

**Trenco**

818 Soundside Rd  
Edenton, NC 27932

Re: CL-3145\_W\_CP  
CL 3145 CP

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: I30418482 thru I30418507

My license renewal date for the state of North Carolina is December 31, 2017.

North Carolina COA: C-0844



July 12, 2017

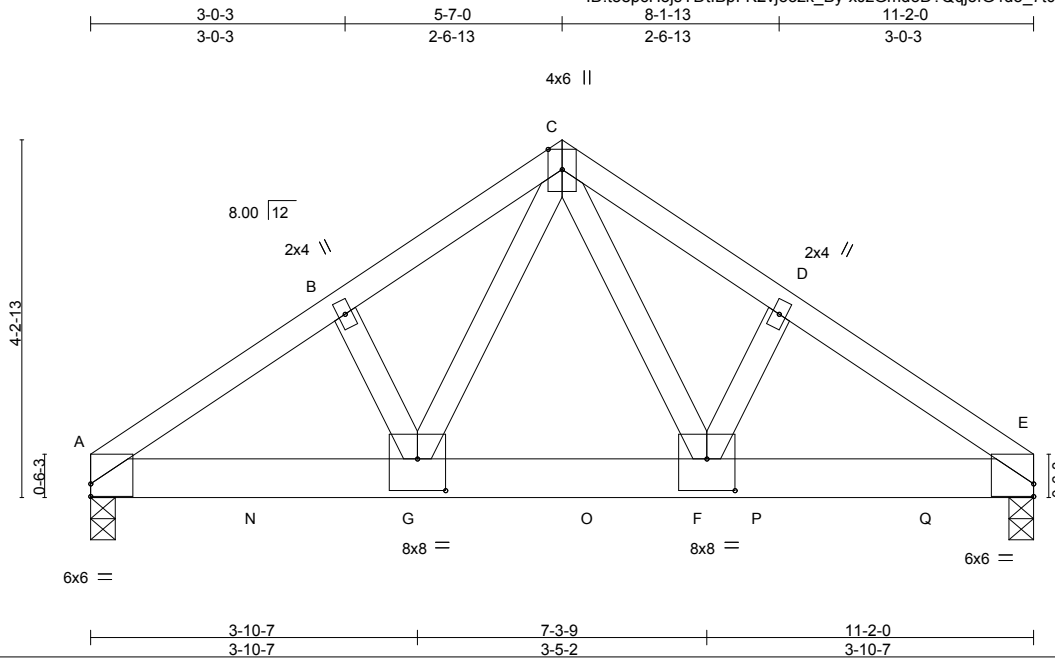
Komnick, Chad

**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 CL-3145_W_CP	Truss GR01	Truss Type Common Girder	Qty 1	Ply 2	CL 3145 CP	130418482
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84 Components, Dunn, NC 28334

8.120 s Jun 22 2017 MiTek Industries, Inc. Wed Jul 12 08:18:23 2017 Page 1  
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Scale = 1:27.3

Plate Offsets (X,Y)--	[A:0-0-0,0-1-13], [E:Edge,0-1-13], [F:0-4-0,0-4-8], [G:0-4-0,0-4-8]				
<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 0.26	Vert(LL) -0.04 F-G >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.90	Vert(TL) -0.10 F-G >999 180		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.62	Horz(TL) 0.02 E n/a n/a		
BCDL 10.0	Code IBC2012/TPI2007	Matrix-MS		Weight: 128 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 5-3-14 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) A=3699/0-3-8, E=4193/0-3-8  
 Max Horz A=72(LC 26)  
 Max Uplift A=-124(LC 8), E=-141(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD A-B=-5121/184, B-C=-5055/215, C-D=-5105/217, D-E=-5166/186  
 BOT CHORD A-G=-163/4234, F-G=-79/3005, E-F=-123/4287  
 WEBS C-F=-134/3010, C-G=-130/2915

**NOTES-**

- 2-ply truss to be connected together with 10d (0.120"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) A=124, E=141.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1400 lb down and 58 lb up at 2-0-0, 1400 lb down and 58 lb up at 4-0-0, 1400 lb down and 58 lb up at 6-0-0, and 1400 lb down and 58 lb up at 8-0-0, and 1400 lb down and 58 lb up at 10-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: A-C=-60, C-E=-60, H-K=-20  
 Concentrated Loads (lb)  
 Vert: G=-1400(F) N=-1400(F) O=-1400(F) P=-1400(F) Q=-1400(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 ANSIT/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 CL-3145_W_CP	Truss GR02	Truss Type Common Girder	Qty 1	Ply 2	CL 3145 CP	130418483
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84 Components, Dunn, NC 28334

8.120 s Jun 22 2017 MiTek Industries, Inc. Wed Jul 12 08:18:24 2017 Page 1  
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Scale = 1:27.2

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.29	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.87	Vert(LL) -0.04 F-G >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.70	Vert(TL) -0.11 F-G >999 180		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Horz(TL) 0.02 E n/a n/a		
	Code IBC2012/TPI2007			Weight: 127 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-1-3 oc purlins.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	

**REACTIONS.** (lb/size) A=4746/0-3-8 (req. 0-3-12), E=5065/0-3-8 (req. 0-4-0)  
Max Horz A=72(LC 7)  
Max Grav A=4756(LC 2), E=5065(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD A-B=-5530/0, B-C=-5474/0, C-D=-5254/0, D-E=-5335/0  
BOT CHORD A-G=0/4592, F-G=0/3176, E-F=0/4390  
WEBS C-F=0/2917, C-G=0/3379

- NOTES-**
- 2-ply truss to be connected together with 10d (0.120"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-3-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - WARNING: Required bearing size at joint(s) A, E greater than input bearing size.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1557 lb down at 0-10-0, 1556 lb down at 2-10-0, 1556 lb down at 4-10-0, 1556 lb down at 6-10-0, and 1400 lb down and 58 lb up at 8-10-0, and 1407 lb down and 51 lb up at 11-1-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

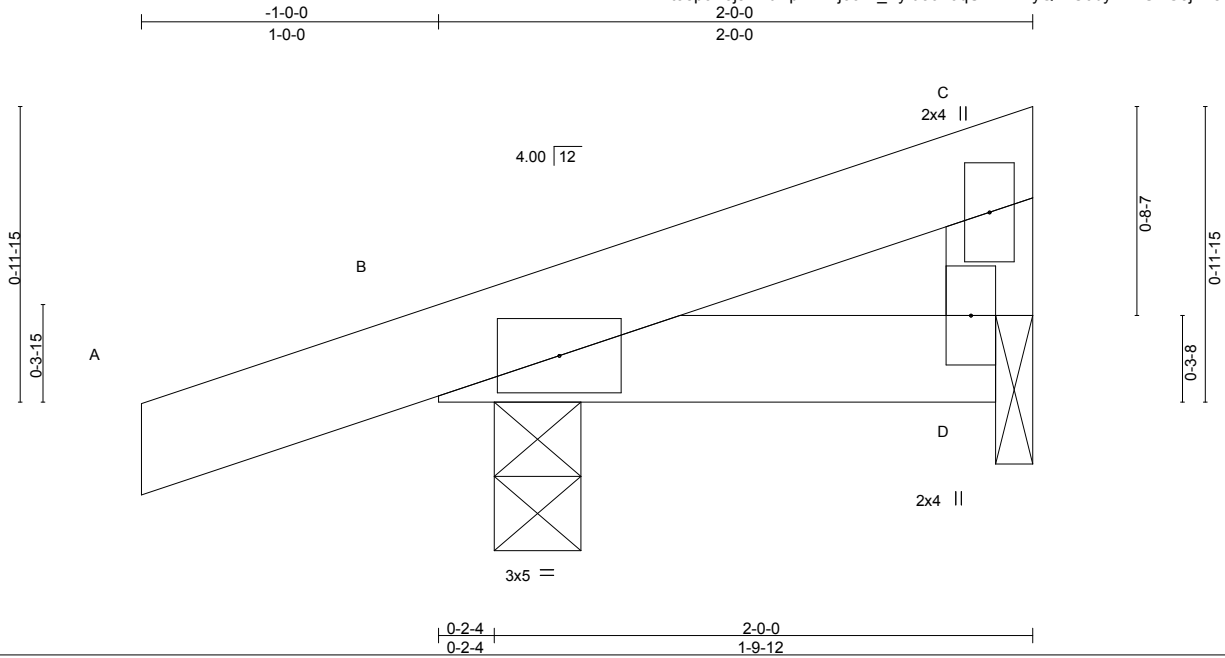
- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: A-C=-60, C-E=-60, H-K=-20  
Concentrated Loads (lb)  
Vert: K=-1407(F) N=-1530(F) O=-1528(F) P=-1528(F) Q=-1528(F) R=-1400(F)



Job CL-3145_W_CP	Truss M01	Truss Type MONOPITCH	Qty 2	Ply 1	CL 3145 CP	130418484
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84 Components, Dunn, NC 28334

8.120 s Jun 22 2017 MiTek Industries, Inc. Wed Jul 12 08:18:25 2017 Page 1  
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Scale = 1:7.8

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	G >999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(TL)	-0.00	G >999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(TL)	0.00	D n/a	n/a		
BCDL 10.0	Code IBC2012/TPI2007		Matrix-MP					Weight: 8 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.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (lb/size) B=150/0-3-8, D=58/0-1-8  
Max Horz B=26(LC 9)  
Max Uplift B=-41(LC 6), D=-3(LC 10)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Bearing at joint(s) D considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) D.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) B, D.



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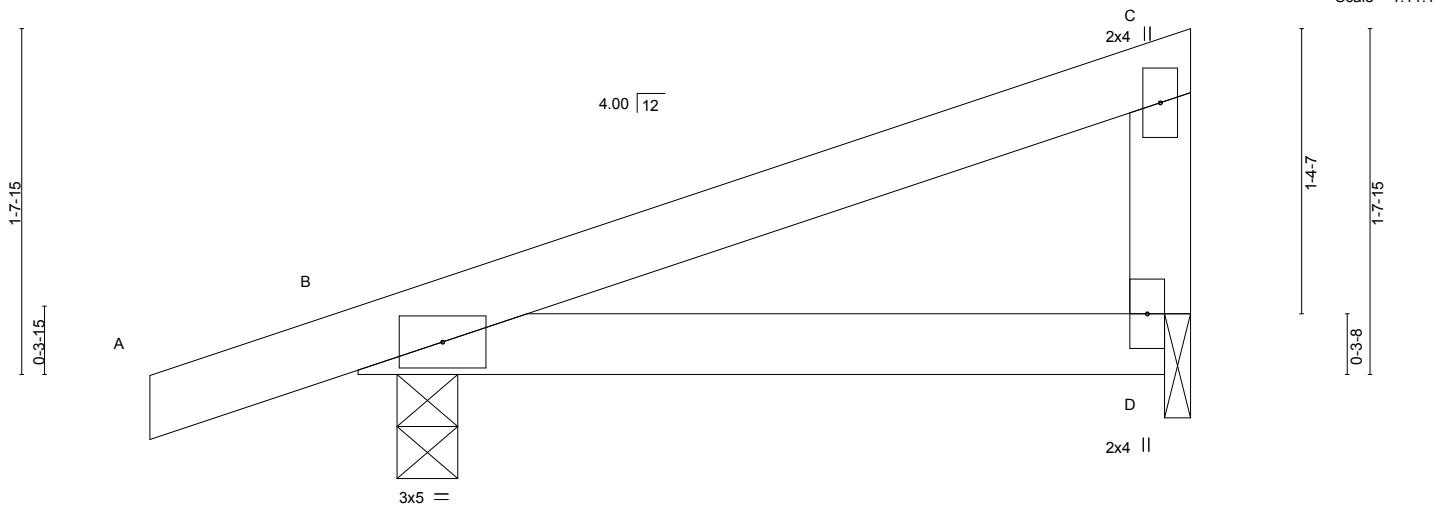
ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

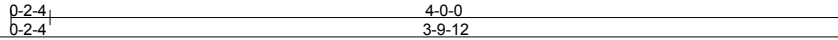
Job CL-3145_W_CP	Truss M02	Truss Type MONOPITCH	Qty 3	Ply 1	CL 3145 CP	130418485
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8.120 s Jun 22 2017 MiTek Industries, Inc. Wed Jul 12 08:18:25 2017 Page 1  
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Scale = 1:11.1



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.18	Vert(LL)	-0.01	D-G >999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.16	Vert(TL)	-0.03	D-G >999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(TL)	0.00	B n/a	n/a		
BCDL 10.0	Code IBC2012/TPI2007		Matrix-MP					Weight: 15 lb	FT = 20%

