

Trenco

818 Soundside Rd
Edenton, NC 27932

Re: 1231742
H&H-NC/Kent

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

Pages or sheets covered by this seal: E10993700 thru E10993714

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

North Carolina COA: C-0844

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



September 27, 2017

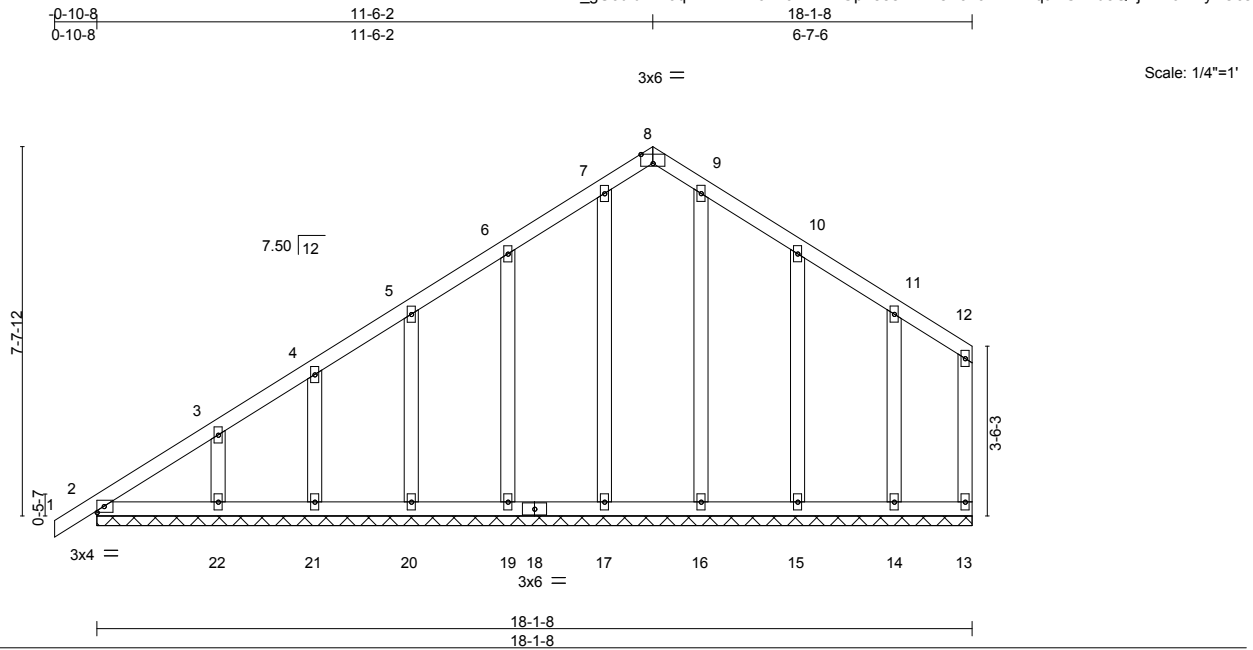
Lassiter, Frank

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

| | | | | | |
|----------------|--------------|---------------------|----------|----------|--------------------------|
| Job 1231742 | Truss A01 | Truss Type GABLE | Qty 1 | Ply 1 | H&H-NC/Kent E10993700 |
|----------------|--------------|---------------------|----------|----------|--------------------------|

Probuild East, Albemarle, NC 28001

7,640 s Aug 16 2017 Mitek Industries, Inc. Wed Sep 27 16:06:31 2017 Page 1
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Scale: 1/4"=1'

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

| LOADING (psf) | SPACING- | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0 | Plate Grip DOL 2-0-0 | TC 0.13 | Vert(LL) -0.00 | 1 | n/r | 120 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.04 | Vert(TL) 0.00 | 1 | n/r | 120 | | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.11 | Horz(TL) 0.00 | 13 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2009/TPI2007 | (Matrix) | | | | | | |
| | | | | | | | Weight: 118 lb | FT = 20% |

LUMBER-

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

BRACING-

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

REACTIONS. (lb/size) 13=49/18-1-8, 2=147/18-1-8, 17=160/18-1-8, 19=159/18-1-8, 20=163/18-1-8, 21=149/18-1-8, 22=197/18-1-8, 16=158/18-1-8, 15=163/18-1-8, 14=147/18-1-8
Max Horz 2=280(LC 7)
Max Uplift 13=-12(LC 9), 2=-91(LC 6), 17=-49(LC 7), 19=-119(LC 8), 20=-91(LC 8), 21=-92(LC 8), 22=-120(LC 8), 15=-129(LC 9), 14=-98(LC 9)
Max Grav 13=49(LC 1), 2=147(LC 1), 17=160(LC 1), 19=161(LC 13), 20=163(LC 1), 21=149(LC 13), 22=197(LC 13), 16=158(LC 1), 15=165(LC 14), 14=148(LC 14)

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/22, 2-3=-297/207, 3-4=-226/189, 4-5=-177/185, 5-6=-126/175, 6-7=-76/206, 7-8=-33/174, 8-9=-33/170, 9-10=-35/185, 10-11=-33/91, 11-12=-21/26, 12-13=-36/25
BOT CHORD 2-22=-2/5, 21-22=-2/5, 20-21=-2/5, 19-20=-2/5, 18-19=-2/5, 17-18=-2/5, 16-17=-2/5, 15-16=-2/5, 14-15=-2/5, 13-14=-2/5
WEBS 7-17=-128/73, 6-19=-121/143, 5-20=-122/116, 4-21=-113/115, 3-22=-143/147, 9-16=-119/0, 10-15=-124/155, 11-14=-111/112

NOTES- (12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
- 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 12 lb uplift at joint 13, 91 lb uplift at joint 2, 49 lb uplift at joint 17, 119 lb uplift at joint 19, 91 lb uplift at joint 20, 92 lb uplift at joint 21, 120 lb uplift at joint 22, 129 lb uplift at joint 15 and 98 lb uplift at joint 14.
- "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



September 27, 2017

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.



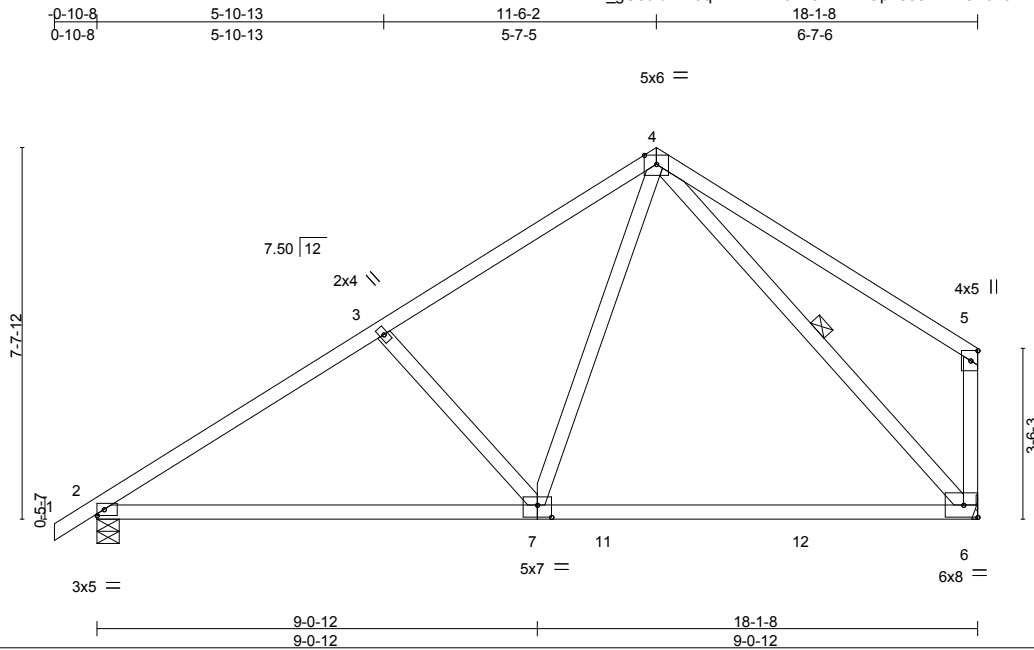
818 Soundside Road
Edenton, NC 27932

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|----------------|--------------|----------------------|----------|----------|--------------------------|
| Job 1231742 | Truss A02 | Truss Type Common | Qty 9 | Ply 1 | H&H-NC/Kent E10993701 |
|----------------|--------------|----------------------|----------|----------|--------------------------|

Probuild East, Albemarle, NC 28001

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Scale = 1:47.4

| | | | | | |
|---------------------------------------|----------------------|------------------|-----------------------------|------------------|-------------|
| Plate Offsets (X,Y)-- [7:0-3-8,0-3-0] | | 9-0-12 9-0-12 | | 18-1-8 9-0-12 | |
| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
| TCLL 20.0 | 2-0-0 | TC 0.43 | in (loc) l/defl L/d | MT20 | 244/190 |
| TCDL 10.0 | Plate Grip DOL 1.15 | BC 0.73 | Vert(LL) -0.24 6-7 >908 360 | | |
| BCLL 0.0 * | Lumber DOL 1.15 | WB 0.27 | Vert(TL) -0.42 6-7 >509 240 | | |
| BCDL 10.0 | Rep Stress Incr YES | (Matrix-S) | Horz(TL) 0.02 6 n/a n/a | | |
| | Code IRC2009/TPI2007 | | Wind(LL) 0.04 7-10 >999 240 | Weight: 97 lb | FT = 20% |

LUMBER-

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3 *Except*
 5-6: 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
 BOT CHORD Rigid ceiling directly applied.
 WEBS 1 Row at midpt 4-6

REACTIONS. (lb/size) 2=775/0-5-8, 6=715/Mechanical
 Max Horz 2=230(LC 7)
 Max Uplift 2=-104(LC 8), 6=-61(LC 8)

FORCES. (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/28, 2-3=-984/316, 3-4=-760/309, 4-5=-187/158, 5-6=-239/186
 BOT CHORD 2-7=-317/771, 7-11=-105/421, 11-12=-105/421, 6-12=-105/421
 WEBS 3-7=-332/275, 4-7=-100/517, 4-6=-537/126

NOTES- (9)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 104 lb uplift at joint 2 and 61 lb uplift at joint 6.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



