext CVP	I36893798
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84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:54:16 2019 Page 1

ID:nWgOt4t5g4cSMBishLJF9DzZSKL-Z4qXeADDLbDNJKlcmqFc6pJdkY7A2Pg5oKiG9YzMqlb



4x6 ||

Scale = 1:50.7

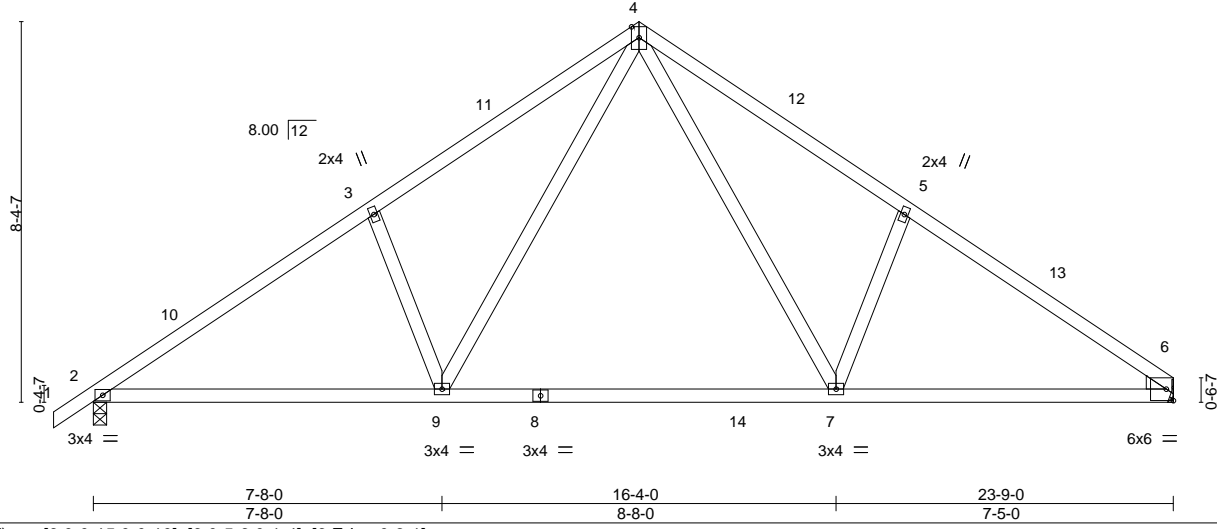


Plate Offsets (X,Y)--	[6:0-0-15,0-0-10], [6:0-5-6,0-1-4], [6:Edge,0-3-1]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.49	Vert(LL)	-0.25	7-9	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.72	Vert(CT)	-0.36	7-9	>775		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.25	Horz(CT)	0.04	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 119 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-4-9 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	
Right: 2x4 SP No.3	

**REACTIONS.** (lb/size) 2=1004/0-3-8, 6=940/Mechanical  
 Max Horz 2=208(LC 9)  
 Max Uplift 2=-123(LC 12), 6=-99(LC 13)

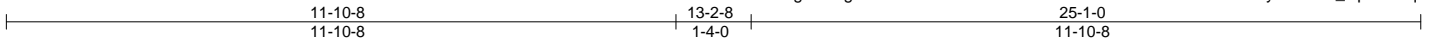
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1381/160, 3-4=-1283/252, 4-5=-1273/253, 5-6=-1349/167  
 BOT CHORD 2-9=-172/1198, 7-9=-10/754, 6-7=-54/1050  
 WEBS 4-7=-156/655, 5-7=-339/253, 4-9=-155/674, 3-9=-356/251

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; 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 12-0-0, Exterior(2) 12-0-0 to 15-0-0, Interior(1) 15-0-0 to 23-8-4 zone; 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.
  - 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 RT7A USP 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.