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

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

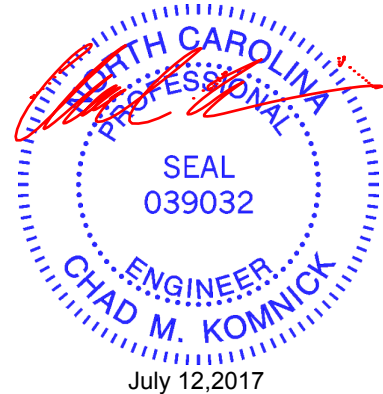
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) D=146/0-1-8, B=222/0-3-8  
 Max Horz B=48(LC 9)  
 Max Uplift D=-13(LC 10), B=-41(LC 6)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Bearing at joint(s) D considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) D.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) D, 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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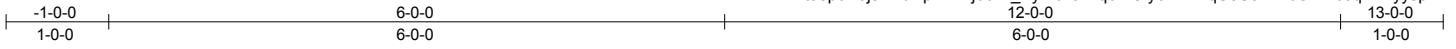


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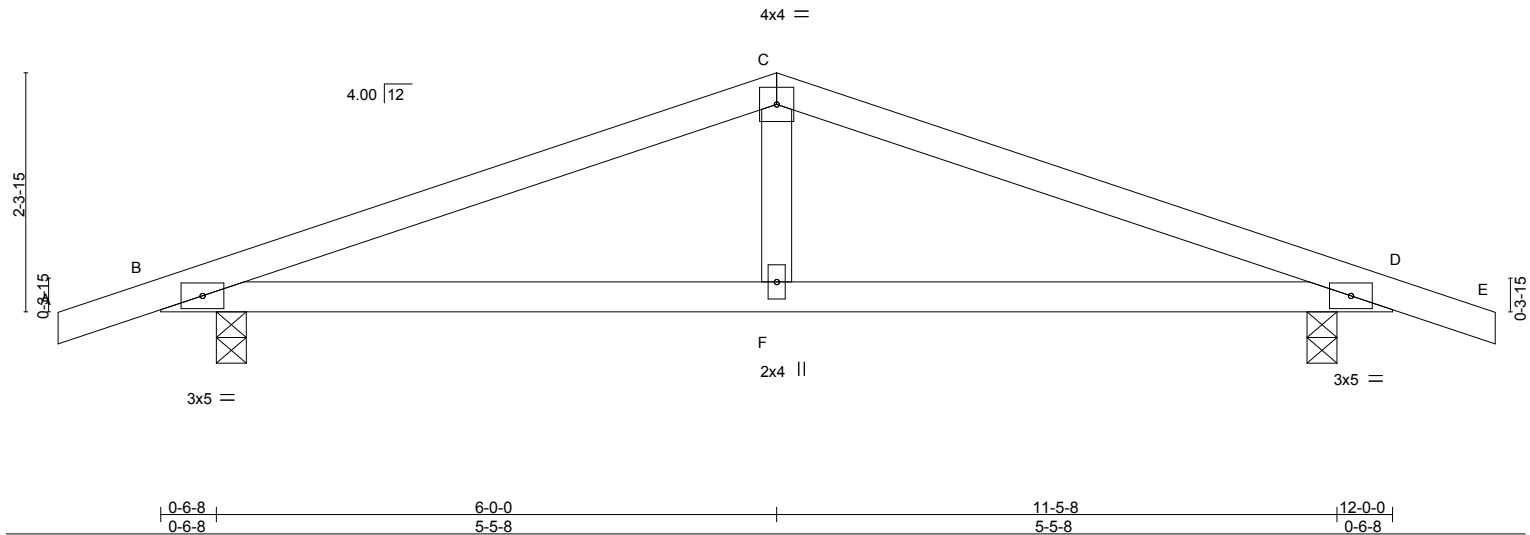
Job	Truss	Truss Type	Qty	Ply	CL 3145 CP	130418486
CL-3145_W_CP	P1	Hip	3	1		

84 Components, Dunn, NC 28334

8.120 s Jun 22 2017 MiTek Industries, Inc. Wed Jul 12 08:18:26 2017 Page 1  
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Scale = 1:22.4



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 0.42	Vert(LL)	-0.02	F-N	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.29	Vert(TL)	-0.05	F-N	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.08	Horz(TL)	0.01	D	n/a		
BCDL 10.0	Code IBC2012/TPI2007		Matrix-MS						
								Weight: 43 lb	FT = 20%

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

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

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

**REACTIONS.** (lb/size) B=540/0-3-8, D=540/0-3-8  
 Max Horz B=30(LC 14)  
 Max Uplift B=-54(LC 6), D=-54(LC 7)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD B-C=-639/92, C-D=-639/92  
 BOT CHORD B-F=-16/550, D-F=-16/550

**NOTES-**

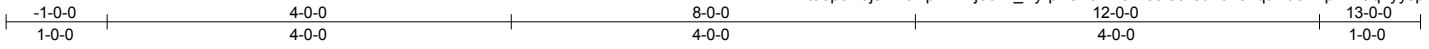
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) B, D.



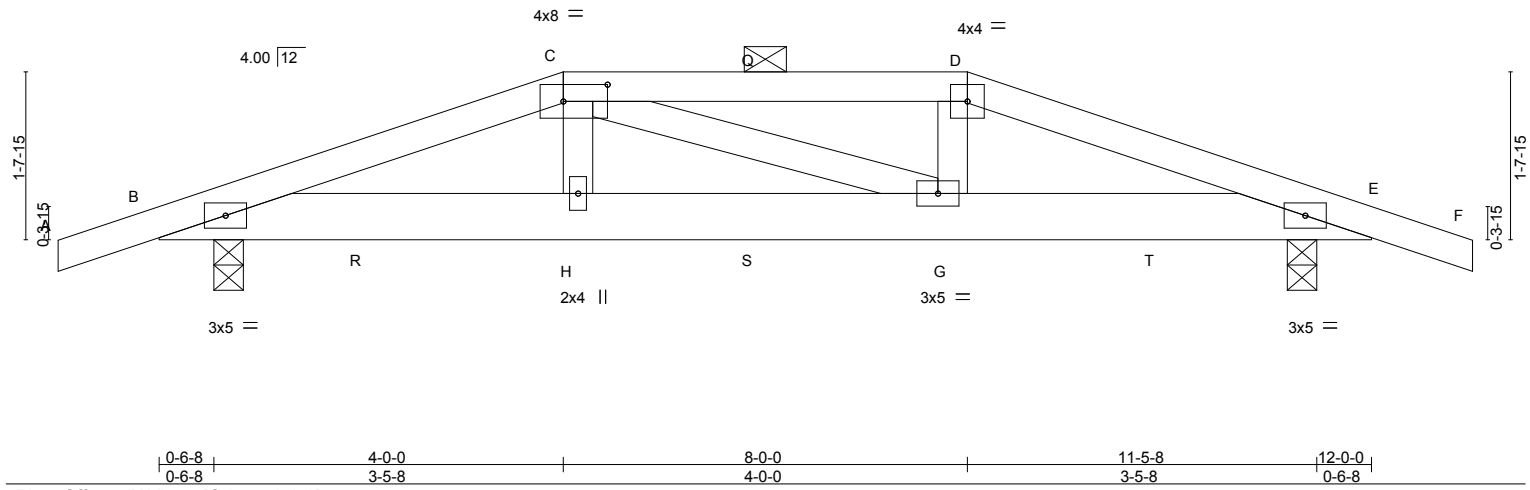
Job	Truss	Truss Type	Qty	Ply	CL 3145 CP	130418487
CL-3145_W_CP	PH	Hip Girder	1	1		

84 Components, Dunn, NC 28334

8.120 s Jun 22 2017 MiTek Industries, Inc. Wed Jul 12 08:18:27 2017 Page 1  
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Scale = 1:22.8



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 0.35	Vert(LL)	-0.02	G-H	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.26	Vert(TL)	-0.05	G-H	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.06	Horz(TL)	0.01	E	n/a		
BCDL 10.0	Code IBC2012/TP12007		Matrix-MS						
								Weight: 58 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 5-10-9 oc purlins, except  
 BOT CHORD 2-0-0 oc purlins (5-7-6 max.); C-D. Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (lb/size) B=683/0-3-8, E=683/0-3-8  
 Max Horz B=-22(LC 9)  
 Max Uplift B=-86(LC 4), E=-86(LC 5)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD B-C=-1004/69, C-D=-924/66, D-E=-992/68  
 BOT CHORD B-H=-42/927, G-H=-36/936, E-G=-37/916

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) B, E.
  - 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) 41 lb down and 37 lb up at 4-0-0, and 30 lb down and 37 lb up at 5-11-4, and 41 lb down and 37 lb up at 8-0-0 on top chord, and 87 lb down and 27 lb up at 2-0-12, 20 lb down at 4-0-12, 20 lb down at 5-11-4, and 20 lb down at 7-11-4, and 87 lb down and 27 lb up at 9-11-4 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  
 Uniform Loads (plf)  
 Vert: A-C=-60, C-D=-60, D-F=-60, B-E=-20  
 Concentrated Loads (lb)  
 Vert: C=-22(F) D=-22(F) H=-15(F) G=-15(F) Q=-22(F) R=-87(F) S=-15(F) T=-87(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 ANSIT/PH1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

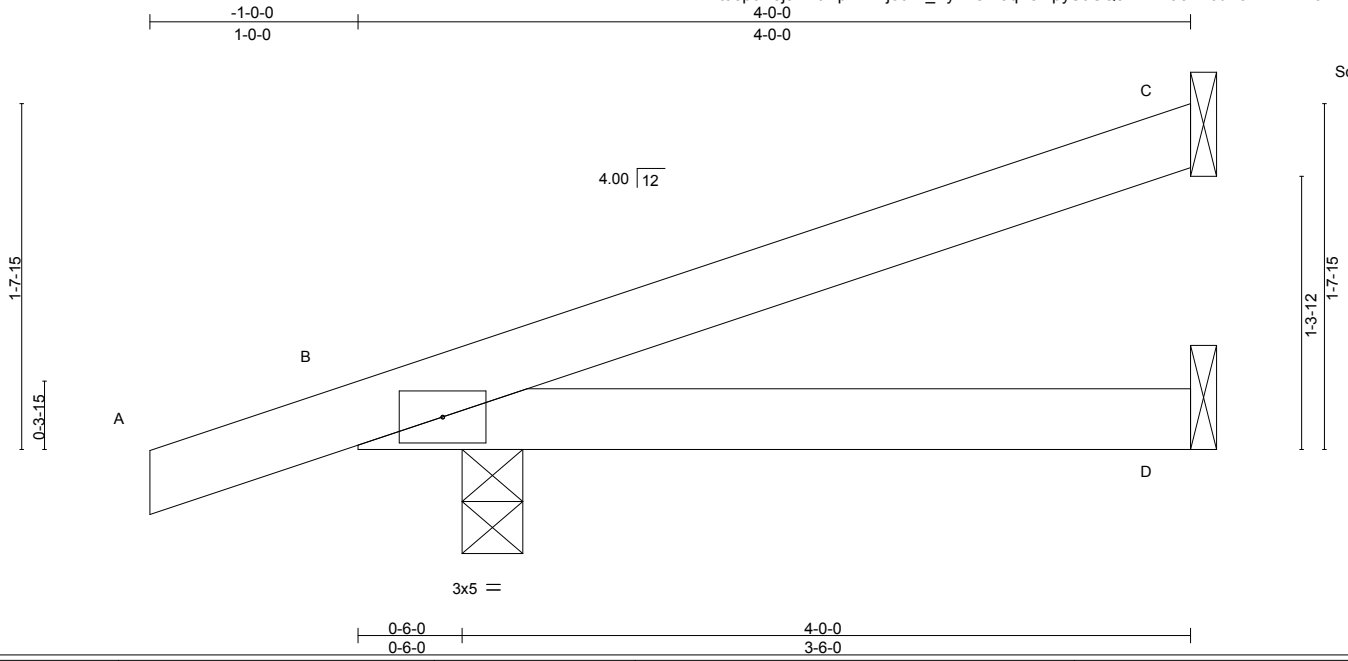


818 Soundside Road  
 Edenton, NC 27932

Job CL-3145_W_CP	Truss PJ1	Truss Type Jack-Open	Qty 3	Ply 1	CL 3145 CP	130418488
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84 Components, Dunn, NC 28334