September 27, 2017

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

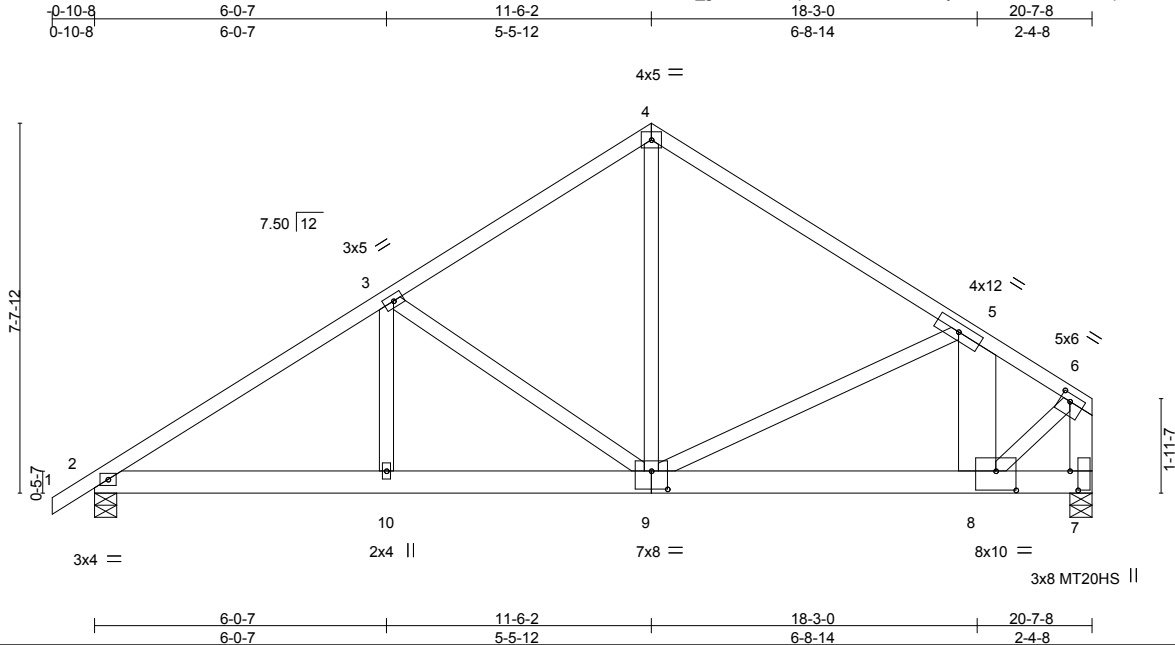
Design valid for use only with Mitek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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 1231742 | Truss A03 | Truss Type Common Girder | Qty 1 | Ply 2 | H&H-NC/Kent E10993702 |
|----------------|--------------|-----------------------------|----------|----------|--------------------------|

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Scale: 1/4"=1'

| | | | | | |
|---|----------------------|-------------|-----------------------------|----------------|-------------|
| Plate Offsets (X,Y)-- [6:0-2-8,0-1-12], [7:0-4-12,0-2-0], [8:0-5-0,0-4-12], [9:0-4-0,0-4-8] | | | | | |
| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
| TCLL 20.0 | 2-0-0 | TC 0.46 | in (loc) l/defl L/d | MT20 | 244/190 |
| TCDL 10.0 | Plate Grip DOL 1.15 | BC 0.66 | Vert(LL) -0.04 8-9 >999 360 | MT20HS | 187/143 |
| BCLL 0.0 * | Lumber DOL 1.15 | WB 0.77 | Horz(TL) 0.04 7 n/a n/a | | |
| BCDL 10.0 | Rep Stress Incr NO | (Matrix-M) | Wind(LL) 0.06 8-9 >999 240 | | |
| | Code IRC2009/TPI2007 | | | Weight: 278 lb | FT = 20% |

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x6 SP No.2
 WEBS 2x4 SP No.2 *Except*
 5-8: 2x10 SP No.1, 6-7: 2x6 SP No.2

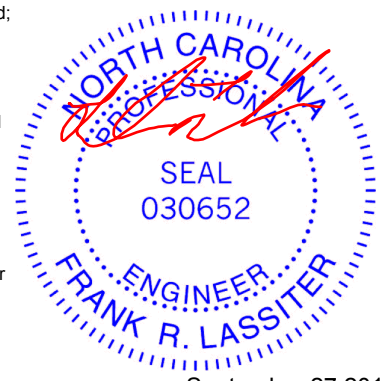
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 4-10-10 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=1653/0-5-8, 7=7398/0-5-8
 Max Horz 2=232(LC 5)
 Max Uplift 2=-444(LC 6), 7=-2834(LC 7)

FORCES. (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/28, 2-3=-2583/706, 3-4=-2242/749, 4-5=-2263/749, 5-6=-6019/2313, 6-7=-7099/2705
 BOT CHORD 2-10=-644/2117, 9-10=-644/2117, 8-9=-1957/5109, 7-8=-79/176
 WEBS 3-10=0/172, 3-9=-372/127, 4-9=-670/1924, 5-9=-3681/1672, 5-8=-1521/3385, 6-8=-2417/6300

- NOTES-** (12)
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
 Bottom chords connected as follows: 2x6 - 3 rows staggered at 0-2-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x10 - 2 rows staggered at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise); end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 444 lb uplift at joint 2 and 2834 lb uplift at joint 7.
 - "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 7366 lb down and 3099 lb up at 18-3-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard



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Continued on page 2

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

ENGINEERING BY
TRENCO
 A MiTek Affiliate

818 Soundside Road
 Edenton, NC 27932

| | | | | | |
|----------------|--------------|-----------------------------|----------|-----------------|--------------------------|
| Job 1231742 | Truss A03 | Truss Type Common Girder | Qty 1 | Ply 2 | H&H-NC/Kent E10993702 |
|----------------|--------------|-----------------------------|----------|-----------------|--------------------------|

Probuild East, Albemarle, NC 28001

Job Reference (optional)
7.640 s Aug 16 2017 MiTek Industries, Inc. Wed Sep 27 16:06:32 2017 Page 2
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LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4=-60, 4-6=-60, 7-11=-20

Concentrated Loads (lb)

Vert: 8=-7366(F)

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

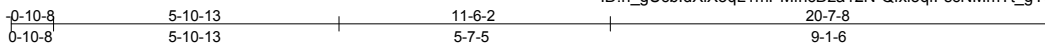
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|----------------|--------------|----------------------|----------|----------|-------------|-----------|
| Job 1231742 | Truss A04 | Truss Type Common | Qty 9 | Ply 1 | H&H-NC/Kent | E10993703 |
|----------------|--------------|----------------------|----------|----------|-------------|-----------|

Probuild East, Albemarle, NC 28001 7.640 s Aug 16 2017 MiTek Industries, Inc. Wed Sep 27 16:06:33 2017 Page 1
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5x6 =

Scale: 1/4"=1'

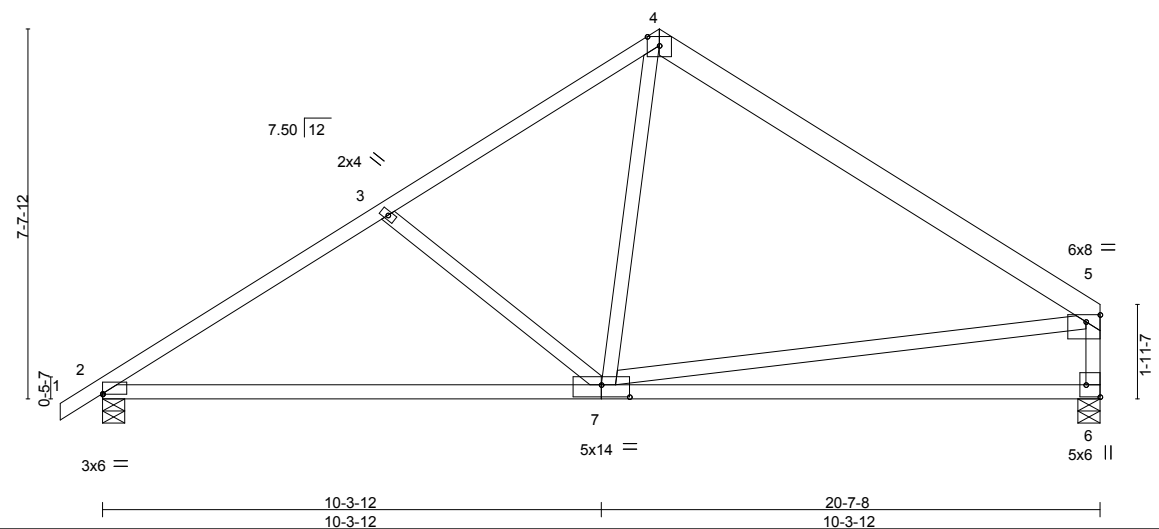


Plate Offsets (X,Y)-- [2:0-0-0,0-0-2], [5:Edge,0-1-12], [6:Edge,0-3-8], [7:0-7-0,0-3-0]

| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
|---------------|----------------------|------------|-----------------------------|----------------|----------|
| TCLL 20.0 | Plate Grip DOL 2-0-0 | TC 0.56 | in (loc) l/defl L/d | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.94 | Vert(LL) -0.19 6-7 >999 360 | | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.24 | Vert(TL) -0.49 6-7 >507 240 | | |
| BCDL 10.0 | Code IRC2009/TPI2007 | (Matrix-S) | Horz(TL) 0.02 6 n/a n/a | | |
| | | | Wind(LL) 0.04 7-10 >999 240 | Weight: 114 lb | FT = 20% |

LUMBER-
 TOP CHORD 2x4 SP No.2 *Except*
 4-5: 2x6 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3 *Except*
 5-6: 2x4 SP No.2

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

REACTIONS. (lb/size) 6=816/0-5-8, 2=875/0-5-8
 Max Horz 2=232(LC 7)
 Max Uplift 6=63(LC 9), 2=-116(LC 8)

FORCES. (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/28, 2-3=-1133/399, 3-4=-874/349, 4-5=-863/296, 5-6=-722/308
 BOT CHORD 2-7=-305/914, 6-7=-85/225
 WEBS 3-7=-343/273, 4-7=-45/496, 5-7=-79/395