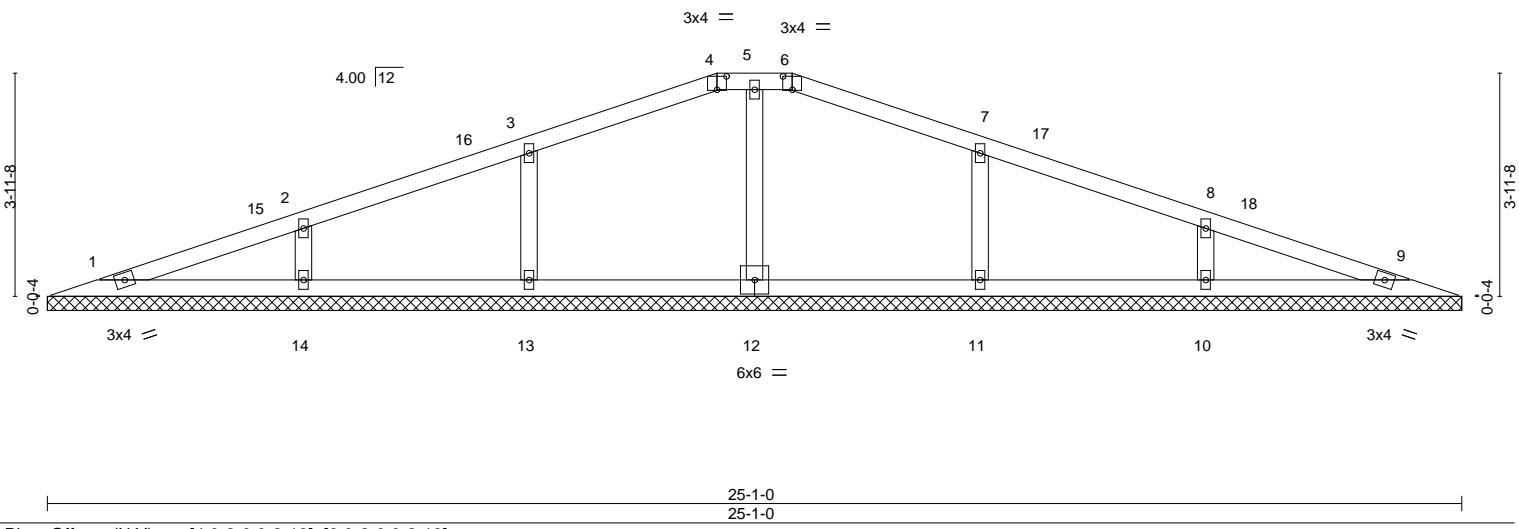


April 29, 2019

Job 20585A	Truss V1	Truss Type GABLE	Qty 1	Ply 1	243.2939.D Ext CVP	136893799
84 Components (Dunn), Dunn, NC - 28334,					8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:54:17 2019 Page 1	
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					Job Reference (optional)	



Scale = 1:40.9



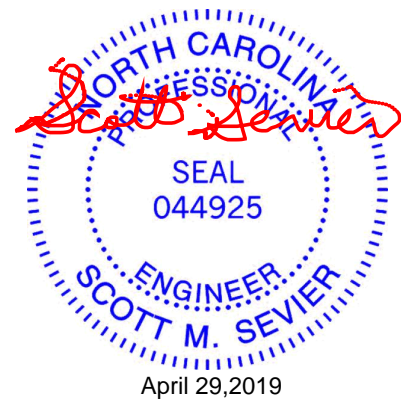
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.18	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	9	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 88 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
BOT CHORD 2x4 SP No.2	2-0-0 oc purlins (6-0-0 max.): 4-6.
OTHERS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 25-1-0.  
 (lb) - Max Horz 1=61(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 13, 14, 11, 10  
 Max Grav All reactions 250 lb or less at joint(s) 1, 9 except 12=299(LC 1), 13=326(LC 23), 14=340(LC 1), 11=326(LC 24), 10=340(LC 1)

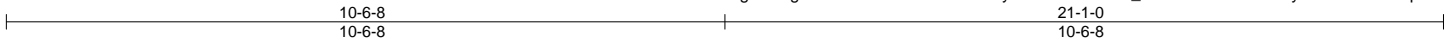
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 2-14=250/126, 8-10=250/126

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-11-5 to 3-11-5, Interior(1) 3-11-5 to 11-10-8, Exterior(2) 11-10-8 to 17-5-7, Interior(1) 17-5-7 to 24-1-11 zone; porch 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) All plates are 2x4 MT20 unless otherwise indicated.
  - 5) Gable requires continuous bottom chord bearing.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9, 13, 14, 11, 10.
  - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

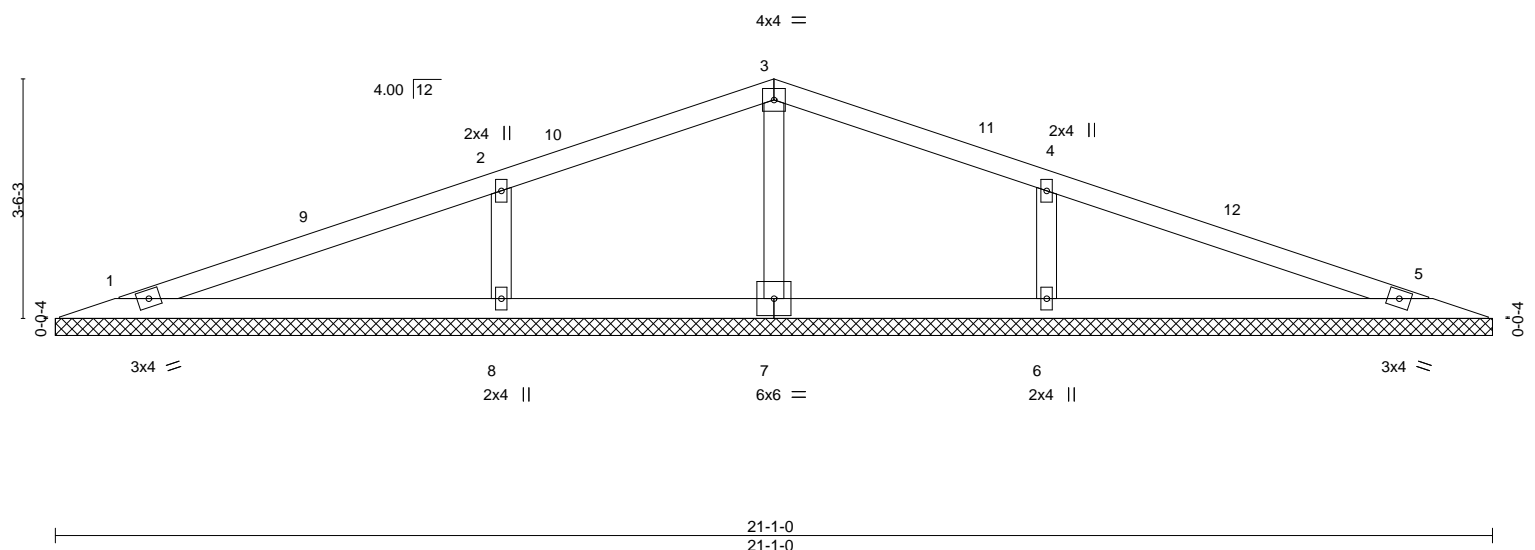




Job 20585A	Truss V2	Truss Type GABLE	Qty 1	Ply 1	243.2939.D Ext CVP	136893800
84 Components (Dunn), Dunn, NC - 28334,					8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:54:18 2019 Page 1	
					Job Reference (optional)	
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					21-1-0	
					10-6-8	