8.120 s Jun 22 2017 MiTek Industries, Inc. Wed Jul 12 08:18:28 2017 Page 1  
ID:t3epcH3jsYDtIBpFK2vjoozk\_By-HGm9qKsMpyS0CQ92PLZla3X2cbHawM?44PJ7MEyyspP



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	-0.01	D-I >999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(TL)	-0.01	D-I >999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(TL)	0.00	C n/a	n/a		
BCDL 10.0	Code IBC2012/TPI2007		Matrix-MP					Weight: 14 lb	FT = 20%

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

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

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

**REACTIONS.** (lb/size) C=82/Mechanical, B=258/0-3-8, D=35/Mechanical  
Max Horz B=53(LC 6)  
Max Uplift C=-27(LC 10), B=-43(LC 6)  
Max Grav C=82(LC 1), B=258(LC 1), D=60(LC 3)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) C, 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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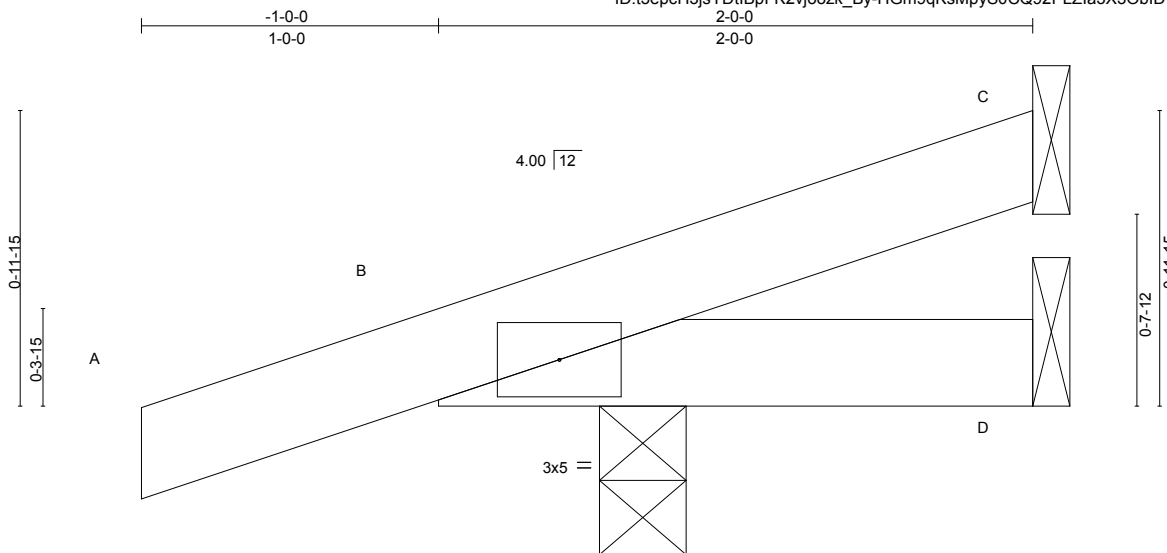
818 Soundside Road  
Edenton, NC 27932



Job CL-3145_W_CP	Truss PJ2	Truss Type Jack-Open	Qty 2	Ply 1	CL 3145 CP	130418489
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84 Components, Dunn, NC 28334

8.120 s Jun 22 2017 MiTek Industries, Inc. Wed Jul 12 08:18:28 2017 Page 1  
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	-0.00	E >999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(TL)	-0.00	E >999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(TL)	-0.00	C n/a	n/a		
BCDL 10.0	Code IBC2012/TPI2007		Matrix-MP					Weight: 8 lb	FT = 20%

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

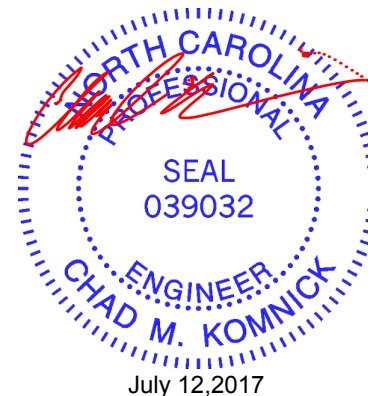
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 2-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (lb/size) C=13/Mechanical, D=-7/Mechanical, B=213/0-3-8  
 Max Horz B=33(LC 6)  
 Max Uplift C=-7(LC 10), D=-7(LC 1), B=-53(LC 6)  
 Max Grav C=13(LC 1), D=16(LC 3), B=213(LC 1)

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

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) C, D, B.



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818 Soundside Road  
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Job	Truss	Truss Type	Qty	Ply	CL 3145 CP	130418490
CL-3145_W_CP	PJG	Half Hip Girder	2	1		

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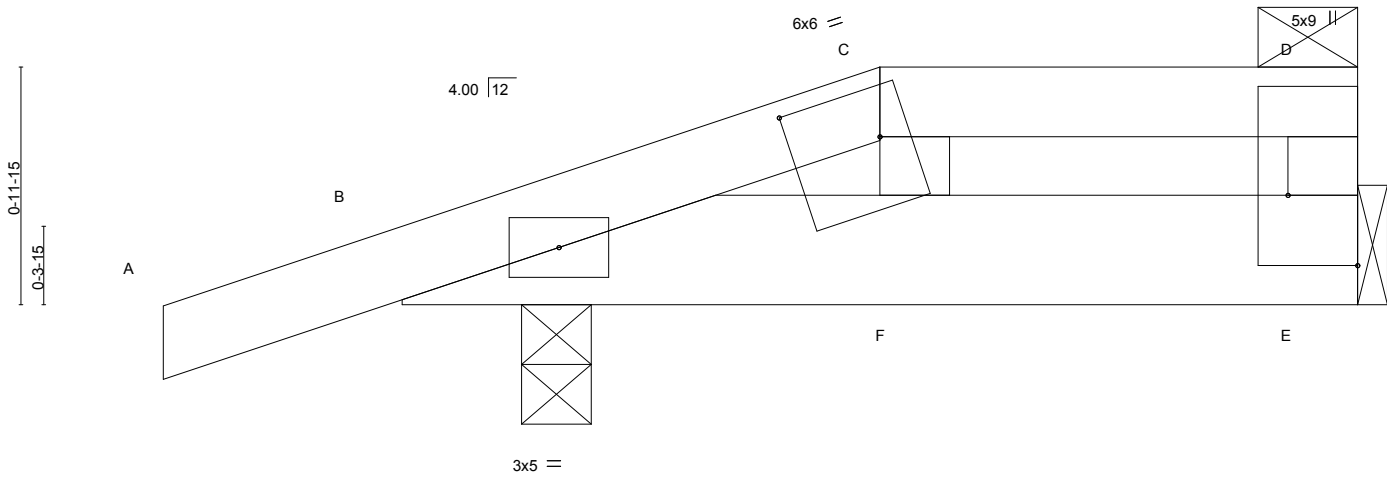


Plate Offsets (X,Y)--	[C:0-4-8,0-2-8], [D:0-0-0,0-1-12], [D:Edge,0-3-8], [E:0-0-0,0-1-12], [F:0-1-11,0-0-9]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15		TC 0.09	Vert(LL) -0.00	F	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15		BC 0.07	Vert(TL) -0.00	F	>999	180		
BCLL 0.0 *	Rep Stress Incr NO		WB 0.01	Horz(TL) 0.00	E	n/a	n/a		
BCDL 10.0	Code IBC2012/TP12007		Matrix-MP					Weight: 18 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 4-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: C-D.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (lb/size) E=102/Mechanical, B=267/0-3-8  
 Max Horz B=27(LC 5)  
 Max Uplift E=-7(LC 5), B=-51(LC 4)  
 Max Grav E=107(LC 20), B=267(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=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 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) E, B.
- 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) 7 lb down and 7 lb up at 2-0-0 on top chord, and 13 lb down and 12 lb up at 2-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: A-C=-60, C-D=-60, B-E=-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 CL-3145_W_CP	Truss T01	Truss Type Common	Qty 5	Ply 1	CL 3145 CP	130418491
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8.120 s Jun 22 2017 MiTek Industries, Inc. Wed Jul 12 08:18:30 2017 Page 1  
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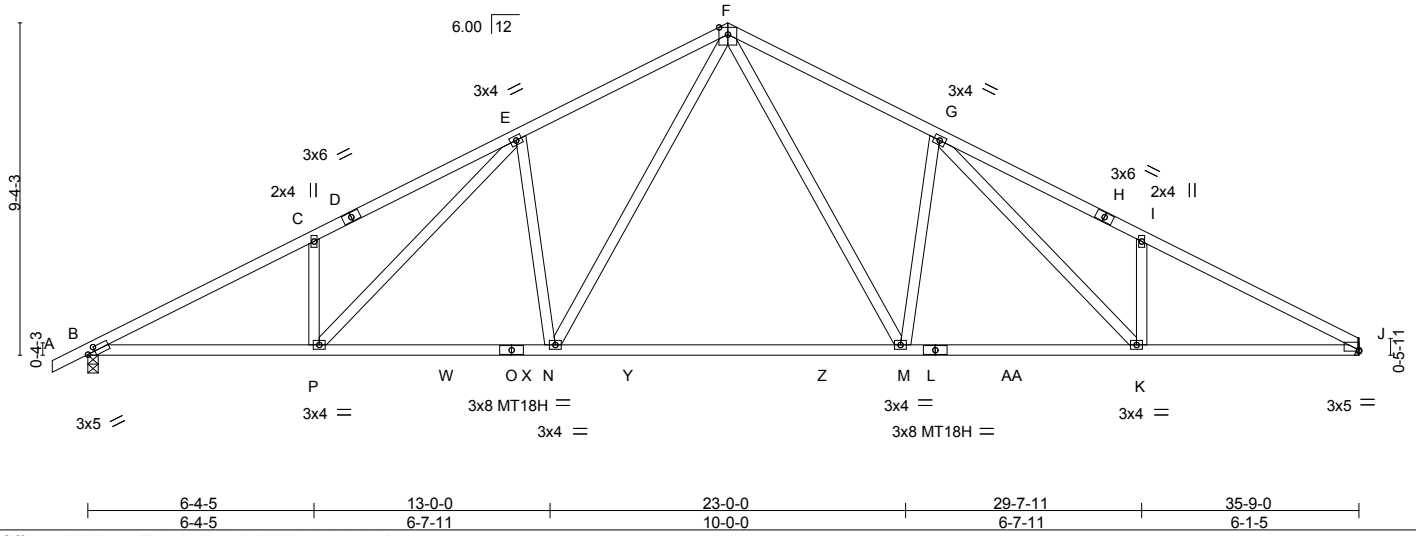


Plate Offsets (X,Y)--	[B:0-2-10,0-1-8], [J:0-0-0,0-0-6]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.48	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.78	Vert(LL) -0.35 M-N >999 240	MT18H	244/190
BCLL 0.0 *	Lumber DOL 1.15	WB 0.43	Vert(TL) -0.79 M-N >540 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(TL) 0.11 J n/a n/a		
	Code IBC2012/TPI2007			Weight: 195 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 3-3-7 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (lb/size) B=1500/0-3-8, J=1420/Mechanical  
 Max Horz B=133(LC 10)  
 Max Uplift B=-54(LC 10), J=-38(LC 11)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD B-C=-2620/320, C-E=-2609/427, E-F=-2167/399, F-G=-2163/400, G-I=-2612/437, I-J=-2623/329  
 BOT CHORD B-P=-218/2269, N-P=-123/1939, M-N=-29/1430, K-M=-124/1936, J-K=-227/2271  
 WEBS F-M=-133/923, G-M=-573/227, G-K=-150/589, I-K=-331/172, F-N=-131/929, E-N=-570/224, E-P=-139/579, C-P=-328/168

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 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) B, J.