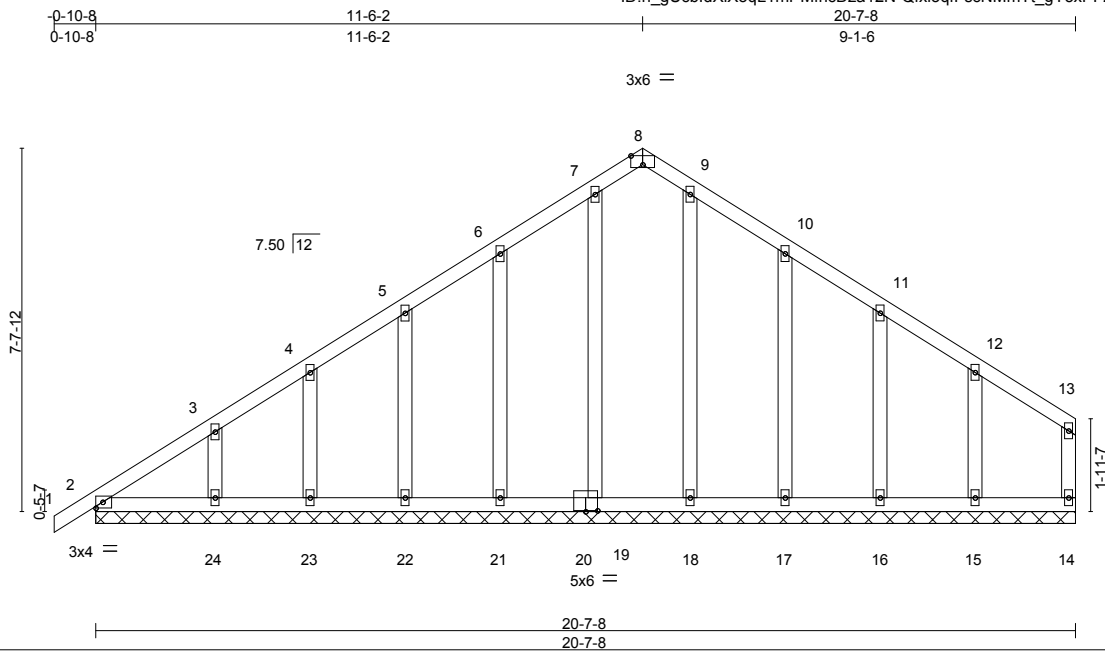
- NOTES-** (8)
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
 - 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 63 lb uplift at joint 6 and 116 lb uplift at joint 2.
 - 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 8) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



September 27, 2017

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|----------------|--------------|---------------------|----------|----------|--------------------------|
| Job 1231742 | Truss A05 | Truss Type GABLE | Qty 1 | Ply 1 | H&H-NC/Kent E10993704 |
|----------------|--------------|---------------------|----------|----------|--------------------------|

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Scale = 1:48.5

| | | | | | | | | | |
|--|----------------------|-------|-------------|--------------|----------|--------|-----|----------------|-------------|
| Plate Offsets (X,Y)-- [8:0-3-0,Edge], [20:0-3-0,0-0-4] | | | | | | | | | |
| 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 0.17 | Vert(LL) | -0.00 | 1 | n/r | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.05 | Vert(TL) | 0.00 | 1 | n/r | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.13 | Horz(TL) | 0.00 | 14 | n/a | | |
| BCDL 10.0 | Code IRC2009/TPI2007 | | (Matrix) | | | | | | |
| | | | | | | | | Weight: 128 lb | FT = 20% |

| | |
|-----------------------|---|
| LUMBER- | BRACING- |
| TOP CHORD 2x4 SP No.2 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD 2x4 SP No.2 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS 2x4 SP No.3 | |
| OTHERS 2x4 SP No.3 | |

REACTIONS. (lb/size) 14=76/20-7-8, 2=151/20-7-8, 19=155/20-7-8, 21=160/20-7-8, 22=163/20-7-8, 23=149/20-7-8, 24=196/20-7-8, 18=154/20-7-8, 17=161/20-7-8, 16=158/20-7-8, 15=168/20-7-8
 Max Horz 2=287(LC 7)
 Max Uplift 2=113(LC 6), 19=50(LC 7), 21=126(LC 8), 22=90(LC 8), 23=92(LC 8), 24=117(LC 8), 17=142(LC 9), 16=74(LC 9), 15=148(LC 9)
 Max Grav 14=76(LC 1), 2=151(LC 1), 19=177(LC 6), 21=162(LC 13), 22=163(LC 1), 23=149(LC 13), 24=196(LC 13), 18=154(LC 1), 17=163(LC 14), 16=158(LC 1), 15=170(LC 14)

FORCES. (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/22, 2-3=-299/247, 3-4=-227/227, 4-5=-179/223, 5-6=-128/213, 6-7=-77/277, 7-8=-39/221, 8-9=-39/217, 9-10=-41/254, 10-11=-41/156, 11-12=-42/88, 12-13=-37/27, 13-14=-57/16
 BOT CHORD 2-24=-7/29, 23-24=-7/29, 22-23=-7/29, 21-22=-7/29, 20-21=-7/29, 19-20=-7/29, 18-19=-7/29, 17-18=-7/29, 16-17=-7/29, 15-16=-7/29, 14-15=-7/29
 WEBS 7-19=-153/74, 6-21=-122/152, 5-22=-121/114, 4-23=-113/115, 3-24=-142/145, 9-18=-114/0, 10-17=-123/165, 11-16=-118/104, 12-15=-128/151

- NOTES-** (12)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
 - 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 113 lb uplift at joint 2, 50 lb uplift at joint 19, 126 lb uplift at joint 21, 90 lb uplift at joint 22, 92 lb uplift at joint 23, 117 lb uplift at joint 24, 142 lb uplift at joint 17, 74 lb uplift at joint 16 and 148 lb uplift at joint 15.
 - "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
 - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



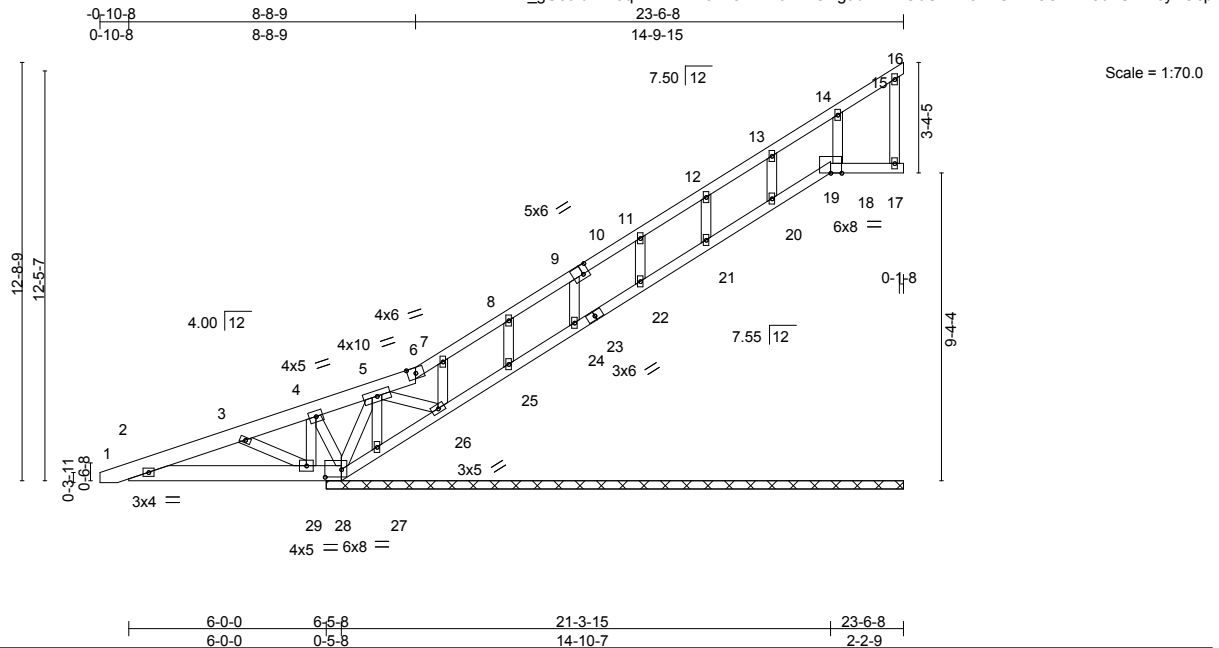
September 27, 2017

| | | | | | |
|----------------|--------------|---------------------|----------|----------|--------------------------|
| Job 1231742 | Truss B01 | Truss Type GABLE | Qty 1 | Ply 1 | H&H-NC/Kent E10993705 |
|----------------|--------------|---------------------|----------|----------|--------------------------|

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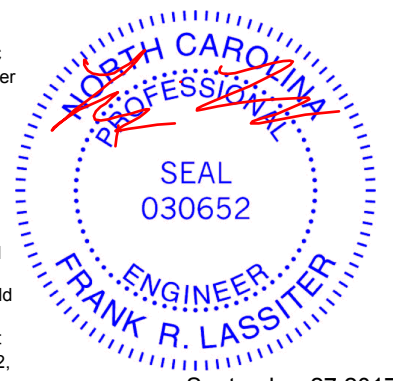
| | | | | | | | | | |
|---|----------------------|-------|-------------|--------------|----------|--------|-----|----------------|-------------|
| Plate Offsets (X,Y)-- [10:0-2-4,0-3-4], [28:0-6-0,0-2-12] | | | | | | | | | |
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.18 | Vert(LL) | -0.00 | 1-2 | n/r | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.19 | Vert(TL) | -0.00 | 1-2 | n/r | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.26 | Horz(TL) | -0.01 | 16 | n/a | | |
| BCDL 10.0 | Code IRC2009/TPI2007 | | (Matrix) | | | | | | |
| | | | | | | | | Weight: 131 lb | FT = 20% |

| | |
|---|---|
| LUMBER- | BRACING- |
| TOP CHORD 2x4 SP No.2 *Except* 1-6: 2x6 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 *Except* 2-28: 2x6 SP No.2 | BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. |
| WEBS 2x4 SP No.3 | |
| OTHERS 2x4 SP No.3 | |