Scale = 1:33.8



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.40	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.25	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 70 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	

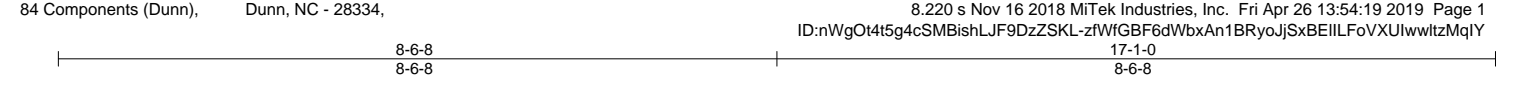
**REACTIONS.** All bearings 21-1-0.  
 (lb) - Max Horz 1=54(LC 16)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-117(LC 12), 6=-117(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=484(LC 23), 6=484(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 2-8=-354/177, 4-6=-354/177

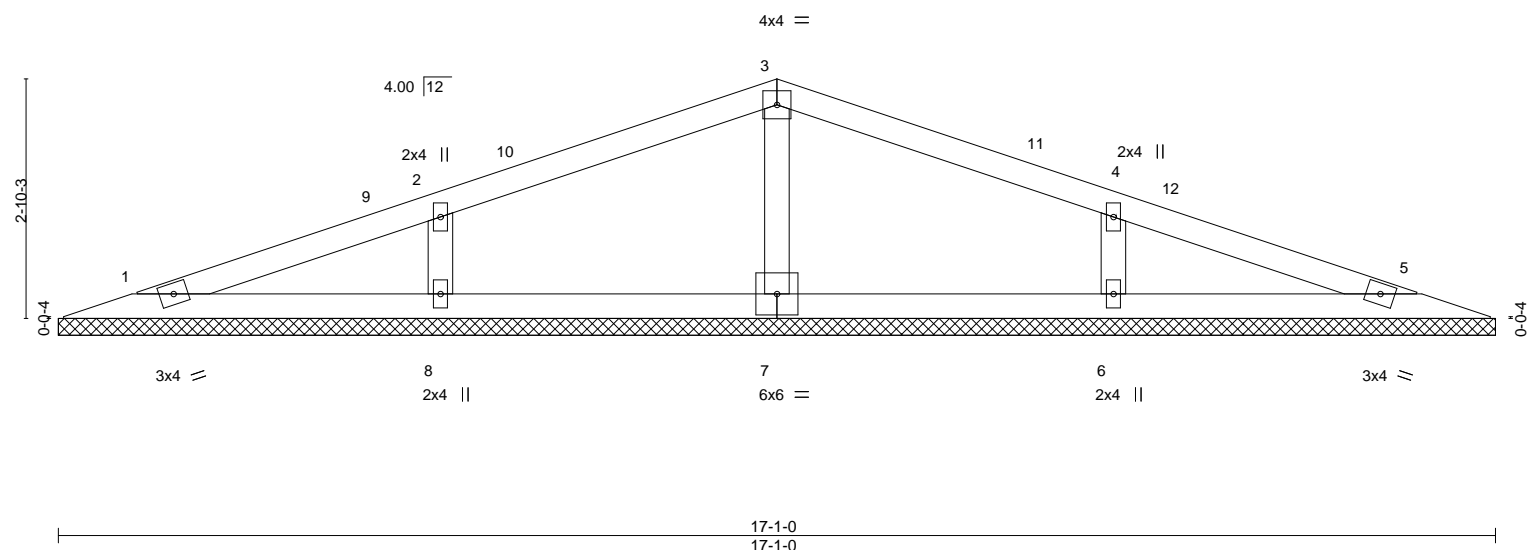
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-11-5 to 3-11-5, Interior(1) 3-11-5 to 10-6-8, Exterior(2) 10-6-8 to 13-6-8, Interior(1) 13-6-8 to 20-1-11 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=117, 6=117.



Job 20585A	Truss V3	Truss Type GABLE	Qty 1	Ply 1	243.2939.D Ext CVP	136893801
84 Components (Dunn), Dunn, NC - 28334,					8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:54:19 2019 Page 1	
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					Job Reference (optional)	



Scale = 1:27.4



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.21	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 55 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	

**REACTIONS.** All bearings 17-1-0.  
 (lb) - Max Horz 1=-43(LC 17)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 8, 6  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=280(LC 1), 8=361(LC 23), 6=361(LC 24)