Job CL-3145_W_CP	Truss T01A	Truss Type ROOF TRUSS	Qty 6	Ply 1	CL 3145 CP	130418492
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8.120 s Jun 22 2017 MiTek Industries, Inc. Wed Jul 12 08:18:31 2017 Page 1  
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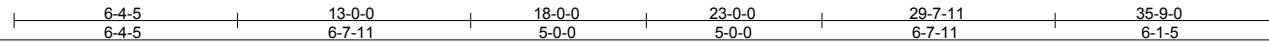
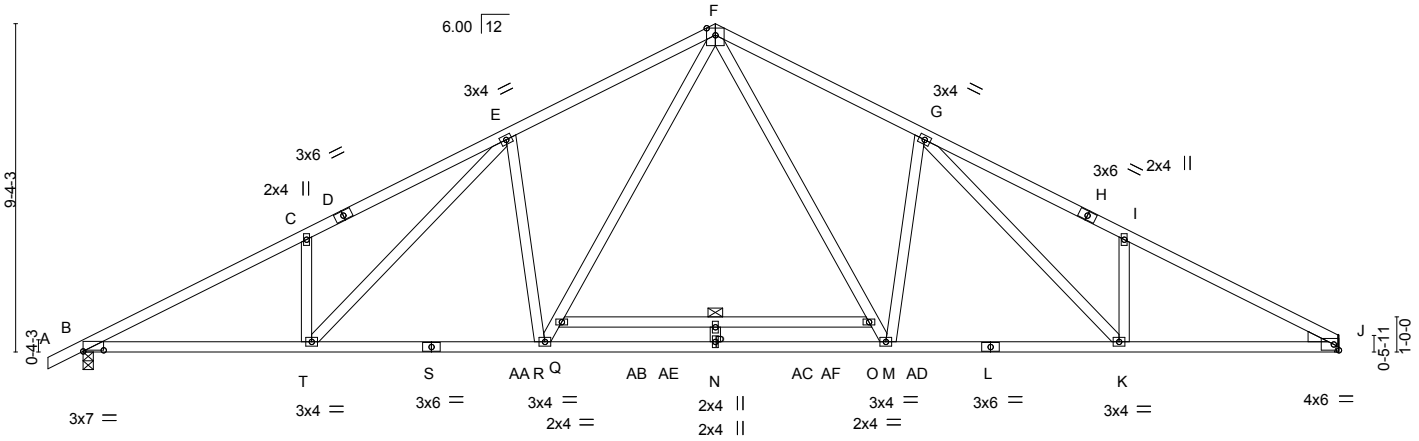


Plate Offsets (X,Y)-- [B:0-7-0,0-0-6]

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.60	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.99	Vert(LL) -0.45 P >955 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.57	Vert(TL) -1.11 P >388 180		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Horz(TL) 0.14 J n/a n/a		
	Code IBC2012/TPI2007			Weight: 209 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2 \*Except\*  
 L-S: 2x4 SP SS  
 WEBS 2x4 SP No.3  
 WEDGE  
 Right: 2x4 SP No.3

**BRACING-**  
 TOP CHORD  
 BOT CHORD  
 Structural wood sheathing directly applied or 2-11-15 oc purlins.  
 Rigid ceiling directly applied or 10-0-0 oc bracing. Except:  
 6-0-0 oc bracing: O-Q

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

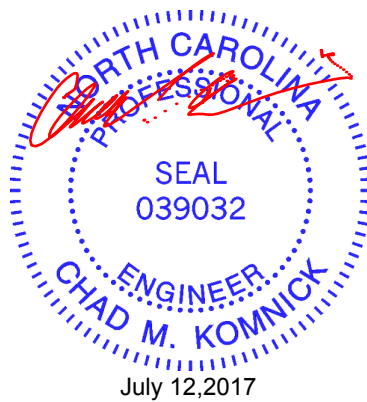
**REACTIONS.** (lb/size) B=1628/0-3-8, J=1548/Mechanical  
 Max Horz B=133(LC 10)  
 Max Uplift B=-3(LC 10)  
 Max Grav B=1645(LC 2), J=1576(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD B-C=-2993/215, C-E=-2981/322, E-F=-2594/285, F-G=-2589/286, G-I=-2963/334, I-J=-2977/225  
 BOT CHORD B-T=-125/2613, R-T=-22/2320, N-R=0/1688, M-N=0/1688, K-M=-24/2314, J-K=-135/2597  
 WEBS F-O=-75/1135, M-O=-121/1039, G-M=-559/231, G-K=-162/548, I-K=-327/174, Q-R=-119/1048, F-Q=-73/1144, E-R=-557/227, E-T=-150/541, C-T=-325/169

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) B.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 75 lb down and 9 lb up at 18-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.
- 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: A-F=-60, F-J=-60, U-X=-20, O-Q=-20



Continued on page 2

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

Job	Truss	Truss Type	Qty	Ply	CL 3145 CP	I30418492
CL-3145_W_CP	T01A	ROOF TRUSS	6	1		
						Job Reference (optional)

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8.120 s Jun 22 2017 MiTek Industries, Inc. Wed Jul 12 08:18:31 2017 Page 2  
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**LOAD CASE(S)** Standard

Concentrated Loads (lb)  
 Vert: N=-75(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 CL-3145_W_CP	Truss T01GE	Truss Type Common Supported Gable	Qty 1	Ply 1	CL 3145 CP	130418493
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84 Components, Dunn, NC 28334

8.120 s Jun 22 2017 MiTek Industries, Inc. Wed Jul 12 08:18:31 2017 Page 1  
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4x4 =

Scale = 1:25.9

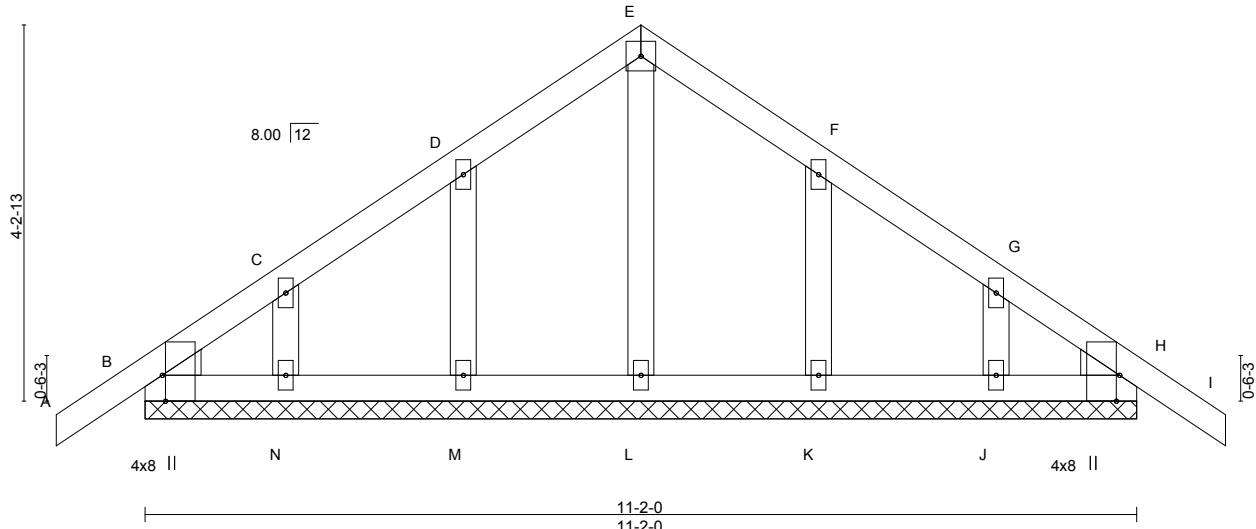


Plate Offsets (X,Y)--	[B:0-0-12,0-1-3], [B:0-1-9,0-5-13], [B:0-3-8,Edge], [H:0-0-12,0-1-3], [H:0-1-9,0-5-13], [H:0-3-8,Edge]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	-0.00	l	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(TL)	-0.00	l	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(TL)	0.00	H	n/a		
BCDL 10.0	Code IBC2012/TPI2007		Matrix-S						
								Weight: 57 lb	FT = 20%

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

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

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

**REACTIONS.** All bearings 11-2-0.  
 (lb) - Max Horz B=-85(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) B, M, N, K, J  
 Max Grav All reactions 250 lb or less at joint(s) B, H, L, M, N, K, J

**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=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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 requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) B, M, N, K, J.
  - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) B, H.



Job	Truss	Truss Type	Qty	Ply	CL 3145 CP	130418494
CL-3145_W_CP	T02A	Common	3	1		

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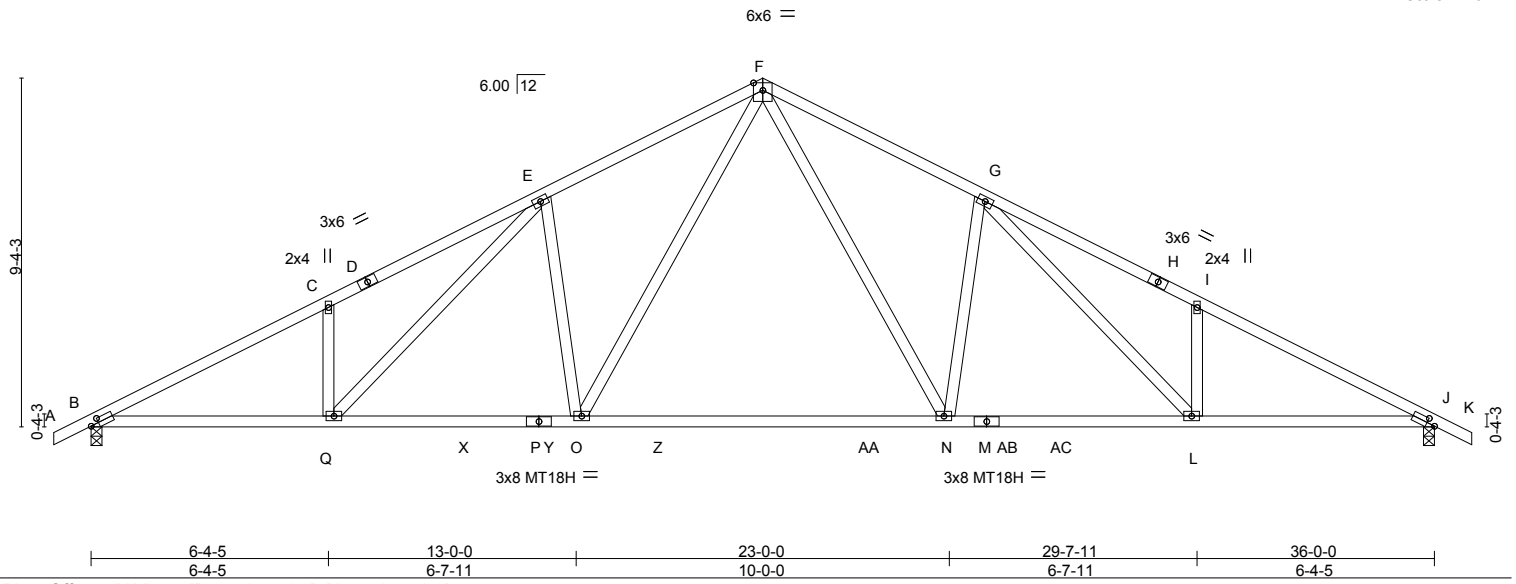
8.120 s Jun 22 2017 MiTek Industries, Inc. Wed Jul 12 08:18:32 2017 Page 1

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Job Reference (optional)

1-0-0	6-4-5	12-2-3	18-0-0	23-9-13	29-7-11	36-0-0	37-0-0
1-0-0	6-4-5	5-9-13	5-9-13	5-9-13	5-9-13	6-4-5	1-0-0

Scale = 1:61.7



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.48	Vert(LL) -0.35 N-O >999 240	MT20 244/190	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.78	Vert(TL) -0.80 N-O >541 180	MT18H 244/190	244/190
BCLL 0.0 *	Rep Stress Incr YES	WB 0.43	Horz(TL) 0.12 J n/a n/a		
BCDL 10.0	Code IBC2012/TP12007	Matrix-MS			
				Weight: 197 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 3-3-7 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (lb/size) B=1500/0-3-8, J=1500/0-3-8  
 Max Horz B=124(LC 10)  
 Max Uplift B=-54(LC 10), J=-54(LC 11)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD B-C=-2619/318, C-E=-2609/425, E-F=-2171/397, F-G=-2171/397, G-I=-2609/425, I-J=-2619/318  
 BOT CHORD B-Q=-186/2268, O-Q=90/1944, N-O=0/1434, L-N=-90/1944, J-L=-186/2268  
 WEBS F-N=-131/928, G-N=-570/224, G-L=-139/578, I-L=-328/168, F-O=-131/928, E-O=-570/224, E-Q=-139/578, C-Q=328/168

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are MT20 plates unless otherwise indicated.
- 4) All plates are 3x5 MT20 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, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) B, J.