REACTIONS. (lb/size) 16=-5/17-6-8, 28=1246/17-6-8, 19=-3/17-6-8, 17=78/17-6-8, 18=165/17-6-8, 20=161/17-6-8, 21=160/17-6-8, 22=160/17-6-8, 24=160/17-6-8, 25=160/17-6-8, 26=-434/17-6-8, 27=68/17-6-8
Max Horz 28=643(LC 8)
Max Uplift 16=-18(LC 8), 28=-1019(LC 6), 19=-21(LC 8), 17=-38(LC 8), 18=-67(LC 8), 20=-96(LC 8), 21=-95(LC 8), 22=-96(LC 8), 24=-92(LC 8), 25=-108(LC 8), 26=-434(LC 1), 27=-15(LC 6)
Max Grav 16=6(LC 6), 28=1246(LC 1), 19=6(LC 6), 17=78(LC 1), 18=165(LC 1), 20=161(LC 1), 21=160(LC 1), 22=160(LC 1), 24=160(LC 1), 25=160(LC 1), 26=514(LC 6), 27=68(LC 1)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/8, 2-3=-606/510, 3-4=-789/747, 4-5=-948/895, 5-6=-530/41, 6-7=-525/45, 7-8=-496/46, 8-9=-414/39, 9-10=-340/20, 10-11=-339/33, 11-12=-264/32, 12-13=-188/32, 13-14=-112/32, 14-15=-38/23, 15-16=-11/3, 15-17=-64/40
BOT CHORD 2-29=-442/599, 28-29=-691/846, 27-28=-717/585, 26-27=-712/578, 25-26=-22/20, 24-25=-21/22, 23-24=-21/0, 22-23=-8/22, 21-22=-21/22, 20-21=-21/22, 19-20=-21/16, 18-19=-7/2, 17-18=-7/2
WEBS 14-18=-121/115, 13-20=-120/120, 12-21=-120/118, 11-22=-120/120, 9-24=-119/116, 8-25=-123/133, 7-26=-104/44, 5-27=-52/52, 4-29=-364/287, 5-28=-610/502, 3-29=-280/280, 4-28=-330/447, 5-26=-512/634

- NOTES-** (12)
- 1) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 3) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
 - 4) All plates are 2x4 MT20 unless otherwise indicated.
 - 5) Gable studs spaced at 2-0-0 oc.
 - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 8) Bearing at joint(s) 16, 19, 20, 21, 22 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 18 lb uplift at joint 16, 1019 lb uplift at joint 28, 21 lb uplift at joint 19, 38 lb uplift at joint 17, 67 lb uplift at joint 18, 96 lb uplift at joint 20, 95 lb uplift at joint 21, 96 lb uplift at joint 22, 92 lb uplift at joint 24, 108 lb uplift at joint 25, 434 lb uplift at joint 26 and 15 lb uplift at joint 27.
 - 10) Non Standard bearing condition. Review required.



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Continued on page 2
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.
This design is valid for use only with Mitek connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

| Job | Truss | Truss Type | Qty | Ply | H&H-NC/Kent |
|---------|-------|------------|-----|-----|-------------|
| 1231742 | B01 | GABLE | 1 | 1 | E10993705 |

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NOTES- (12)

- 11) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 12) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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

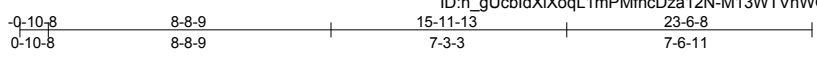
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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 1231742 | Truss B02 | Truss Type JACK-CLOSED | Qty 4 | Ply 1 | H&H-NC/Kent E10993706 |
|----------------|--------------|---------------------------|----------|----------|--------------------------|

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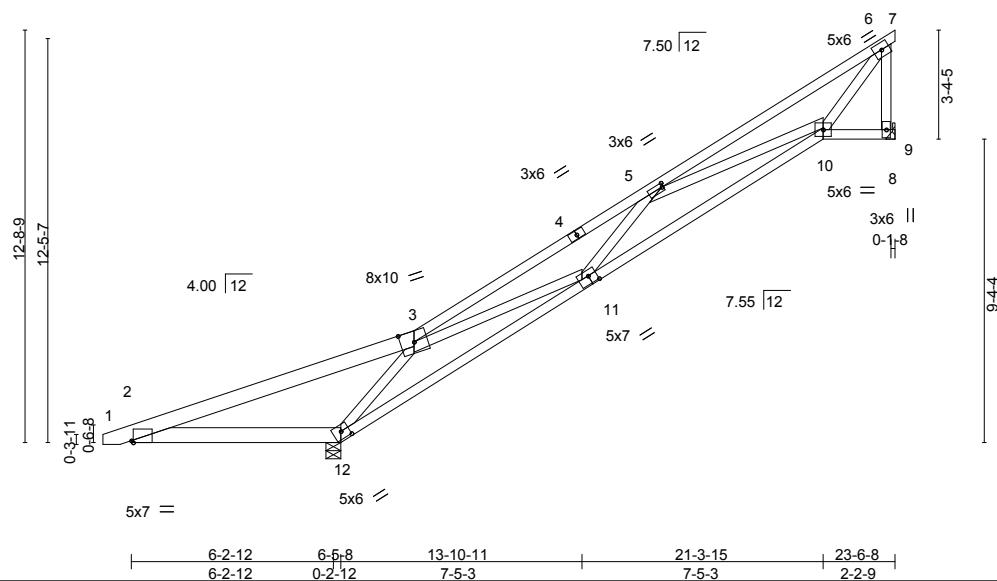


Plate Offsets (X,Y)-- [2:0-0-11,Edge], [5:0-0-8,0-1-8], [11:0-3-0,0-3-0], [12:0-3-0,0-2-12]

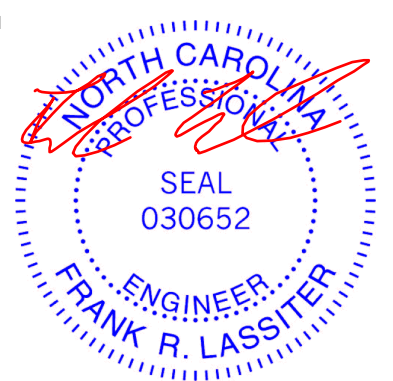
| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
|---------------|----------------------|------------|-------------------------------|----------------|----------|
| TCLL 20.0 | Plate Grip DOL 2-0-0 | TC 0.49 | in (loc) l/defl L/d | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.59 | Vert(LL) -0.09 11-12 >999 360 | | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.56 | Vert(TL) -0.27 10-11 >744 240 | | |
| BCDL 10.0 | Code IRC2009/TPI2007 | (Matrix-S) | Horz(TL) 0.07 9 n/a n/a | | |
| | | | Wind(LL) 0.10 10-11 >999 240 | Weight: 132 lb | FT = 20% |

| LUMBER- | BRACING- |
|---|---|
| TOP CHORD 2x4 SP No.2 *Except* 1-3: 2x6 SP No.2 | TOP CHORD Structural wood sheathing directly applied, except end verticals. |
| BOT CHORD 2x4 SP No.2 *Except* 2-12: 2x6 SP No.2 | BOT CHORD Rigid ceiling directly applied. |
| WEBS 2x4 SP No.3 *Except* 6-9: 2x4 SP No.2 | |

REACTIONS. (lb/size) 12=1346/0-5-8, 9=563/Mechanical
 Max Horz 12=447(LC 8)
 Max Uplift 12=-312(LC 6), 9=-198(LC 8)

FORCES. (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/12, 2-3=-1108/1033, 3-4=-1350/156, 4-5=-1144/180, 5-6=-723/147, 6-7=-3/0, 6-9=-533/283
 BOT CHORD 2-12=-905/1140, 11-12=-438/879, 10-11=-914/1548, 9-10=-72/78, 8-9=0/0
 WEBS 3-12=-1275/717, 3-11=-550/1265, 5-11=-431/534, 5-10=-812/561, 6-10=-260/767

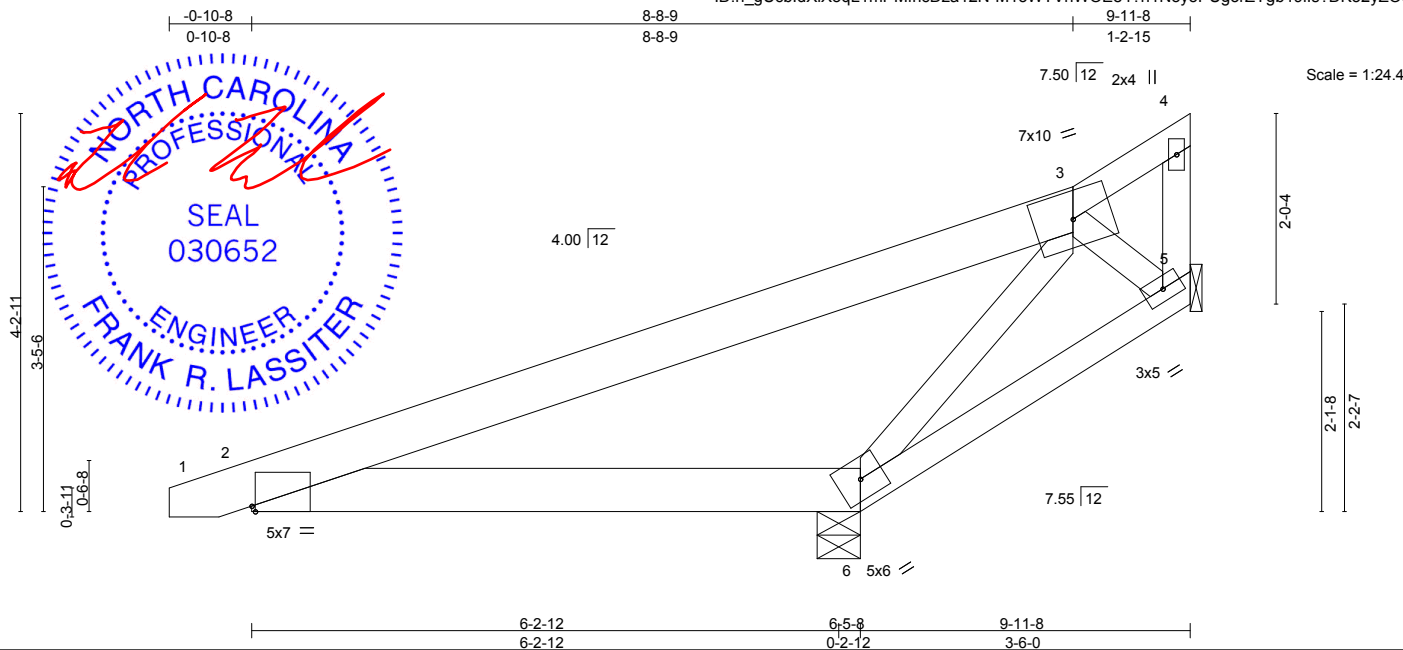
- NOTES-** (8)
- 1) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; cantilever left exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 5) Refer to girder(s) for truss to truss connections.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 312 lb uplift at joint 12 and 198 lb uplift at joint 9.
 - 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 8) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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|----------------|--------------|----------------------------|----------|----------|--------------------------|
| Job 1231742 | Truss B04 | Truss Type ROOF SPECIAL | Qty 3 | Ply 1 | H&H-NC/Kent E10993707 |
|----------------|--------------|----------------------------|----------|----------|--------------------------|