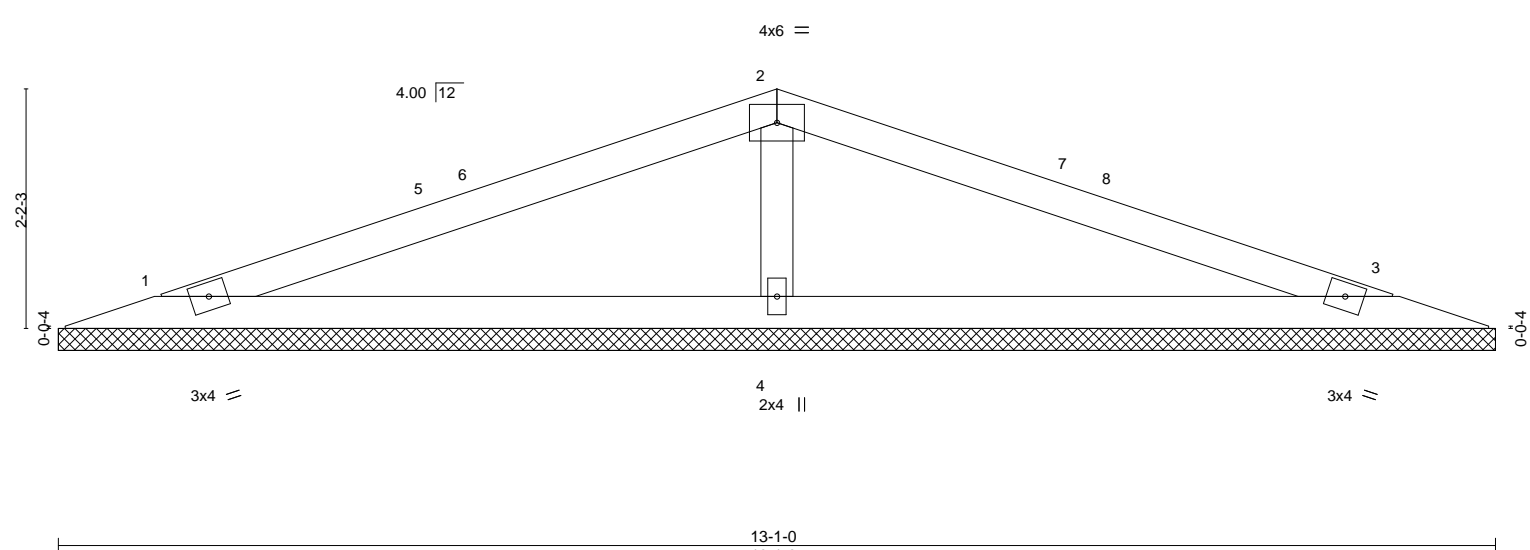
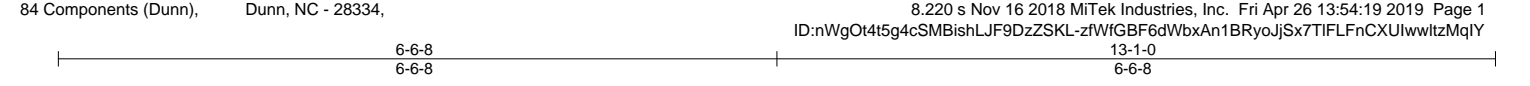
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 2-8=-271/137, 4-6=-271/137

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-11-5 to 3-11-5, Interior(1) 3-11-5 to 8-6-8, Exterior(2) 8-6-8 to 11-6-8, Interior(1) 11-6-8 to 16-1-11 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 8, 6.



April 29, 2019

Job 20585A	Truss V4	Truss Type GABLE	Qty 1	Ply 1	243.2939.D Ext CVP	136893802
84 Components (Dunn), Dunn, NC - 28334,					8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:54:19 2019 Page 1	
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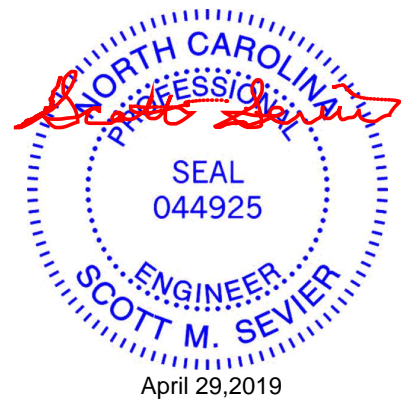
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.45	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.31	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 39 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	

**REACTIONS.** (lb/size) 1=192/13-1-0, 3=192/13-1-0, 4=513/13-1-0  
 Max Horz 1=31(LC 16)  
 Max Uplift 1=-42(LC 8), 3=-46(LC 13), 4=-42(LC 8)  
 Max Grav 1=198(LC 23), 3=198(LC 24), 4=513(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 2-4=-349/145

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-11-5 to 3-11-5, Interior(1) 3-11-5 to 6-6-8, Exterior(2) 6-6-8 to 9-6-8, Interior(1) 9-6-8 to 12-1-11 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.