Job CL-3145_W_CP	Truss T02GE	Truss Type Common Supported Gable	Qty 1	Ply 1	CL 3145 CP	130418495
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8.120 s Jun 22 2017 MiTek Industries, Inc. Wed Jul 12 08:18:33 2017 Page 1  
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4x4 =

Scale = 1:25.9

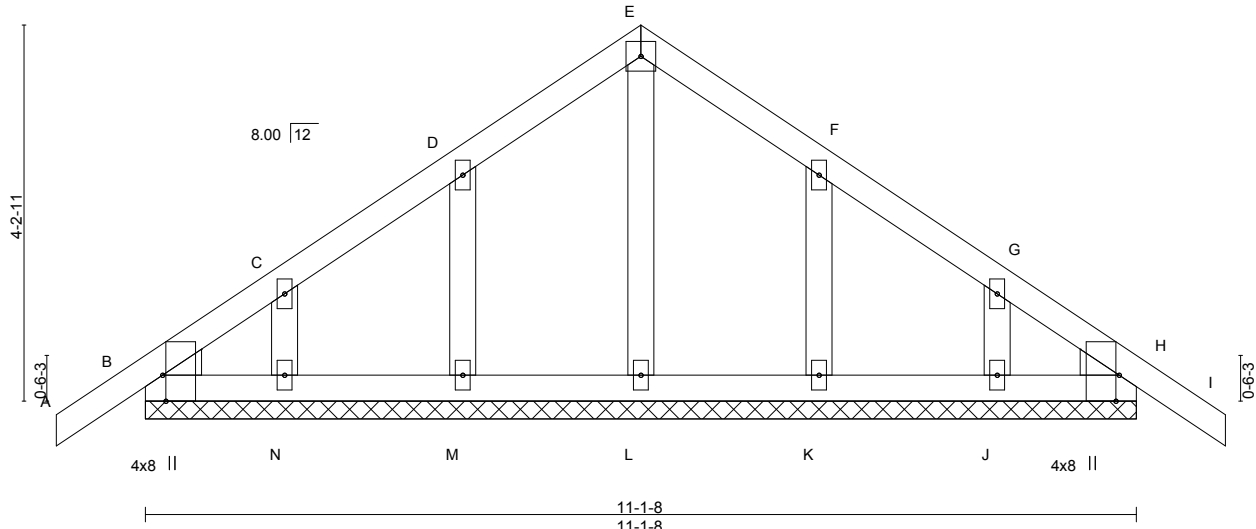


Plate Offsets (X,Y)--	[B:0-0-12,0-1-3], [B:0-1-9,0-5-13], [B:0-3-8,Edge], [H:0-0-12,0-1-3], [H:0-1-9,0-5-13], [H:0-3-8,Edge]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.07	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.03	Vert(LL) -0.00 I n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.03	Vert(TL) -0.00 I n/r 90		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(TL) 0.00 H n/a n/a		
	Code IBC2012/TPI2007			Weight: 57 lb	FT = 20%

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

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

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

**REACTIONS.** All bearings 11-1-8.  
(lb) - Max Horz B=-85(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) B, M, N, K, J  
Max Grav All reactions 250 lb or less at joint(s) B, H, L, M, N, K, J

**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=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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 requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) B, M, N, K, J.
  - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) B, H.





Job CL-3145_W_CP	Truss T03	Truss Type GABLE	Qty 1	Ply 1	CL 3145 CP	130418496
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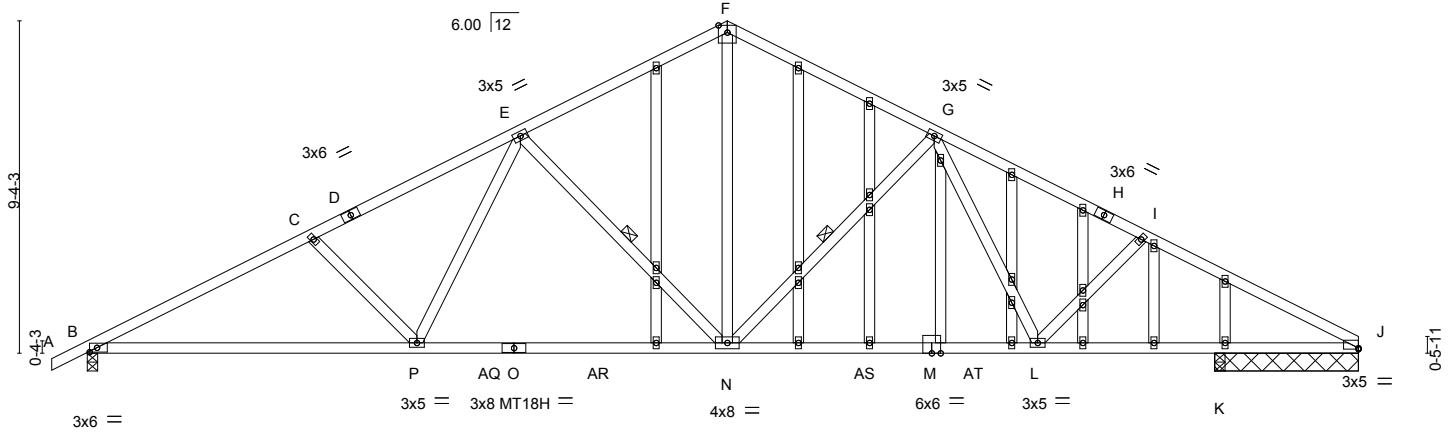
84 Components, Dunn, NC 28334

8.120 s Jun 22 2017 MiTek Industries, Inc. Wed Jul 12 08:18:35 2017 Page 1  
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6x6 =

Scale = 1:64.8



	9-3-4	18-0-0	26-8-12	31-8-8	35-9-0
	9-3-4	8-8-12	8-8-12	4-11-12	4-0-8
Plate Offsets (X,Y)--	[B:0-2-8,0-1-8], [J:0-0-0,0-0-6], [M:0-0-0,0-1-12], [Z:0-1-12,0-0-0]				

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.64	Vert(LL)	-0.24	L-N	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.98	Vert(TL)	-0.61	L-N	>627	MT18H	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.46	Horz(TL)	0.15	J	n/a		
BCDL 10.0	Code IBC2012/TPI2007		Matrix-MS						
								Weight: 244 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 3-0-9 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.  
 WEBS 1 Row at midpt G-N, E-N

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

**REACTIONS.** All bearings 4-0-8 except (it=length) B=0-3-8.  
 (lb) - Max Horz B=133(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) B, J  
 Max Grav All reactions 250 lb or less at joint(s) K, K except B=1487(LC 1), J=1302(LC 1), J=1302(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD B-C=-2572/360, C-E=-2327/346, E-F=-1642/319, F-G=-1643/319, G-I=-2249/358, I-J=-2486/373  
 BOT CHORD B-P=-255/2230, N-P=-144/1828, L-N=-148/1796, K-L=-268/2144, J-K=-268/2144  
 WEBS F-N=-160/1100, G-N=-601/187, G-L=-20/395, I-L=-293/160, E-N=-643/180, E-P=-8/466, C-P=-316/157

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) All plates are MT20 plates unless otherwise indicated.
  - 5) All plates are 2x4 MT20 unless otherwise indicated.
  - 6) Gable studs spaced at 2-0-0 oc.
  - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) B, J, J.



Job CL-3145_W_CP	Truss T03GE	Truss Type Common Supported Gable	Qty 1	Ply 1	CL 3145 CP	130418497
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8.120 s Jun 22 2017 MiTek Industries, Inc. Wed Jul 12 08:18:36 2017 Page 1  
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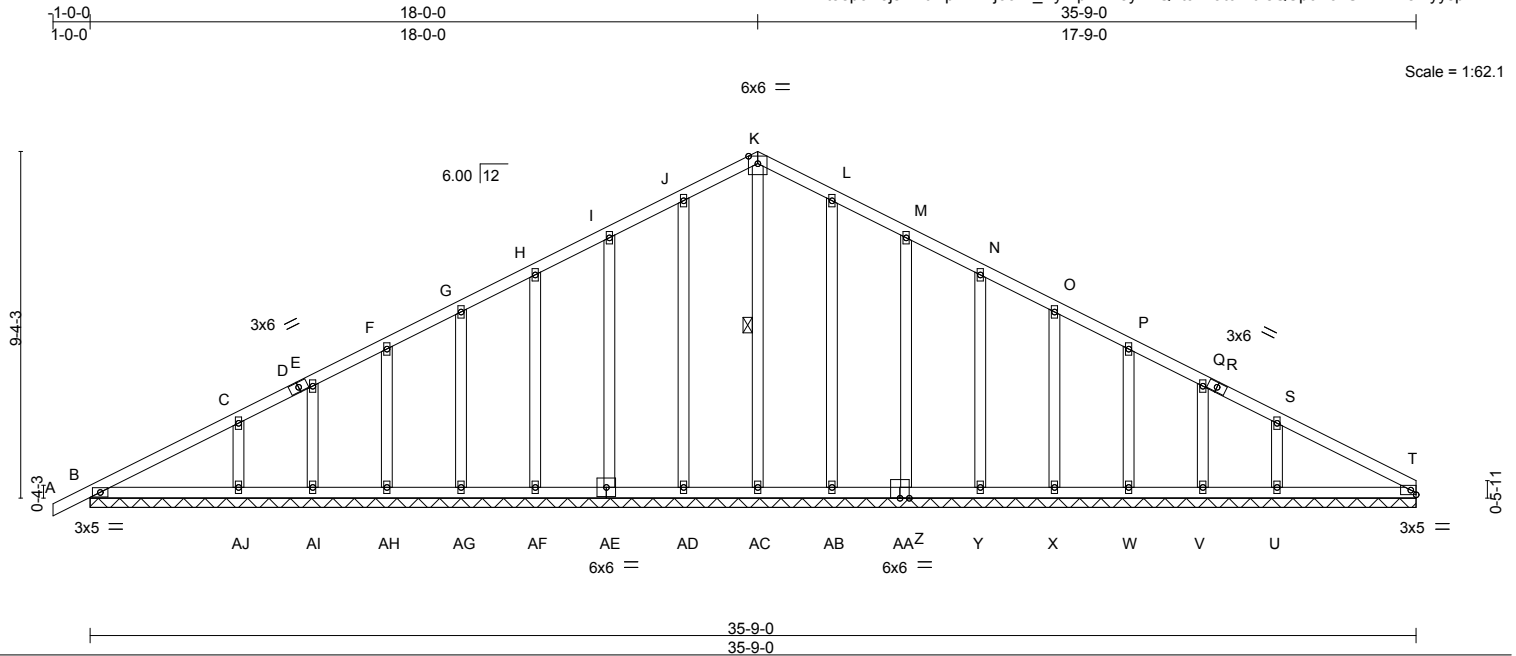


Plate Offsets (X,Y)--	[Z:0-1-12,0-0-0], [AA:0-0-0,0-1-12]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.16	in (loc) l/def L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.12	Vert(LL) -0.00 A n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.16	Vert(TL) 0.01 A n/r 90		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(TL) 0.01 T n/a n/a		
	Code IBC2012/TPI2007			Weight: 228 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>	
TOP CHORD 2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	WEBS	1 Row at midpt K-AC

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

- REACTIONS.** All bearings 35-9-0.  
 (lb) - Max Horz B=130(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) B, AD, AE, AF, AG, AH, AI, AJ, AB, Z, Y, X, W, V, U  
 Max Grav All reactions 250 lb or less at joint(s) B, AC, AD, AE, AF, AG, AH, AI, AB, Z, Y, X, W, V, T except AJ=310(LC 21), U=305(LC 22)

**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=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) B, AD, AE, AF, AG, AH, AI, AJ, AB, Z, Y, X, W, V, U.