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| | | | | | | | |
|--------------------------------------|--|--------|--|--------|--|--------|--|
| Plate Offsets (X,Y)-- [2:0-0-7,Edge] | | 6-2-12 | | 6-5-8 | | 9-11-8 | |
| | | 6-2-12 | | 0-2-12 | | 3-6-0 | |

| LOADING (psf) | SPACING- | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|------------|----------------|----------|--------|-----|---------------|----------|
| TCLL 20.0 | Plate Grip DOL 2-0-0 | TC 0.43 | Vert(LL) 0.01 | 5-6 | >999 | 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.43 | Vert(TL) 0.01 | 5-6 | >999 | 240 | | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.39 | Horz(TL) -0.00 | 5 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2009/TP12007 | (Matrix-S) | Wind(LL) -0.01 | 5-6 | >999 | 240 | | |
| | | | | | | | Weight: 57 lb | FT = 20% |

LUMBER-
 TOP CHORD 2x6 SP No.2 *Except*
 3-4: 2x4 SP No.2
 BOT CHORD 2x6 SP No.2 *Except*
 5-6: 2x4 SP No.2
 WEBS 2x4 SP No.3

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

REACTIONS. (lb/size) 6=1278/0-5-8, 5=-456/Mechanical
 Max Horz 6=141(LC 8)
 Max Uplift 6=-723(LC 6), 5=-456(LC 1)
 Max Grav 6=1278(LC 1), 5=347(LC 6)

FORCES. (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/12, 2-3=-1256/1025, 3-4=-87/49, 4-5=-188/152
 BOT CHORD 2-6=-897/1296, 5-6=-293/358
 WEBS 3-6=-1154/1315, 3-5=-285/248

- NOTES-** (8)
- 1) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; cantilever left exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 5) Refer to girder(s) for truss to truss connections.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 723 lb uplift at joint 6 and 456 lb uplift at joint 5.
 - 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 8) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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| | |
|---|--|
| <p>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.</p> | <p>ENGINEERING BY TRENCO A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p> |
|---|--|

| | | | | | |
|----------------|--------------|----------------------------------|----------|----------|--------------------------|
| Job 1231742 | Truss B05 | Truss Type JACK-CLOSED GIRDER | Qty 2 | Ply 1 | H&H-NC/Kent E10993708 |
|----------------|--------------|----------------------------------|----------|----------|--------------------------|

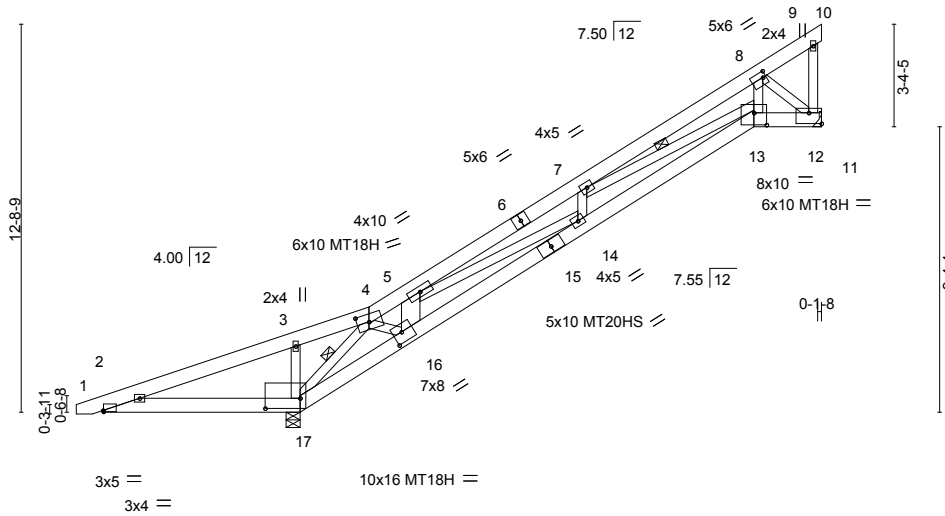
Probuild East, Albemarle, NC 28001

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Scale = 1:75.5



| | |
|-----------------------|---|
| Plate Offsets (X,Y)-- | [2:0-0-3,0-0-7], [4:0-4-12,0-3-0], [8:0-1-4,0-2-4], [12:Edge,0-4-4], [13:0-5-0,0-4-12], [16:0-3-8,0-4-0], [17:1-1-12,0-4-0] |
|-----------------------|---|

| LOADING (psf) | SPACING- | CSL | DEFL. | PLATES | GRIP |
|---------------|----------------------|------------|-------------------------------|--------|-------------------------|
| TCLL 20.0 | 2-0-0 | TC 0.77 | in (loc) l/defl L/d | MT20 | 244/190 |
| TCDL 10.0 | Plate Grip DOL 1.15 | BC 0.99 | Vert(TL) -0.66 14-16 >305 240 | MT20HS | 187/143 |
| BCLL 0.0 * | Lumber DOL 1.15 | WB 0.91 | Horz(TL) 0.27 12 n/a n/a | MT18H | 244/190 |
| BCDL 10.0 | Rep Stress Incr NO | (Matrix-S) | Wind(LL) 0.20 14-16 >999 240 | | Weight: 168 lb FT = 20% |
| | Code IRC2009/TPI2007 | | | | |

LUMBER-

TOP CHORD 2x6 SP No.2
 BOT CHORD 2x6 SP No.2 *Except*
 13-15,15-17: 2x6 SP No.1
 WEBS 2x4 SP No.2 *Except*
 5-16: 2x8 SP DSS

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
 BOT CHORD Rigid ceiling directly applied.
 WEBS 1 Row at midpt 7-13, 4-17

REACTIONS. (lb/size) 17=3039/0-5-8, 12=2497/Mechanical
 Max Horz 17=445(LC 8)

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/12, 2-3=-880/847, 3-4=-773/742, 4-5=-4925/0, 5-6=-6524/0, 6-7=-6248/0, 7-8=-3912/90, 8-9=-183/0, 9-10=-14/0, 9-12=0/45
 BOT CHORD 2-17=-736/894, 16-17=0/2167, 15-16=0/5104, 14-15=0/5113, 13-14=0/6288, 12-13=-72/2847, 11-12=0/0
 WEBS 3-17=-597/355, 4-16=-52/2873, 5-16=-1273/0, 5-14=0/1088, 7-14=-159/17, 7-13=-2250/0, 8-13=-288/3699, 8-12=-3740/87, 4-17=-4325/0

NOTES- (10)

- 1) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; cantilever left exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
- 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) Refer to girder(s) for truss to truss connections.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1450 lb down and 312 lb up at 10-1-0, and 1090 lb down and 446 lb up at 21-3-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- 10) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-4=-60, 4-5=-60, 5-9=-140(F=-80), 9-10=-100(F=-80), 17-18=-20, 13-17=-20, 11-13=-20



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Continued on page 2

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

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



818 Soundside Road
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| Job | Truss | Truss Type | Qty | Ply | H&H-NC/Kent |
|---------|-------|--------------------|-----|-----|-------------|
| 1231742 | B05 | JACK-CLOSED GIRDER | 2 | 1 | E10993708 |

Probuild East, Albemarle, NC 28001

7.640 s Aug 16 2017 MiTek Industries, Inc. Wed Sep 27 16:06:36 2017 Page 2
 ID:h_gUcblDxiXoqL1mPMfncDza12N-qEcuhrh89XmxdxcZLgce1tbx7yt5mUuS5fztbUyZOCn

LOAD CASE(S) Standard
 Concentrated Loads (lb)
 Vert: 13=-1090(F) 16=-1450(F)

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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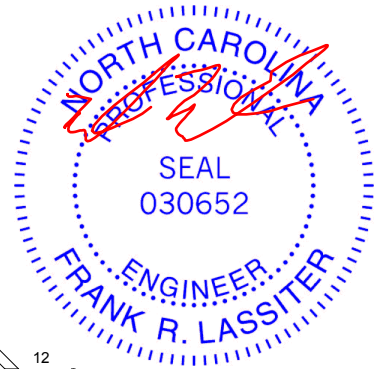
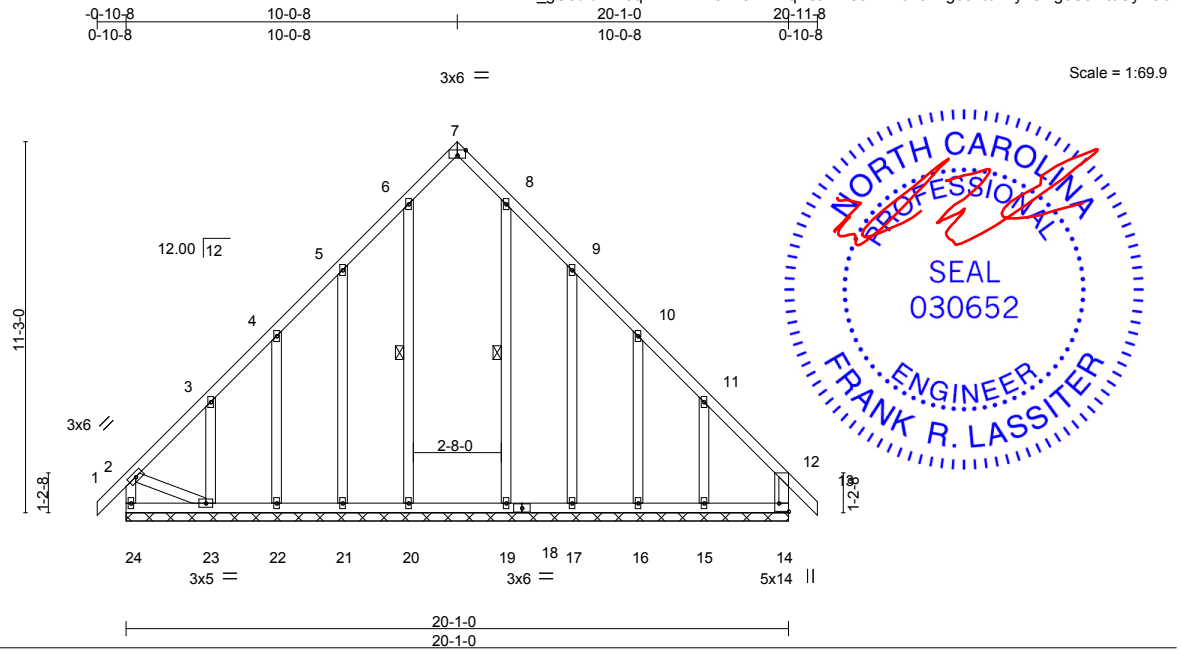