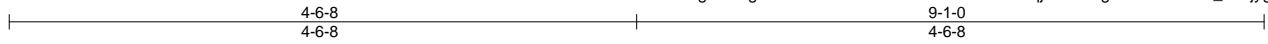


Job 20585A	Truss V5	Truss Type GABLE	Qty 1	Ply 1	243.2939.D Ext CVP	136893803
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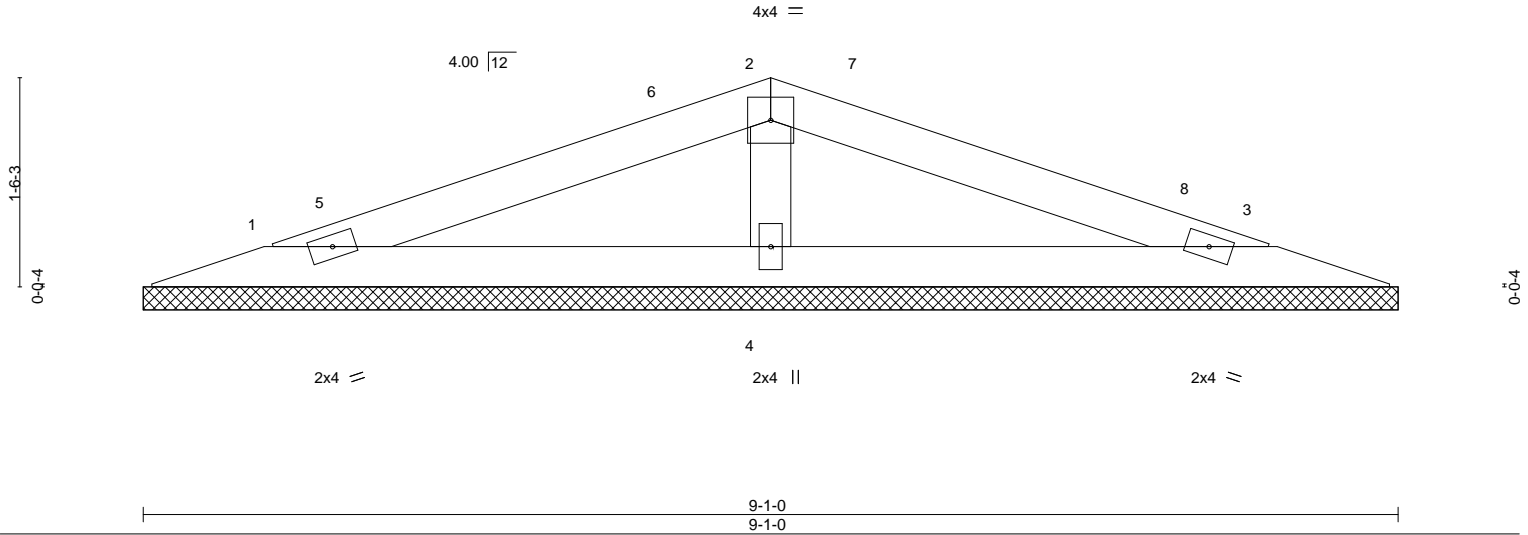
84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:54:20 2019 Page 1

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Scale = 1:16.7



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 0.24	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					Weight: 26 lb	FT = 20%

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

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

**REACTIONS.** (lb/size) 1=139/9-1-0, 3=139/9-1-0, 4=298/9-1-0  
 Max Horz 1=-20(LC 13)  
 Max Uplift 1=-34(LC 8), 3=-36(LC 9), 4=-13(LC 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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-11-5 to 3-11-5, Interior(1) 3-11-5 to 4-6-8, Exterior(2) 4-6-8 to 7-6-8, Interior(1) 7-6-8 to 8-1-11 zone; porch 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.



April 29, 2019

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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.



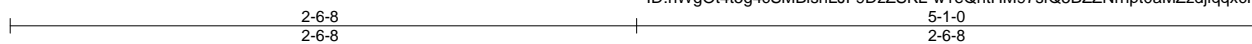
818 Soundside Road  
 Edenton, NC 27932

Job 20585A	Truss V6	Truss Type Valley	Qty 1	Ply 1	243.2939.D Ext CVP	136893804
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84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:54:21 2019 Page 1

ID:nWgOt4t5g4cSMBishLJF9DzZSKL-w1eQhtHM97sfQ5BZZNrpt0aMZzdjiqxcP0qzmMqlW



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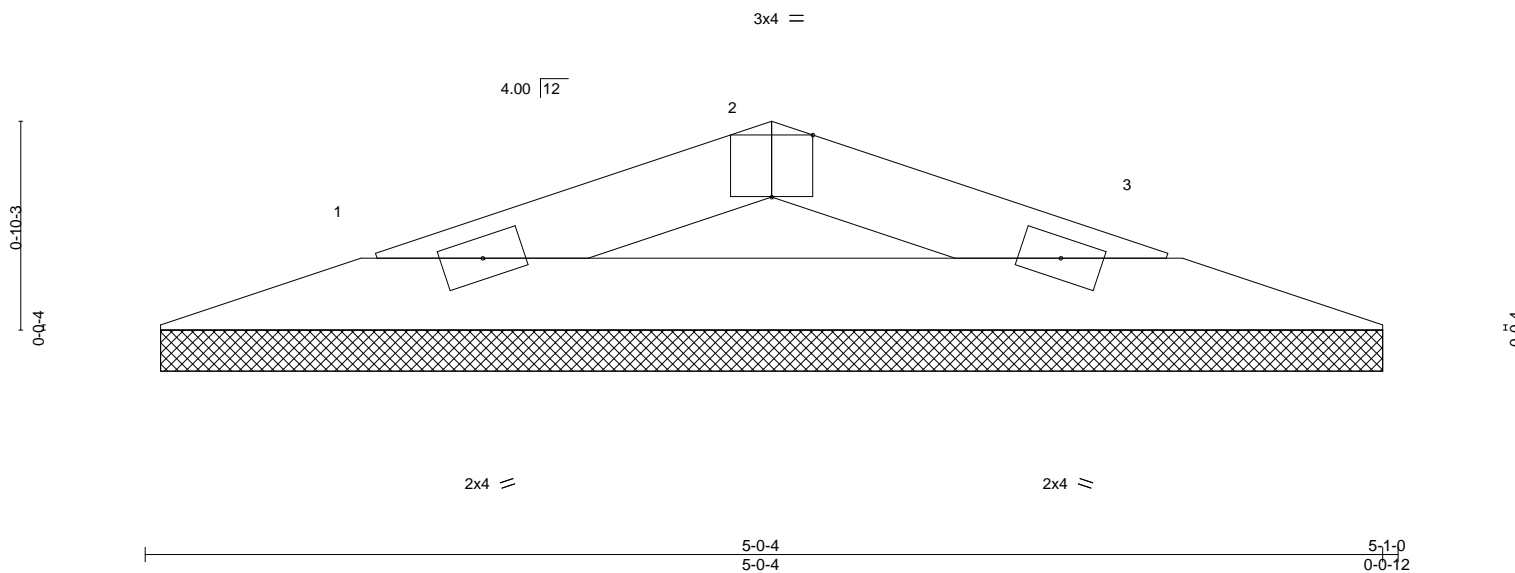