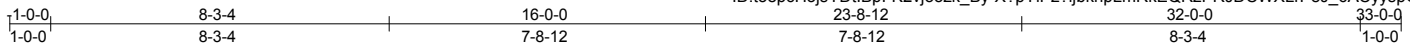


Job	Truss	Truss Type	Qty	Ply	CL 3145 CP	130418498
CL-3145_W_CP	T04	Common	2	1		

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8.120 s Jun 22 2017 MiTek Industries, Inc. Wed Jul 12 08:18:37 2017 Page 1  
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Job Reference (optional)



Scale = 1:56.3

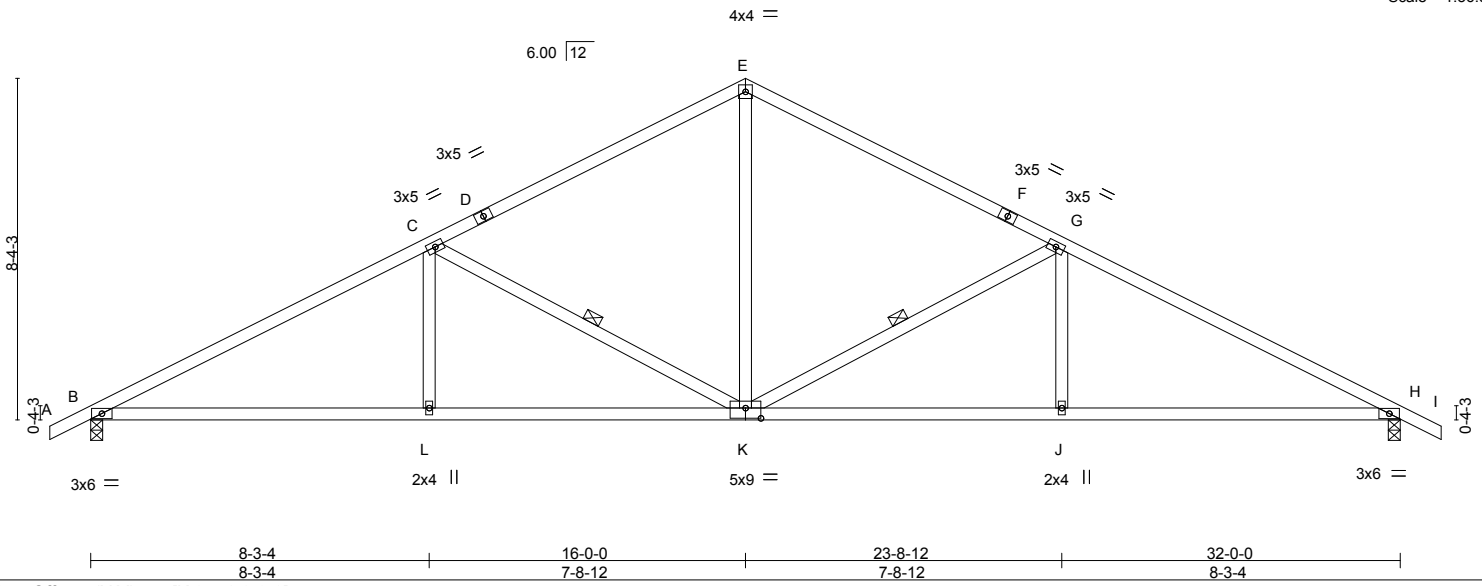


Plate Offsets (X,Y)--	[K:0-4-8,0-3-0]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.78	Vert(LL) -0.11 J-K >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.69	Vert(TL) -0.34 J-K >999 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.34	Horz(TL) 0.12 H n/a n/a		
BCDL 10.0	Code IBC2012/TP12007	Matrix-MS			
				Weight: 153 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 2-2-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt G-K, C-K

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

**REACTIONS.** (lb/size) B=1340/0-3-8, H=1340/0-3-8  
 Max Horz B=-111(LC 11)  
 Max Uplift B=-51(LC 10), H=-51(LC 11)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD B-C=-2195/276, C-E=-1513/261, E-G=-1513/261, G-H=-2195/276  
 BOT CHORD B-L=-130/1874, K-L=-130/1874, J-K=-130/1874, H-J=-130/1874  
 WEBS E-K=-68/831, G-K=-725/169, G-J=0/308, C-K=-725/169, C-L=0/308

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) B, H.



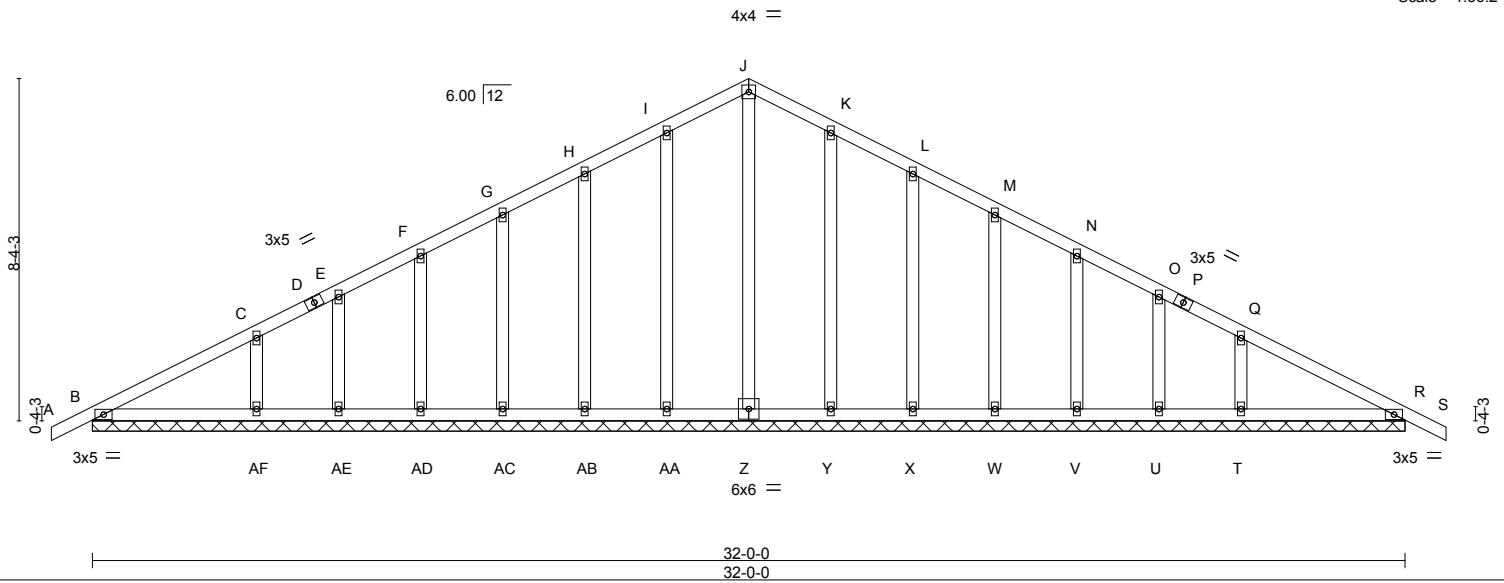
Job CL-3145_W_CP	Truss T04GE	Truss Type Common Supported Gable	Qty 1	Ply 1	CL 3145 CP	130418499
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84 Components, Dunn, NC 28334

8.120 s Jun 22 2017 MiTek Industries, Inc. Wed Jul 12 08:18:38 2017 Page 1  
ID:t3epcH3jsYDtIBpFK2vjoozk\_By-?CNxwl\_dT1jbOyww?RlfzAylidhiGryNzkfffyyspF



Scale = 1:56.2



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.16	Vert(LL)	0.00	S	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(TL)	0.01	S	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.16	Horz(TL)	0.01	R	n/a		
BCDL 10.0	Code IBC2012/TPI2007		Matrix-S						
								Weight: 193 lb	FT = 20%

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

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

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

**REACTIONS.** All bearings 32-0-0.  
(lb) - Max Horz B=-111(LC 11)  
Max Uplift All uplift 100 lb or less at joint(s) B, AA, AB, AC, AD, AE, AF, Y, X, W, V, U, T  
Max Grav All reactions 250 lb or less at joint(s) B, Z, AA, AB, AC, AD, AE, Y, X, W, V, U, R except AF=310(LC 21), T=310(LC 22)

**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=115mph (3-second gust) Vasd=91mph; TCDDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) B, AA, AB, AC, AD, AE, AF, Y, X, W, V, U, T.



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

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

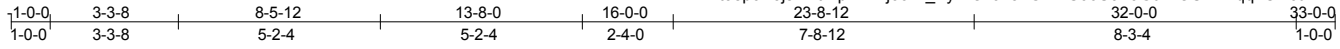


818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CL 3145 CP	130418500
CL-3145_W_CP	T05	Common	7	1		

84 Components, Dunn, NC 28334

8.120 s Jun 22 2017 MiTek Industries, Inc. Wed Jul 12 08:18:39 2017 Page 1  
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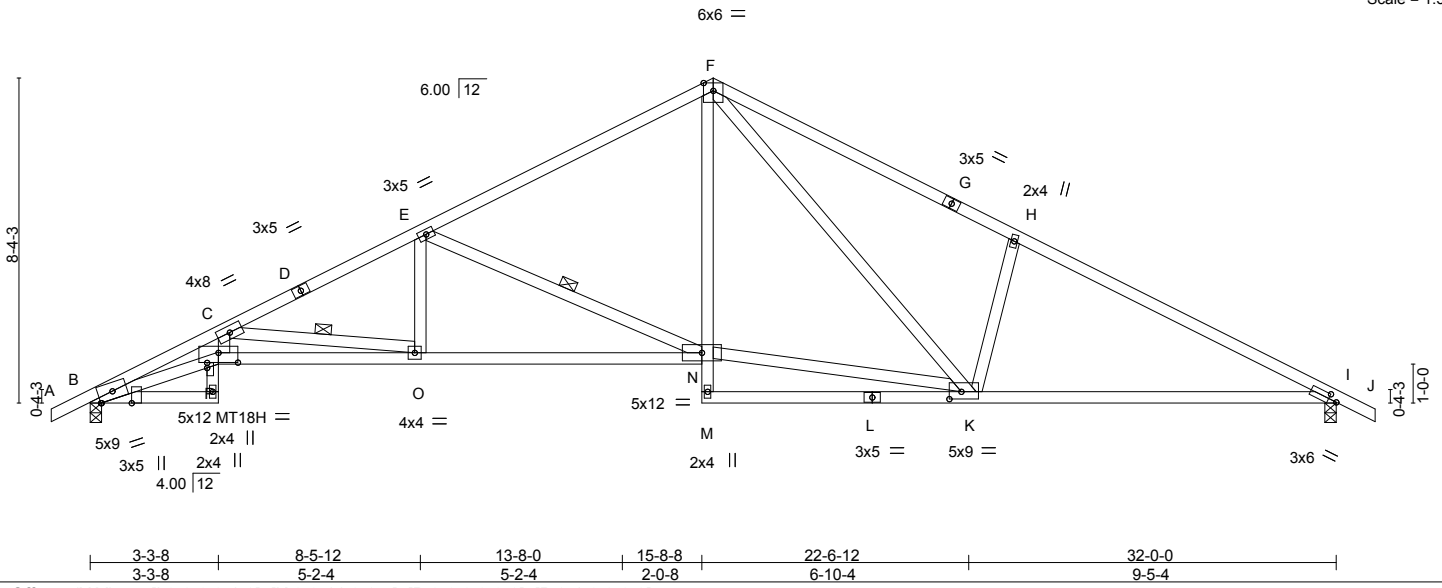


Plate Offsets (X,Y)--	[I:0-2-9,0-1-8], [K:0-3-11,0-2-4], [P:0-6-0,0-3-0], [P:0-1-9,0-0-0]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.78	Vert(LL)	-0.26	O-P	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.96	Vert(TL)	-0.67	N-O	>574	MT18H	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.57	Horz(TL)	0.35	I	n/a		
BCDL 10.0	Code IBC2012/TPI2007		Matrix-MS						
								Weight: 177 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except* F-G: 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
BOT CHORD 2x4 SP No.2 *Except* C-P,F-M: 2x4 SP No.3, N-P: 2x4 SP No.1, B-P: 2x4 SP SS	2-2-0 oc bracing: O-P.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt C-O, E-N
	MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) B=1328/0-3-8, I=1352/0-3-8  
 Max Horz B=111(LC 10)  
 Max Uplift B=-49(LC 10), I=-49(LC 11)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD B-C=-5102/525, C-E=-2798/334, E-F=-1728/269, F-H=-2068/377, H-I=-2186/292  
 BOT CHORD C-P=-76/1318, O-P=-421/4678, N-O=-171/2489, F-N=-5/788, I-K=-144/1866,  
 B-P=-416/4671  
 WEBS C-O=-2213/253, E-O=0/559, E-N=-1139/199, K-N=0/1382, F-K=-152/586, H-K=-458/222

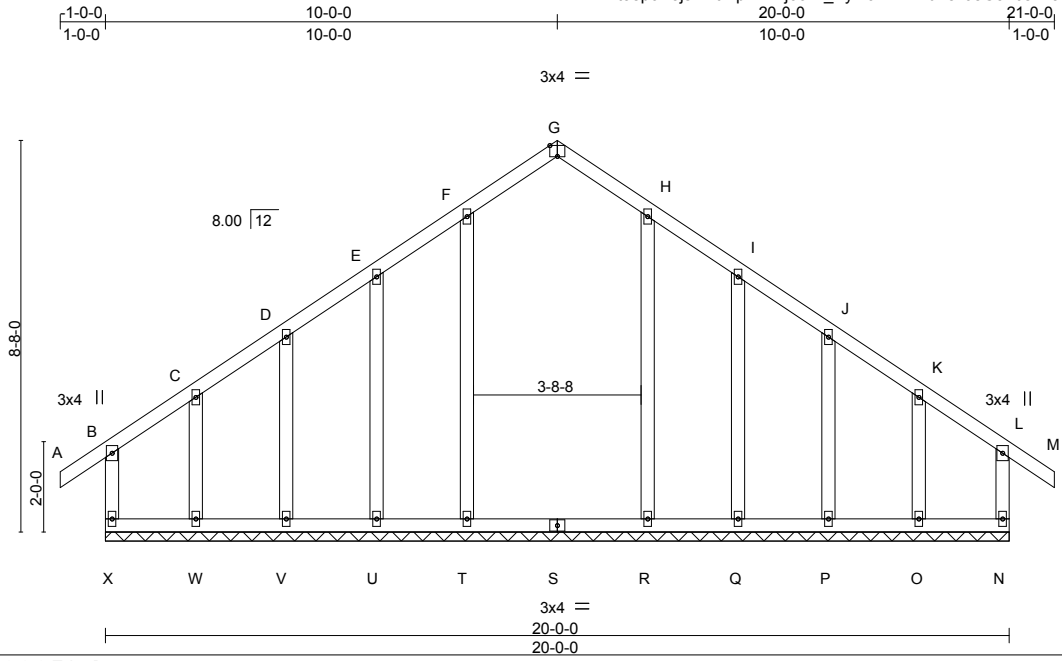
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) All plates are MT20 plates unless otherwise indicated.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Bearing at joint(s) B considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) B, I.