818 Soundside Road
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| | | | | | |
|----------------|--------------|---------------------|----------|----------|--------------------------|
| Job 1231742 | Truss C01 | Truss Type GABLE | Qty 1 | Ply 1 | H&H-NC/Kent E10993709 |
|----------------|--------------|---------------------|----------|----------|--------------------------|

Probuild East, Albemarle, NC 28001

7.640 s Aug 16 2017 Mitek Industries, Inc. Wed Sep 27 16:06:36 2017 Page 1
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| | | | | | | | | | |
|---|----------------------|-------|-------------|--------------|----------|--------|-----|----------------|-------------|
| Plate Offsets (X,Y)-- [7:0-3-0,Edge], [14:Edge,0-3-8] | | | | | | | | | |
| 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 0.34 | Vert(LL) | -0.00 | 13 | n/r | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.38 | Vert(TL) | -0.00 | 13 | n/r | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.13 | Horz(TL) | 0.01 | 14 | n/a | | |
| BCDL 10.0 | Code IRC2009/TPI2007 | | (Matrix) | | | | | | |
| | | | | | | | | Weight: 156 lb | FT = 20% |

| | |
|---------------------------|---|
| LUMBER- | BRACING- |
| TOP CHORD 2x4 SP No.2 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD 2x4 SP No.2 | BOT CHORD Rigid ceiling directly applied or 9-2-5 oc bracing. |
| WEBS 2x4 SP No.2 *Except* | WEBS 1 Row at midpt 6-20, 8-19 |
| 2-23: 2x4 SP No.3 | |
| OTHERS 2x4 SP No.3 | |

REACTIONS. (lb/size) 24=196/20-1-0, 14=199/20-1-0, 20=175/20-1-0, 21=155/20-1-0, 22=156/20-1-0, 23=171/20-1-0, 19=175/20-1-0, 17=154/20-1-0, 16=161/20-1-0, 15=164/20-1-0
Max Horz 24=-446(LC 6)
Max Uplift 24=-193(LC 6), 14=-55(LC 7), 20=-79(LC 7), 21=-216(LC 8), 22=-142(LC 8), 23=-346(LC 8), 17=-255(LC 9), 16=-58(LC 9), 15=-437(LC 9)
Max Grav 24=422(LC 7), 14=345(LC 9), 20=209(LC 2), 21=157(LC 13), 22=156(LC 1), 23=174(LC 13), 19=209(LC 2), 17=156(LC 14), 16=161(LC 1), 15=170(LC 14)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-24=-404/203, 1-2=0/43, 2-3=-425/221, 3-4=-312/200, 4-5=-218/183, 5-6=-119/208, 6-7=-83/147, 7-8=-83/141, 8-9=-81/162, 9-10=-83/47, 10-11=-171/52, 11-12=-429/87, 12-13=0/43, 12-14=-244/53
BOT CHORD 23-24=-416/441, 22-23=-54/409, 21-22=-54/409, 20-21=-54/409, 19-20=-54/409, 18-19=-54/409, 17-18=-54/409, 16-17=-54/409, 15-16=-54/409, 14-15=-54/409
WEBS 6-20=-173/111, 5-21=-121/242, 4-22=-117/167, 3-23=-131/199, 8-19=-122/0, 9-17=-121/266, 10-16=-120/123, 11-15=-126/338, 2-23=-163/442

- NOTES-** (13)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) zone; 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.
 - This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
 - 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 193 lb uplift at joint 24, 55 lb uplift at joint 14, 79 lb uplift at joint 20, 216 lb uplift at joint 21, 142 lb uplift at joint 22, 346 lb uplift at joint 23, 255 lb uplift at joint 17, 58 lb uplift at joint 16 and 437 lb uplift at joint 15.
 - "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

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Continued on page 2

| | |
|---|--|
| <p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</p> <p>Design valid for use only with Mitek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see 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.</p> | <p>ENGINEERING BY TRENCO A Mitek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p> |
|---|--|

| Job | Truss | Truss Type | Qty | Ply | H&H-NC/Kent |
|---------|-------|------------|-----|-----|-------------|
| 1231742 | C01 | GABLE | 1 | 1 | E10993709 |

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ID:h_gUcblDxiXoqL1mPMfncDza12N-qEcuhrh89XmxdxcZLgce1tb1ny1cmg0S5fzbtUyZOcn

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

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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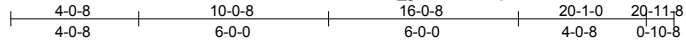


818 Soundside Road
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| | | | | | |
|----------------|--------------|--------------------------|----------|----------|--------------------------|
| Job 1231742 | Truss C02 | Truss Type ROOF TRUSS | Qty 2 | Ply 1 | H&H-NC/Kent E10993710 |
|----------------|--------------|--------------------------|----------|----------|--------------------------|

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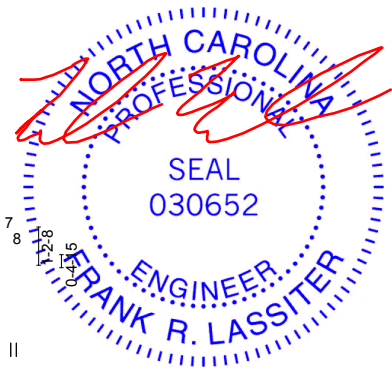
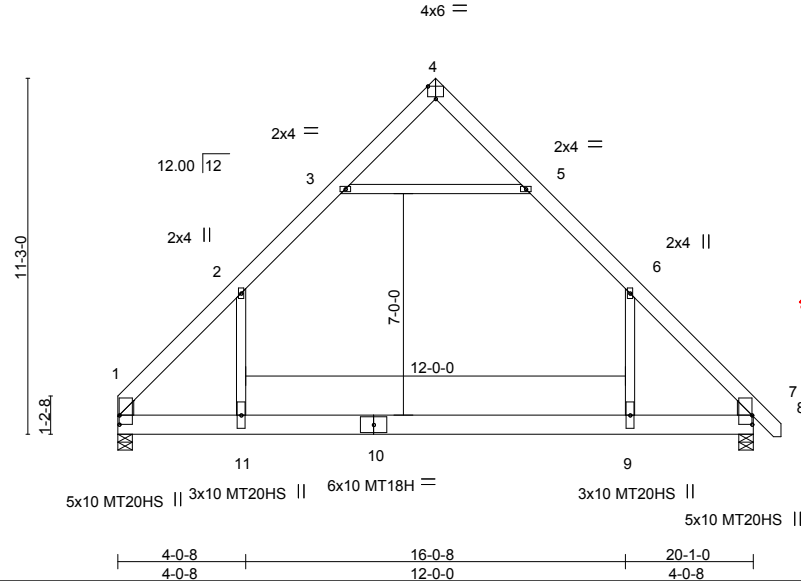


Plate Offsets (X,Y)-- [1:0-3-8,0-0-0], [4:0-3-0,Edge], [7:0-3-8,0-0-0]

| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
|---------------|----------------------|------------|------------------------------|----------------|----------|
| TCLL 20.0 | 2-0-0 | TC 0.95 | in (loc) l/defl L/d | MT20 | 244/190 |
| TCDL 10.0 | Plate Grip DOL 1.15 | BC 0.51 | Vert(LL) -0.36 9-11 >670 360 | MT20HS | 187/143 |
| BCLL 0.0 * | Lumber DOL 1.15 | WB 0.70 | Vert(TL) -0.63 9-11 >381 240 | MT18H | 244/190 |
| BCDL 10.0 | Rep Stress Incr YES | (Matrix-S) | Horz(TL) 0.04 1 n/a n/a | Weight: 156 lb | FT = 20% |
| | Code IRC2009/TPI2007 | | Wind(LL) 0.09 9-11 >999 240 | | |

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x8 SP DSS
WEBS 2x4 SP No.2
WEDGE
Left: 2x6 SP No.2, Right: 2x6 SP No.2

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

REACTIONS. (lb/size) 1=970/0-5-8, 7=1017/0-5-8
Max Horz 1=-327(LC 6)
Max Grav 1=1239(LC 2), 7=1278(LC 2)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1599/84, 2-3=-880/259, 3-4=-81/227, 4-5=-81/227, 5-6=-881/259, 6-7=-1600/84, 7-8=0/32
BOT CHORD 1-11=0/873, 10-11=0/876, 9-10=0/876, 7-9=0/873
WEBS 6-9=0/1034, 2-11=0/1033, 3-5=-1122/325

- NOTES-** (11)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; 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 basic load combinations, which include cases with reductions for multiple concurrent live loads.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Ceiling dead load (5.0 psf) on member(s). 2-3, 5-6, 3-5; Wall dead load (5.0psf) on member(s).6-9, 2-11
 - Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 9-11
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Attic room checked for L/360 deflection.
 - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

September 27, 2017

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TRENCO
A Mitek Affiliate

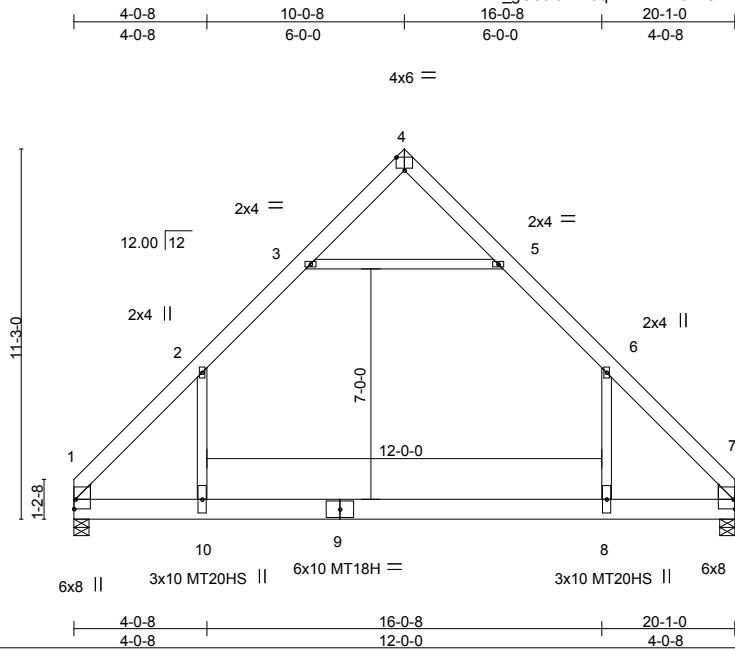
818 Soundside Road
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| | | | | | | |
|---------|-------|------------|-----|-----|-------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | H&H-NC/Kent | E10993711 |
| 1231742 | C03 | ROOF TRUSS | 8 | 1 | | |