Plate Offsets (X,Y)--	[2:0-2-0,Edge]									
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.04	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P						Weight: 12 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 5-1-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 1=128/4-11-8, 3=128/4-11-8  
 Max Horz 1=9(LC 16)  
 Max Uplift 1=-18(LC 8), 3=-18(LC 9)

**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=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



April 29, 2019

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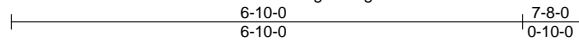


Job 20585A	Truss VA2	Truss Type GABLE	Qty 1	Ply 1	243.2939.D Ext CVP	136893806
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84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:54:22 2019 Page 1

ID:nWgOt4t5g4cSMBishLJF9DzZSKL-OECovDH\_wR\_W1Fmm74M0L4Zj9zK?S9HzAG9aMCzMqIV



Scale = 1:30.8

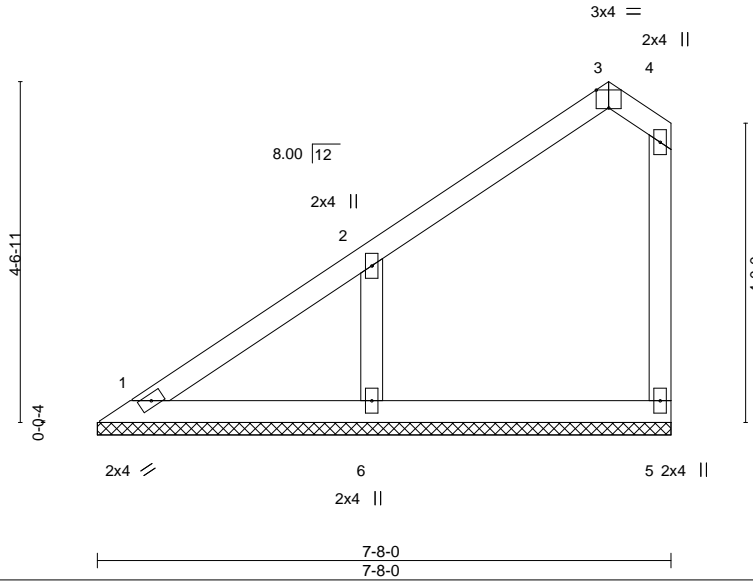


Plate Offsets (X,Y)--	[3:0-2-0,Edge]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.17	Vert(LL) n/a - n/a 999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.12	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.05	Horz(CT) 0.00 5 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 33 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.** (lb/size) 1=101/7-8-0, 5=132/7-8-0, 6=330/7-8-0  
 Max Horz 1=154(LC 12)  
 Max Uplift 5=-28(LC 12), 6=-125(LC 12)  
 Max Grav 1=106(LC 21), 5=132(LC 1), 6=351(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-6=-269/174

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-5-12 to 3-8-0, Interior(1) 3-8-0 to 6-10-0, Exterior(2) 6-10-0 to 7-6-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Gable requires continuous bottom chord bearing.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 6=125.



April 29, 2019

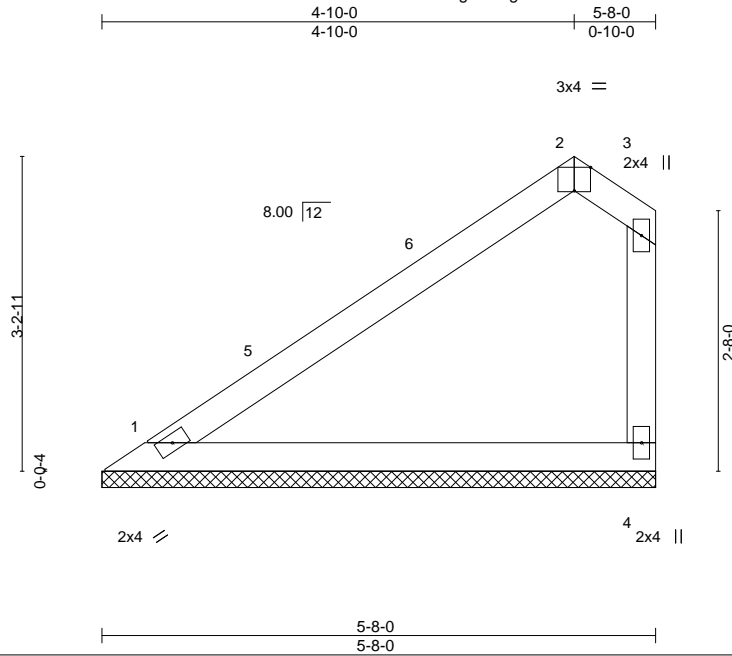
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**  
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ENGINEERING BY  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