Job CL-3145_W_CP	Truss T05GE	Truss Type Common Supported Gable	Qty 1	Ply 1	CL 3145 CP	130418501
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84 Components, Dunn, NC 28334

8.120 s Jun 22 2017 MiTek Industries, Inc. Wed Jul 12 08:18:40 2017 Page 1  
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Scale = 1:51.0

Plate Offsets (X,Y)--	[G: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 0.25	Vert(LL) -0.00 M n/r 120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.15	Vert(TL) 0.00 L n/r 90		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.18	Horz(TL) 0.00 N n/a n/a		
BCDL 10.0	Code IBC2012/TPI2007	Matrix-R		Weight: 131 lb	FT = 20%

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

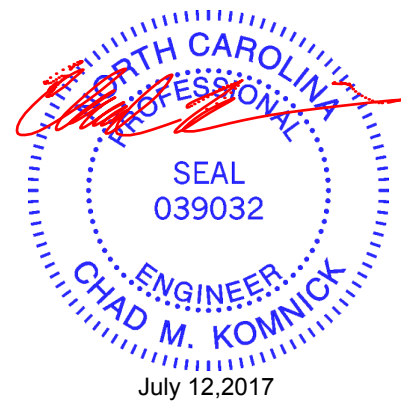
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** All bearings 20-0-0.  
 (lb) - Max Horz X=-192(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) X, N, U, V, Q, P except W=-146(LC 10), O=-144(LC 11)  
 Max Grav All reactions 250 lb or less at joint(s) X, N, U, V, W, Q, P, O except T=333(LC 20), R=333(LC 19)

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

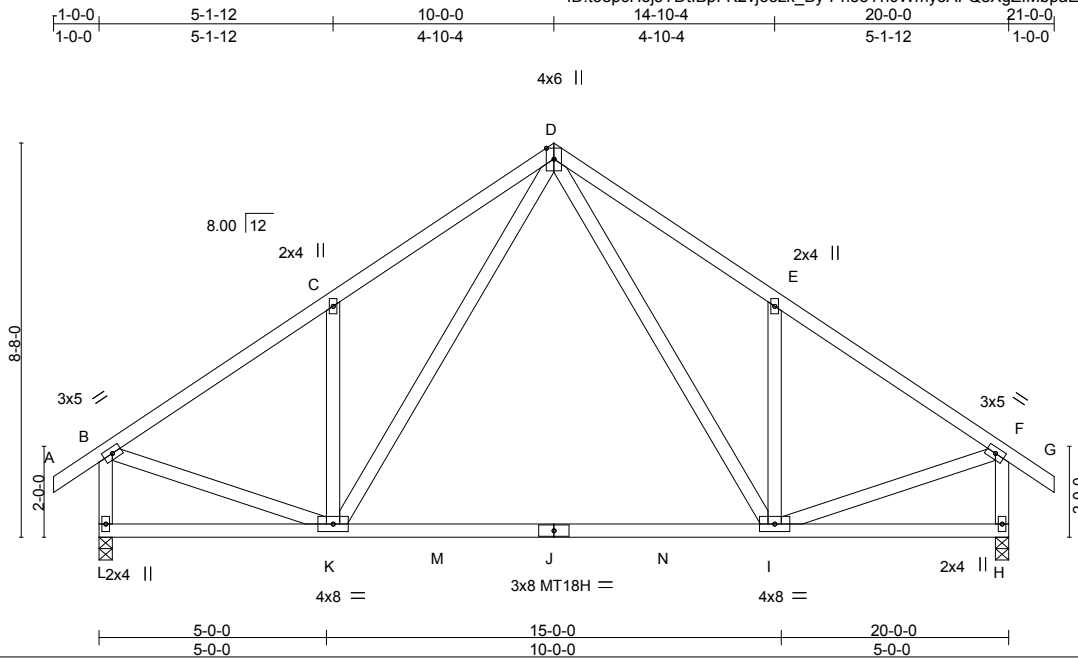
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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 requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) X, N, U, V, Q, P except (jt=lb) W=146, O=144.



Job CL-3145_W_CP	Truss T06	Truss Type Common	Qty 3	Ply 1	CL 3145 CP	130418502
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84 Components, Dunn, NC 28334

8.120 s Jun 22 2017 MiTek Industries, Inc. Wed Jul 12 08:18:41 2017 Page 1  
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Scale = 1:50.7

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.29	Vert(LL)	-0.33	I-K >724	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.88	Vert(TL)	-0.62	I-K >381	180	MT18H	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.27	Horz(TL)	0.01	H n/a	n/a		
BCDL 10.0	Code IBC2012/TPI2007		Matrix-MS						
								Weight: 131 lb	FT = 20%

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

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

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

**REACTIONS.** (lb/size) L=857/0-3-8, H=857/0-3-8  
 Max Horz L=192(LC 9)  
 Max Uplift L=-25(LC 10), H=-25(LC 11)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD B-C=-852/87, C-D=-896/204, D-E=-896/204, E-F=-852/87, B-L=-850/95, F-H=-850/95  
 BOT CHORD I-K=0/526  
 WEBS D-I=-107/454, E-I=-330/174, D-K=-107/454, C-K=-330/174, B-K=0/694, F-I=0/696

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) All plates are MT20 plates unless otherwise indicated.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) L, H.



**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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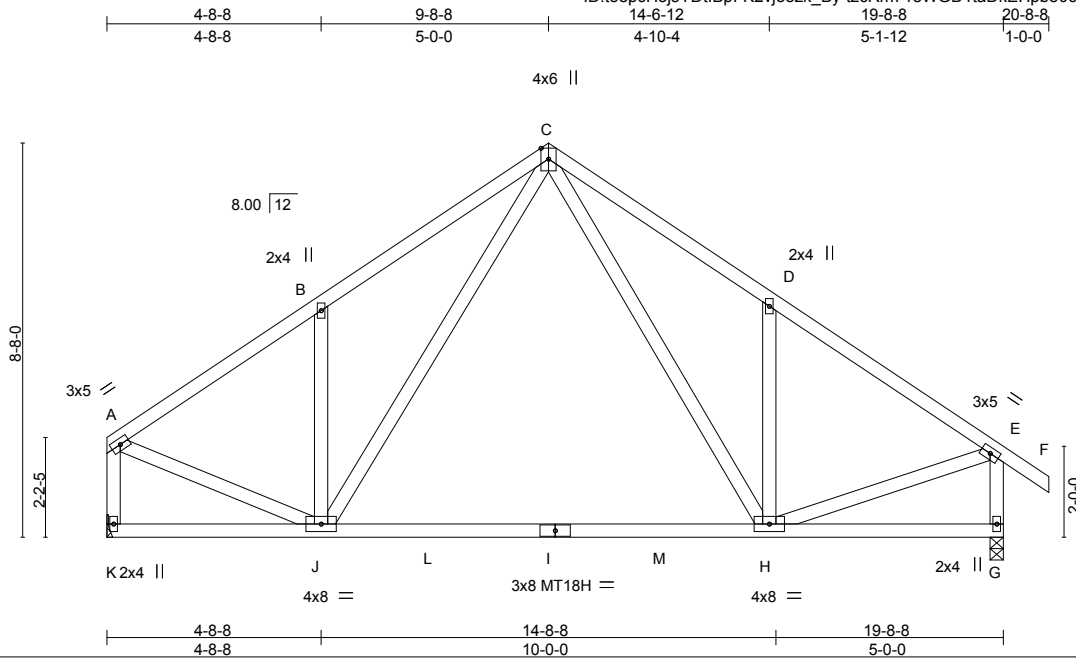


818 Soundside Road  
 Edenton, NC 27932

Job CL-3145_W_CP	Truss T07	Truss Type Common	Qty 3	Ply 1	CL 3145 CP	130418503
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84 Components, Dunn, NC 28334

8.120 s Jun 22 2017 MiTek Industries, Inc. Wed Jul 12 08:18:42 2017 Page 1  
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.30	Vert(LL)	-0.34	H-J >686	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.90	Vert(TL)	-0.65	H-J >359	180	MT18H	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.28	Horz(TL)	0.01	G n/a	n/a		
BCDL 10.0	Code IBC2012/TPI2007		Matrix-MS						
								Weight: 128 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.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	

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

**REACTIONS.** (lb/size) K=775/Mechanical, G=847/0-3-8  
 Max Horz K=-189(LC 6)  
 Max Uplift K=-9(LC 10), G=-24(LC 11)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD A-B=-810/77, B-C=-869/198, C-D=-887/201, D-E=-843/84, A-K=-789/54, E-G=-843/92  
 BOT CHORD H-J=0/515  
 WEBS B-J=-335/176, C-J=-101/420, C-H=-106/461, D-H=-329/174, A-J=0/691, E-H=0/689

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) All plates are MT20 plates unless otherwise indicated.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Refer to girder(s) for truss to truss connections.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) K, G.

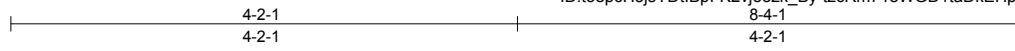




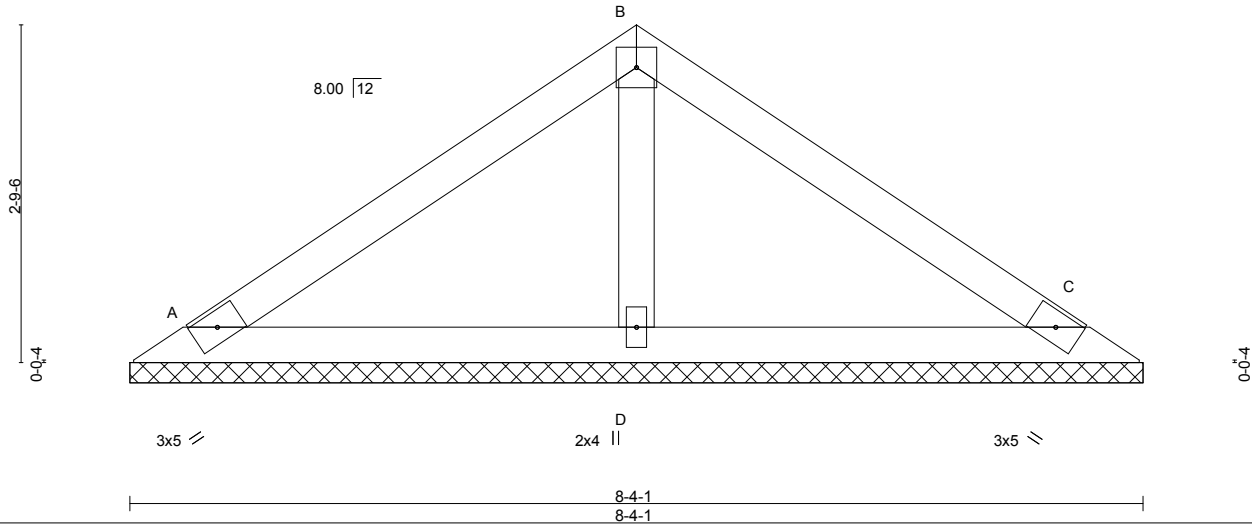
Job CL-3145_W_CP	Truss V01	Truss Type Valley	Qty 1	Ply 1	CL 3145 CP	130418504
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84 Components, Dunn, NC 28334