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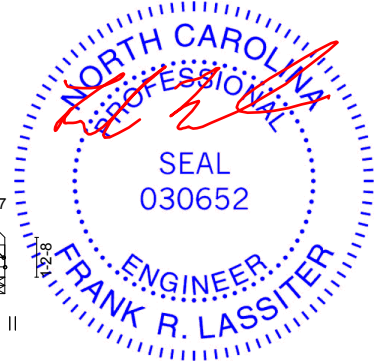


Plate Offsets (X,Y)-- [1:Edge,0-0-8], [4:0-3-0,Edge], [7:Edge,0-0-8]

| 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 0.95 | Vert(LL) | -0.36 | 8-10 | >670 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.51 | Vert(TL) | -0.63 | 8-10 | >381 | MT20HS | 187/143 |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.70 | Horz(TL) | 0.04 | 1 | n/a | MT18H | 244/190 |
| BCDL 10.0 | Code | IRC2009/TPI2007 | (Matrix-S) | Wind(LL) | 0.09 | 8-10 | >999 | | Weight: 153 lb FT = 20% |

LUMBER-

TOP CHORD 2x6 SP No.1
 BOT CHORD 2x8 SP DSS
 WEBS 2x4 SP No.2
 WEDGE
 Left: 2x6 SP No.2, Right: 2x6 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied.
 BOT CHORD Rigid ceiling directly applied.

REACTIONS. (lb/size) 1=971/0-5-8, 7=971/0-5-8
 Max Horz 1=311(LC 7)
 Max Grav 1=1239(LC 2), 7=1239(LC 2)

FORCES. (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=-1601/84, 2-3=-881/259, 3-4=-80/227, 4-5=-80/227, 5-6=-881/259, 6-7=-1601/84
 BOT CHORD 1-10=0/874, 9-10=0/877, 8-9=0/877, 7-8=0/874
 WEBS 6-8=0/1034, 2-10=0/1034, 3-5=-1124/326

NOTES- (11)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Ceiling dead load (5.0 psf) on member(s). 2-3, 5-6, 3-5; Wall dead load (5.0psf) on member(s).6-8, 2-10
- 8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 8-10
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Attic room checked for L/360 deflection.
- 11) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

September 27, 2017

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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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.



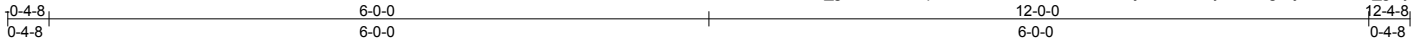
818 Soundside Road
 Edenton, NC 27932

| | | | | | | |
|----------------|---------------|--------------------------------------|----------|----------|-------------|-----------|
| Job 1231742 | Truss CP01 | Truss Type Common Supported Gable | Qty 1 | Ply 1 | H&H-NC/Kent | E10993712 |
|----------------|---------------|--------------------------------------|----------|----------|-------------|-----------|

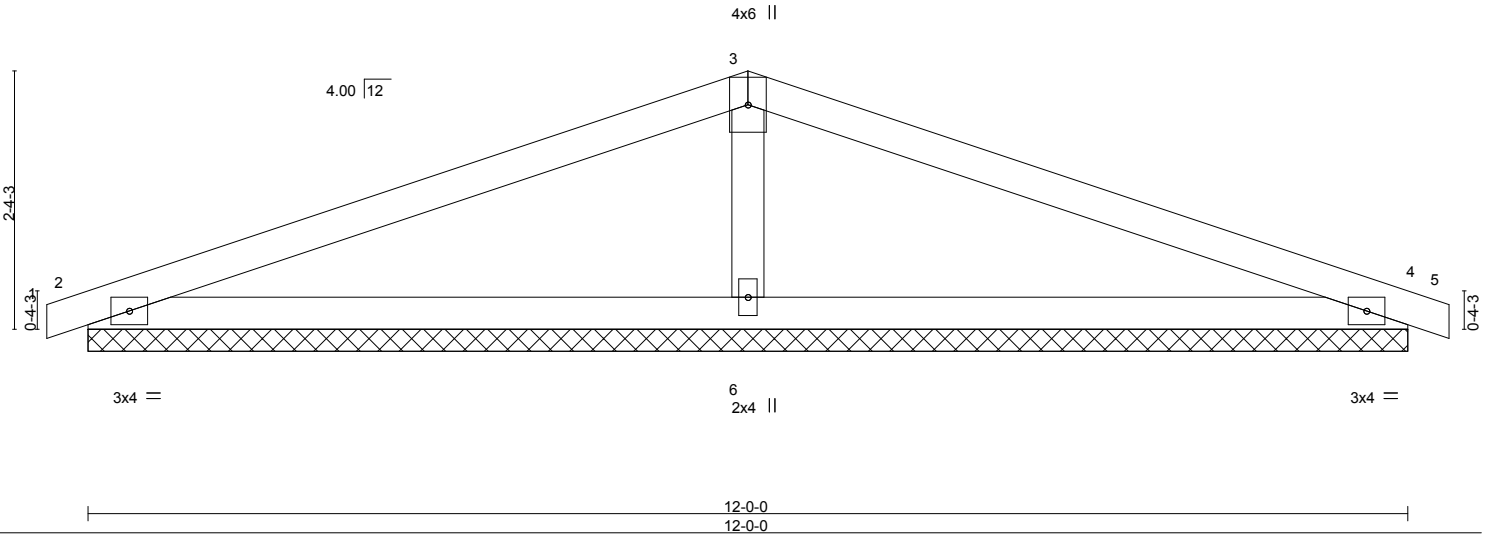
Probuild East, Albemarle, NC 28001

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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 0.50 | Vert(LL) | 0.01 | 5 | n/r | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.35 | Vert(TL) | 0.03 | 5 | n/r | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.08 | Horz(TL) | 0.00 | 4 | n/a | | |
| BCDL 10.0 | Code IRC2009/TPI2007 | | (Matrix) | | | | | Weight: 41 lb | FT = 20% |

LUMBER-

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

BRACING-

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

REACTIONS. (lb/size) 2=228/12-0-0, 4=228/12-0-0, 6=549/12-0-0
 Max Horz 2=-37(LC 7)
 Max Uplift 2=-102(LC 8), 4=-108(LC 7), 6=-117(LC 8)
 Max Grav 2=235(LC 13), 4=235(LC 14), 6=549(LC 1)

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/4, 2-3=-79/63, 3-4=-79/63, 4-5=0/4
 BOT CHORD 2-6=0/26, 4-6=0/26
 WEBS 3-6=-366/283

NOTES- (11)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) zone; 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) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
- 5) Gable requires continuous bottom chord bearing.
- 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.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 102 lb uplift at joint 2, 108 lb uplift at joint 4 and 117 lb uplift at joint 6.
- 10) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 11) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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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.



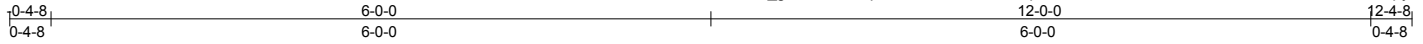
818 Soundside Road
 Edenton, NC 27932

| | | | | | | |
|----------------|---------------|----------------------|----------|----------|-------------|-----------|
| Job 1231742 | Truss CP02 | Truss Type Common | Qty 3 | Ply 1 | H&H-NC/Kent | E10993713 |
|----------------|---------------|----------------------|----------|----------|-------------|-----------|

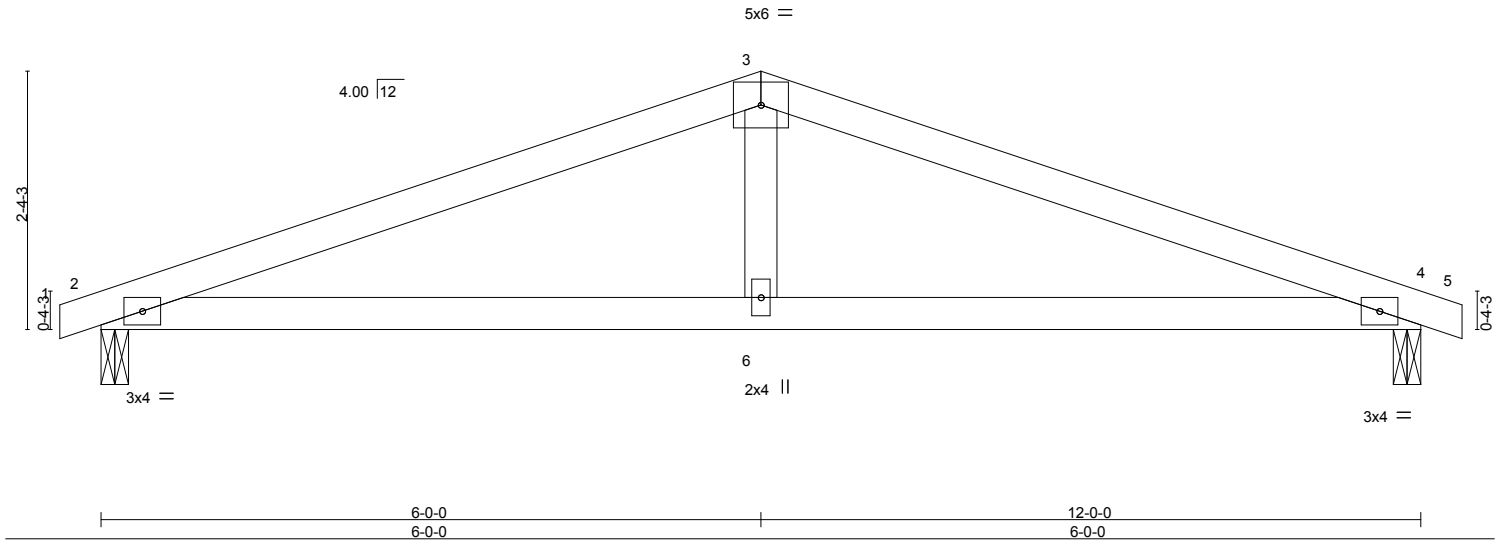
Probuild East, Albemarle, NC 28001

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Scale = 1:20.9



| LOADING (psf) | SPACING- | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|------------|----------------|----------|--------|-----|---------------|----------|
| TCLL 20.0 | Plate Grip DOL 1.15 | TC 0.34 | Vert(LL) -0.02 | 6-9 | >999 | 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.32 | Vert(TL) -0.07 | 6-9 | >999 | 240 | | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.09 | Horz(TL) 0.01 | 4 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2009/TPI2007 | (Matrix-S) | Wind(LL) 0.07 | 6-12 | >999 | 240 | | |
| | | | | | | | Weight: 41 lb | FT = 20% |