Job 20585A	Truss VA3	Truss Type GABLE	Qty 1	Ply 1	243.2939.D Ext CVP	136893807
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84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:54:23 2019 Page 1  
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-sQIA6Zlch16NfOKygotFul5rtMeJBcK7Pwu7uezMqIU



Scale = 1:23.6

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 2-0-0	TC 0.36	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.24	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Vert(CT) n/a - n/a 999		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-R	Horz(CT) 0.00 4 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 5-8-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 1=202/5-8-0, 4=202/5-8-0  
 Max Horz 1=102(LC 12)  
 Max Uplift 1=9(LC 12), 4=-53(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=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 4-10-0, Exterior(2) 4-10-0 to 5-6-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4.



April 29, 2019

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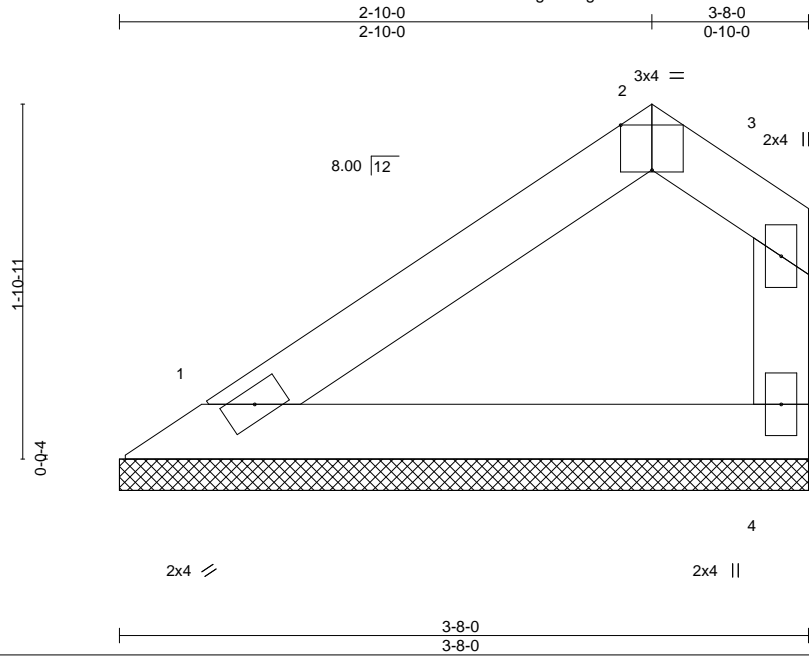
ENGINEERING BY  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932



Job 20585A	Truss VA4	Truss Type GABLE	Qty 1	Ply 1	243.2939.D Ext CVP	I36893808
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84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:54:23 2019 Page 1  
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-sQIA6Zlchl6NfOKygotFul5vxMgqBck7Pwu7uezMqIU



Scale = 1:12.3

Plate Offsets (X,Y)--	[2:0-2-0,Edge]						
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d
TCLL 20.0	Plate Grip DOL	1.15	TC 0.10	Vert(LL)	n/a	-	n/a
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	n/a	-	n/a
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	4	n/a
BCDL 10.0	Code IRC2015/TPI2014		Matrix-R				
				<b>PLATES</b>			<b>GRIP</b>
				MT20			244/190
				Weight: 13 lb			FT = 20%

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

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

**REACTIONS.** (lb/size) 1=122/3-8-0, 4=122/3-8-0  
Max Horz 1=51(LC 12)  
Max Uplift 1=10(LC 12), 4=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=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4.



April 29, 2019

**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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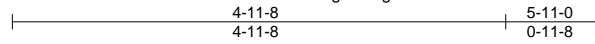
818 Soundside Road  
Edenton, NC 27932

Job 20585A	Truss VB1	Truss Type GABLE	Qty 1	Ply 1	243.2939.D Ext CVP	136893809
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84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:54:24 2019 Page 1

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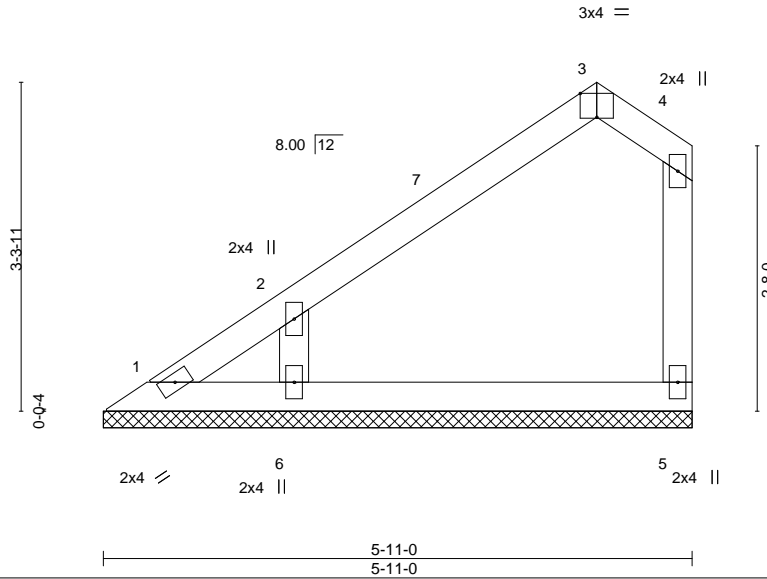


Plate Offsets (X,Y)--	[3:0-2-0,Edge]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.18	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 23 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-11-0 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	
OTHERS 2x4 SP No.3	

**REACTIONS.** (lb/size) 1=16/5-11-0, 5=139/5-11-0, 6=269/5-11-0  
 Max Horz 1=103(LC 12)  
 Max Uplift 1=-22(LC 10), 5=-27(LC 12), 6=-94(LC 12)  
 Max Grav 1=57(LC 12), 5=139(LC 1), 6=285(LC 19)

**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=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 4-11-8, Exterior(2) 4-11-8 to 5-9-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Gable requires continuous bottom chord bearing.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 6.