8.120 s Jun 22 2017 MiTek Industries, Inc. Wed Jul 12 08:18:42 2017 Page 1  
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Scale = 1:19.0



<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 0.26	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(TL)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(TL)	0.00	C	n/a		
BCDL 10.0	Code IBC2012/TPI2007		Matrix-P					Weight: 29 lb	FT = 20%

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

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

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

**REACTIONS.** (lb/size) A=159/8-4-1, C=159/8-4-1, D=272/8-4-1  
Max Horz A=-48(LC 6)  
Max Uplift A=-18(LC 10), C=-25(LC 11)

**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=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) A, C.



**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 CL-3145_W_CP	Truss V02	Truss Type Valley	Qty 1	Ply 1	CL 3145 CP	130418505
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84 Components, Dunn, NC 28334

8.120 s Jun 22 2017 MiTek Industries, Inc. Wed Jul 12 08:18:43 2017 Page 1  
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3x5 =

Scale = 1:13.5

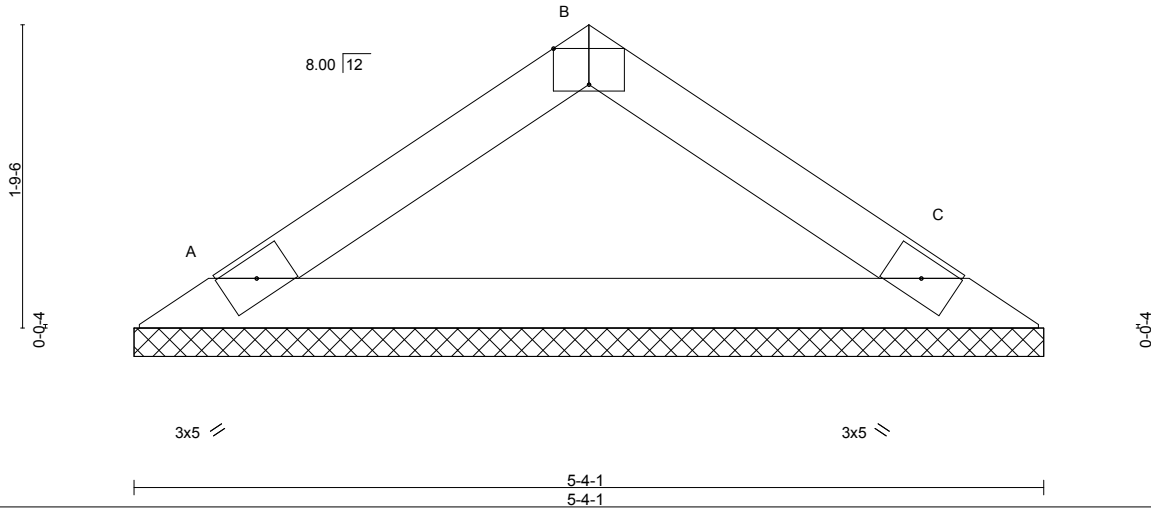


Plate Offsets (X,Y)--	[B:0-2-8,Edge]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15		TC 0.08	Vert(LL) n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15		BC 0.24	Vert(TL) n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES		WB 0.00	Horz(TL) 0.00	C	n/a	n/a		
BCDL 10.0	Code IBC2012/TPI2007		Matrix-P					Weight: 16 lb	FT = 20%

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

**BRACING-**  
TOP CHORD  
BOT CHORD

Structural wood sheathing directly applied or 5-4-1 oc purlins.  
Rigid ceiling directly applied or 10-0-0 oc bracing.

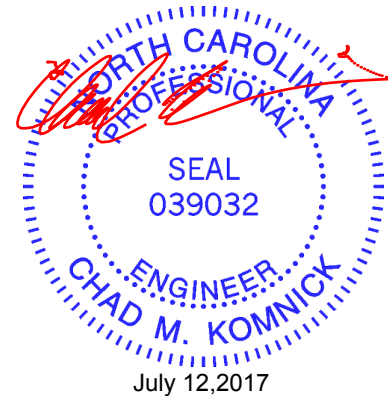
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) A=175/5-4-1, C=175/5-4-1  
Max Horz A=28(LC 9)  
Max Uplift A=-3(LC 10), C=-3(LC 11)

**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=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) A, C.



**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.

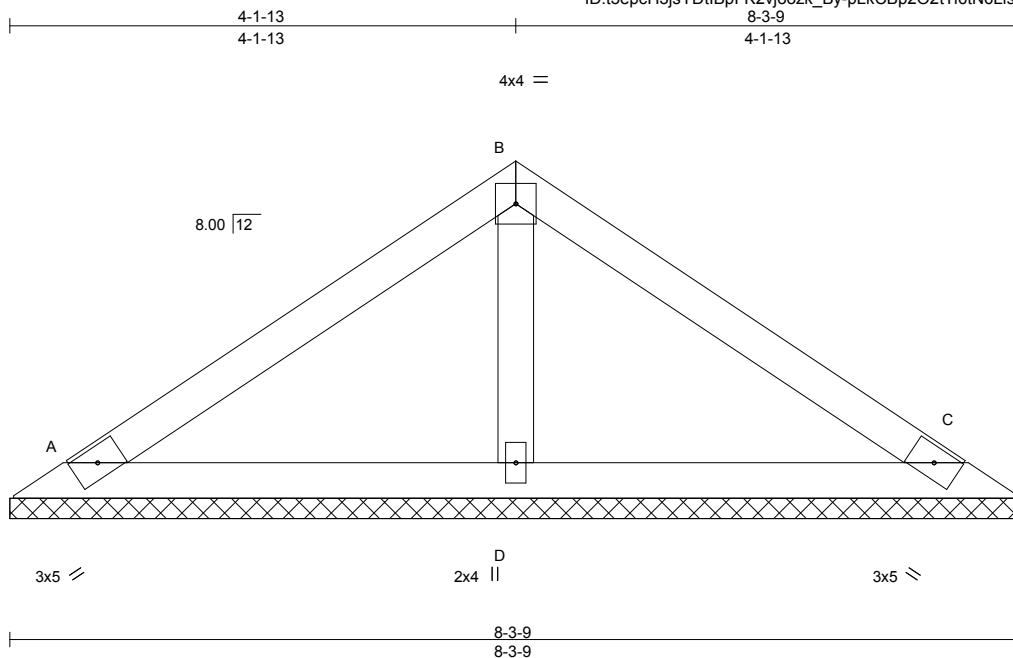


818 Soundside Road  
Edenton, NC 27932

Job CL-3145_W_CP	Truss V03	Truss Type Valley	Qty 1	Ply 1	CL 3145 CP	130418506
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84 Components, Dunn, NC 28334

8.120 s Jun 22 2017 MiTek Industries, Inc. Wed Jul 12 08:18:44 2017 Page 1  
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Scale = 1:18.9

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 0.26	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(TL)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(TL)	0.00	C	n/a	n/a		
BCDL 10.0	Code IBC2012/TPI2007		Matrix-P						Weight: 29 lb	FT = 20%

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

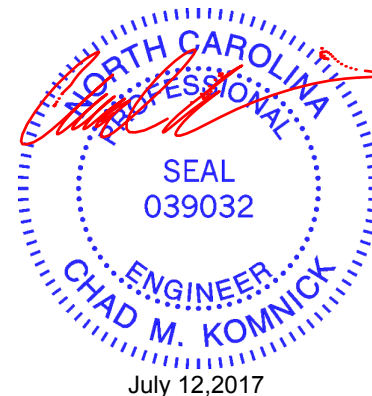
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (lb/size) A=158/8-3-9, C=158/8-3-9, D=270/8-3-9  
 Max Horz A=-47(LC 6)  
 Max Uplift A=-18(LC 10), C=-25(LC 11)

**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=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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) A, C.



**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 CL-3145_W_CP	Truss V04	Truss Type Valley	Qty 1	Ply 1	CL 3145 CP	130418507
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84 Components, Dunn, NC 28334

8.120 s Jun 22 2017 MiTek Industries, Inc. Wed Jul 12 08:18:44 2017 Page 1  
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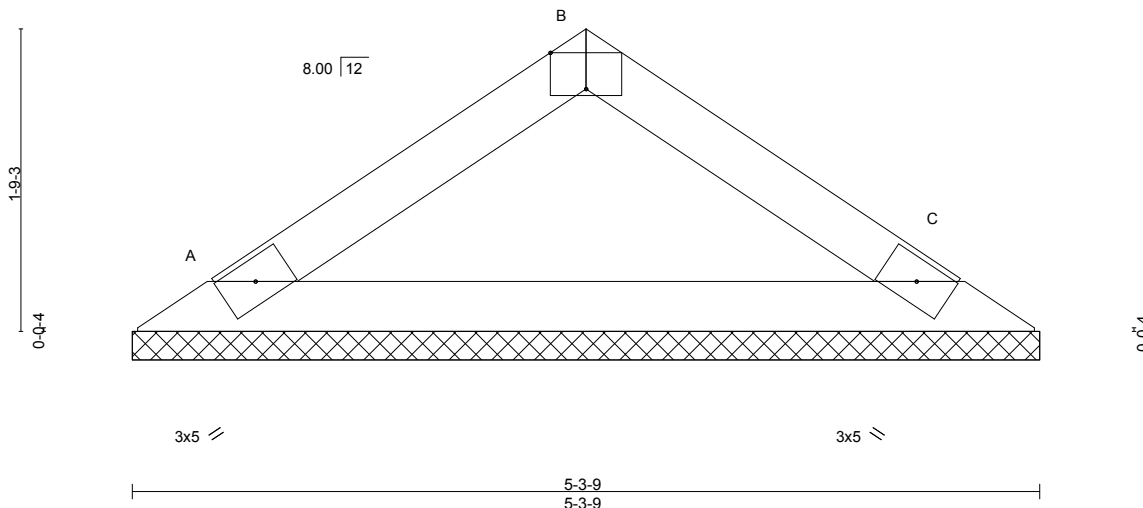
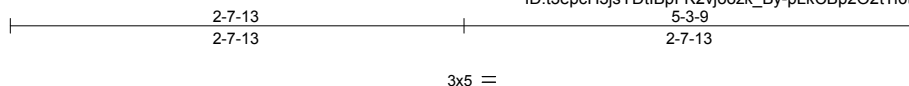


Plate Offsets (X,Y)--	[B:0-2-8,Edge]							
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.08	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.24	Vert(TL)	n/a	-	999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(TL)	0.00	C	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 16 lb	FT = 20%
	Code IBC2012/TPI2007							

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

**BRACING-**  
 TOP CHORD  
 BOT CHORD

Structural wood sheathing directly applied or 5-3-9 oc purlins.  
 Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (lb/size) A=173/5-3-9, C=173/5-3-9  
 Max Horz A=28(LC 7)  
 Max Uplift A=-3(LC 10), C=-3(LC 11)

**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=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) A, C.



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

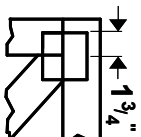
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



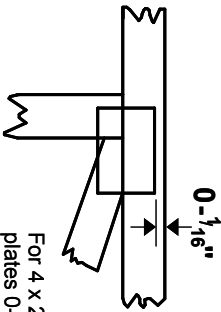
818 Soundside Road  
 Edenton, NC 27932

# Symbols

## PLATE LOCATION AND ORIENTATION



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



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



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

\* Plate location details available in **MITek 2020 software** or upon request.

## PLATE SIZE

### 4 X 4

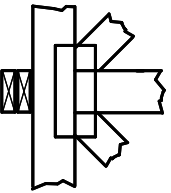
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

## BEARING



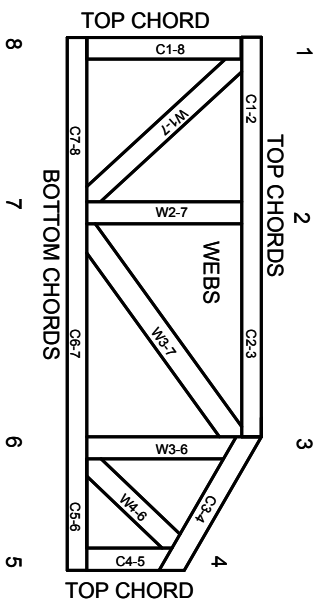
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TP11: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing.  
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System

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



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

Lumber design values are in accordance with ANSI/TP1 section 6.3. These truss designs rely on lumber values established by others.

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MITek Engineering Reference Sheet: Mill-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/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 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/TP1 1 Quality Criteria.