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(lb/size) 2=502/0-3-0, 4=503/0-3-0
Max Horz 2=-31(LC 9)
Max Uplift 2=-243(LC 6), 4=-243(LC 7)

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/7, 2-3=-786/1017, 3-4=-786/1017, 4-5=0/7
BOT CHORD 2-6=-882/701, 4-6=-882/701
WEBS 3-6=-340/235

NOTES- (8)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; end vertical left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 243 lb uplift at joint 2 and 243 lb uplift at joint 4.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



September 27, 2017

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

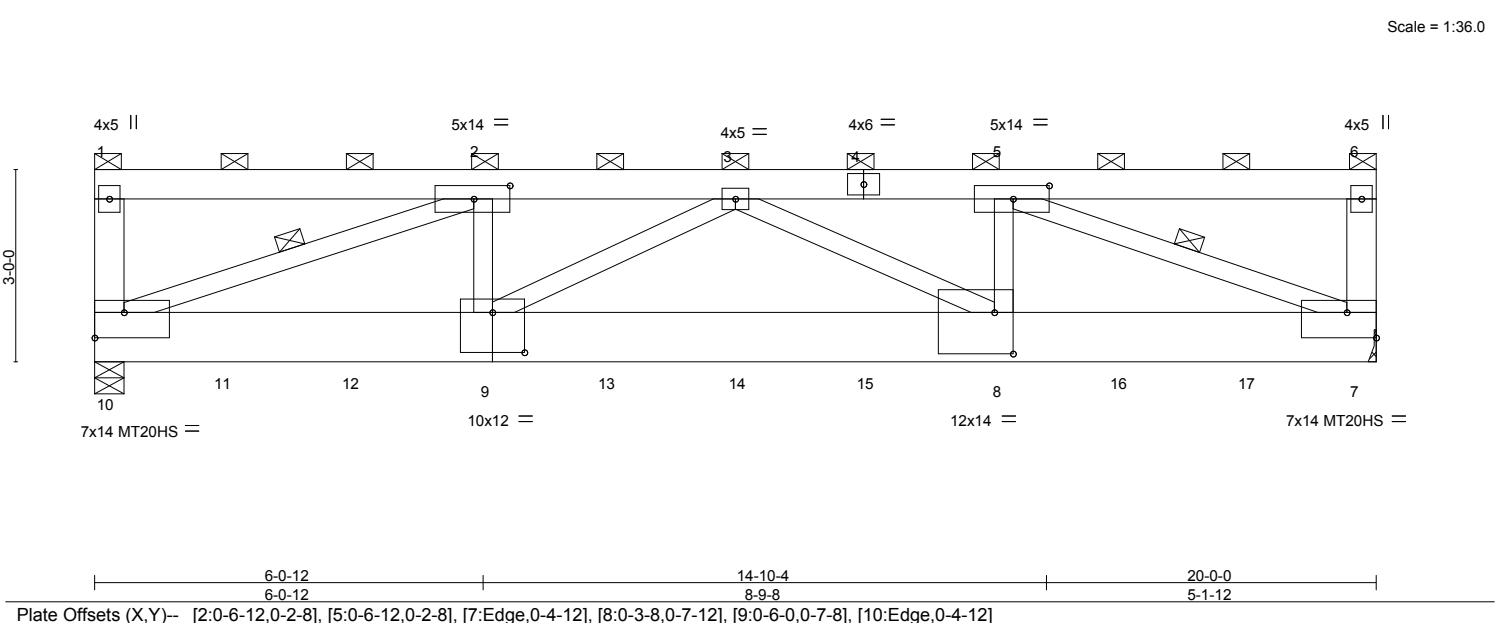
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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 1231742 | Truss FG01 | Truss Type Flat Girder | Qty 1 | Ply 2 | H&H-NC/Kent | E10993714 |
|----------------|---------------|---------------------------|----------|----------|-------------|-----------|

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 7,640 s Aug 16 2017 Mitek Industries, Inc. Wed Sep 27 16:06:40 2017 Page 1
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| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
|---------------|----------------------|------------|-----------------------------|----------------|----------|
| TCLL 20.0 | 2-0-0 | TC 0.61 | in (loc) l/defl L/d | MT20 | 244/190 |
| TCDL 10.0 | Plate Grip DOL 1.15 | BC 0.69 | Vert(LL) -0.18 8-9 >999 360 | MT20HS | 187/143 |
| BCLL 0.0 * | Lumber DOL 1.15 | WB 1.00 | Vert(TL) -0.52 8-9 >451 240 | | |
| BCDL 10.0 | Rep Stress Incr NO | (Matrix-M) | Horz(TL) 0.08 7 n/a n/a | | |
| | Code IRC2009/TP12007 | | Wind(LL) 0.27 8-9 >853 240 | Weight: 337 lb | FT = 20% |

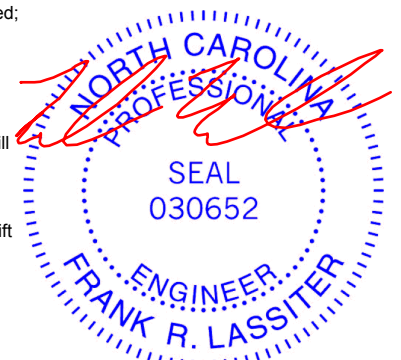
LUMBER-
 TOP CHORD 2x6 SP No.2
 BOT CHORD 2x10 SP DSS
 WEBS 2x4 SP No.2 *Except*
 1-10,6-7: 2x6 SP No.2, 2-10: 2x4 SP SS, 5-7: 2x4 SP No.1

BRACING-
 TOP CHORD 2-0-0 oc purlins (3-6-12 max.): 1-6, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 2-10, 5-7

REACTIONS. (lb/size) 10=7392/0-5-8, 7=7555/Mechanical
 Max Horz 10=62(LC 6)
 Max Uplift 10=-2630(LC 4), 7=-2674(LC 6)

FORCES. (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-10=-321/116, 1-2=-595/256, 2-3=-14490/4592, 3-4=-13918/4396, 4-5=-13918/4396, 5-6=-617/230, 6-7=-327/116
 BOT CHORD 10-11=-4488/14152, 11-12=-4488/14152, 9-12=-4488/14152, 9-13=-4642/14631, 13-14=-4642/14631, 14-15=-4642/14631, 8-15=-4642/14631, 8-16=-4396/13918, 16-17=-4396/13918, 7-17=-4396/13918
 WEBS 2-10=-14647/4585, 2-9=-1705/5534, 3-9=-167/71, 3-8=-821/283, 5-8=-1751/5673, 5-7=-14464/4531

- NOTES-** (15)
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
 Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-3-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise); end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Refer to girder(s) for truss to truss connections.
 - Provide metal plate or equivalent at bearing(s) 7 to support reaction shown.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2630 lb uplift at joint 10 and 2674 lb uplift at joint 7.
 - "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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| Job | Truss | Truss Type | Qty | Ply | H&H-NC/Kent |
|---------|-------|-------------|-----|-----|-------------|
| 1231742 | FG01 | Flat Girder | 1 | 2 | E10993714 |

Probuild East, Albemarle, NC 28001

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NOTES- (15)

- 14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 543 lb down and 467 lb up at 2-0-12, 695 lb down and 284 lb up at 2-0-12, 543 lb down and 467 lb up at 4-0-12, 695 lb down and 284 lb up at 4-0-12, 2477 lb down and 321 lb up at 6-0-4, 695 lb down and 284 lb up at 6-0-12, 696 lb down and 284 lb up at 8-0-12, 696 lb down and 284 lb up at 10-0-12, 696 lb down and 284 lb up at 12-0-12, 696 lb down and 284 lb up at 14-0-12, 2477 lb down and 321 lb up at 14-1-12, 543 lb down and 467 lb up at 16-0-4, 696 lb down and 284 lb up at 16-0-12, and 543 lb down and 467 lb up at 18-0-4, and 696 lb down and 284 lb up at 18-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 15) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-6=-60, 7-10=-20

Concentrated Loads (lb)

Vert: 9=-3172(F=-2477, B=-695) 8=-3172(F=-2477, B=-696) 11=-1238(F=-543, B=-695) 12=-1238(F=-543, B=-695) 13=-696(B) 14=-696(B) 15=-696(B)

16=-1238(F=-543, B=-696) 17=-1238(F=-543, B=-696)

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

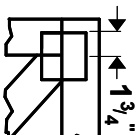
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



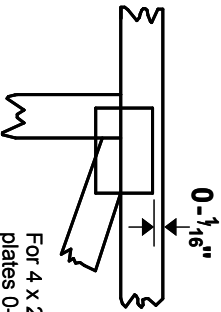
818 Soundside Road
Edenton, NC 27932

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

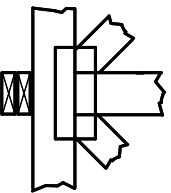
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



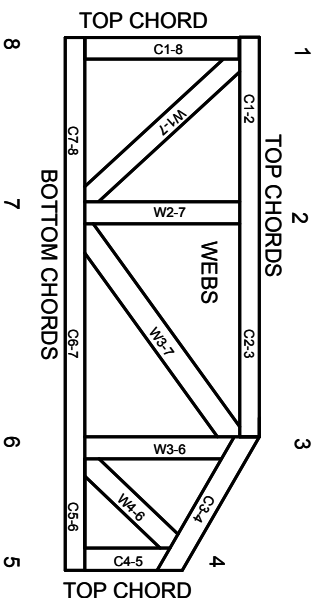
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.