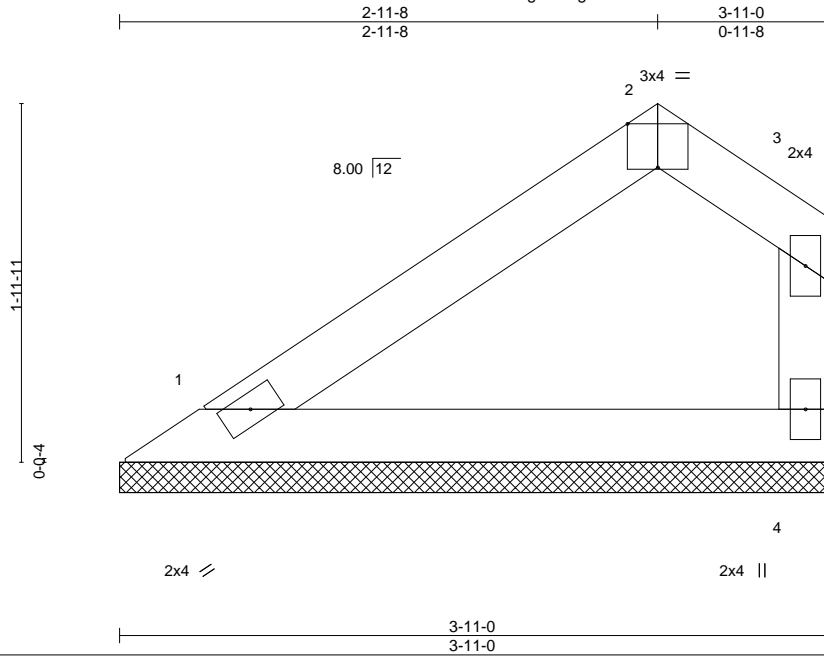
April 29, 2019

<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 20585A	Truss VB2	Truss Type GABLE	Qty 1	Ply 1	243.2939.D Ext CVP	136893810
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84 Components (Dunn), Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Apr 26 13:54:25 2019 Page 1  
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-ootxXEKtDMM5uiULoDvjzjBFDAL4fVpQsENEzXzMqIS



Scale = 1:12.7

Plate Offsets (X,Y)--	[2:0-2-0,Edge]	
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0
TCLL 20.0	Plate Grip DOL	1.15
TCDL 10.0	Lumber DOL	1.15
BCLL 0.0 *	Rep Stress Incr	YES
BCDL 10.0	Code IRC2015/TPI2014	
	<b>CSI.</b>	
	TC 0.12	
	BC 0.10	
	WB 0.00	
	Matrix-R	
	<b>DEFL.</b>	
	in (loc)	l/defl L/d
	Vert(LL) n/a - n/a	999
	Vert(CT) n/a - n/a	999
	Horz(CT) 0.00 4 n/a	n/a
	<b>PLATES</b>	<b>GRIP</b>
	MT20	244/190
	Weight: 14 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 3-11-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 1=132/3-11-0, 4=132/3-11-0  
Max Horz 1=52(LC 12)  
Max Uplift 1=11(LC 12), 4=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=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4.



April 29, 2019

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

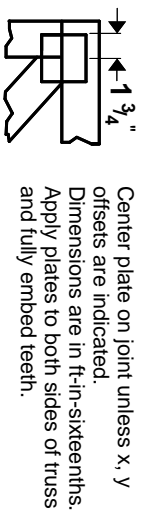
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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.



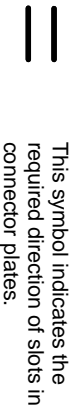
818 Soundside Road  
Edenton, NC 27932

# Symbols

## PLATE LOCATION AND ORIENTATION



For 4 x 2 orientation, locate plates 0-  $\frac{1}{16}$ " from outside edge of truss.



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

## PLATE SIZE

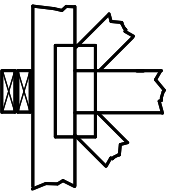
4 X 4

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

## LATERAL BRACING LOCATION



## BEARING

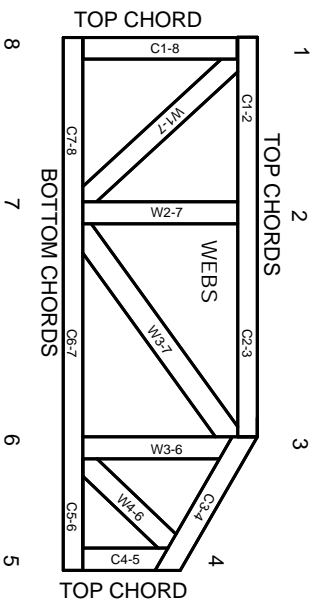


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## 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



**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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MITteK 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.