

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0720-3434
Watermark/Lot 18 Oak Haven/Harnett

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Pages or sheets covered by this seal: E14661672 thru E14661688

My license renewal date for the state of North Carolina is December 31, 2020.

North Carolina COA: C-0844



July 24, 2020

Gilbert, Eric

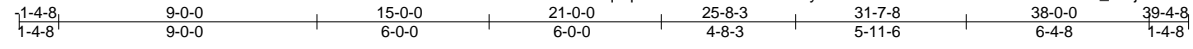
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which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

| | | | | | | |
|-------------------|-------------|----------------------------|----------|----------|------------------------------------|-----------|
| Job J0720-3434 | Truss A1 | Truss Type ROOF SPECIAL | Qty 5 | Ply 1 | Watermark/Lot 18 Oak Haven/Harnett | E14661672 |
|-------------------|-------------|----------------------------|----------|----------|------------------------------------|-----------|

Comtech, Inc. Fayetteville, NC - 28314,

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4x8 =

Scale = 1:80.3

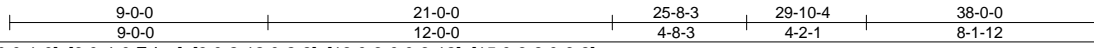
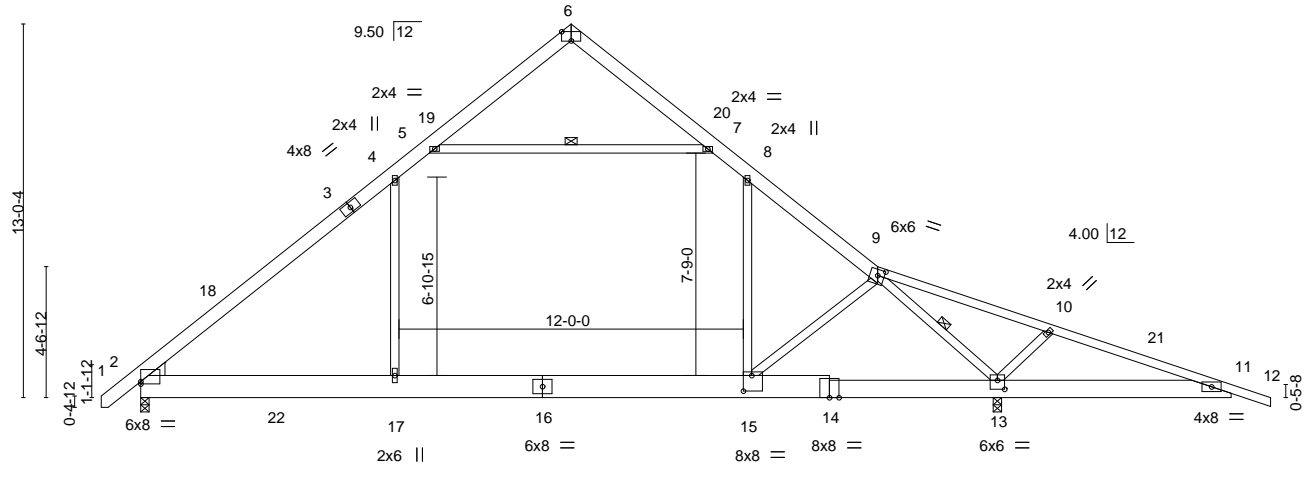


Plate Offsets (X,Y)-- [2:0-0,0,0-1-0], [6:0-4-0,Edge], [9:0-2-12,0-2-8], [13:0-3-0,0-3-12], [15:0-3-8,0-6-8]

| | | | | | | | | | |
|----------------------|----------------------|-------|-------------|--------------|----------|--------|------|----------------|-------------|
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.56 | Vert(LL) | -0.21 | 15-17 | >999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.54 | Vert(CT) | -0.31 | 15-17 | >999 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.51 | Horz(CT) | 0.02 | 13 | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | Wind(LL) | 0.20 | 2-17 | >999 | | |
| | | | | | | | | Weight: 298 lb | FT = 20% |

LUMBER-
TOP CHORD 2x6 SP No.1 *Except*
9-12: 2x4 SP No.1
BOT CHORD 2x10 SP No.1 *Except*
11-14: 2x8 SP No.1
WEBS 2x4 SP No.2
WEDGE
Left: 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-6-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
6-0-0 oc bracing: 11-13.
WEBS 1 Row at midpt 9-13, 5-7

REACTIONS. (size) 2=0-3-8, 13=0-3-8
Max Horz 2=-315(LC 8)
Max Uplift 2=-103(LC 10), 13=-297(LC 7)
Max Grav 2=1507(LC 17), 13=2094(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1850/131, 4-5=-1154/240, 5-6=-275/126, 6-7=-288/139, 7-8=-1153/253,
8-9=-1616/194, 9-10=-1076/1317, 10-11=-1009/1029
BOT CHORD 2-17=-20/1275, 15-17=-20/1275, 13-15=-47/971, 11-13=-914/1031
WEBS 4-17=-177/11, 9-13=-2567/1024, 10-13=-431/225, 8-15=-54/594, 9-15=-376/512,
5-7=-1155/213

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-3-1 to 3-1-12, Interior(1) 3-1-12 to 10-7-3, Exterior(2) 10-7-3 to 19-4-13, Interior(1) 19-4-13 to 34-11-11, Exterior(2) 34-11-11 to 39-4-8 zone; cantilever 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=103, 13=297.



July 24, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ENGINEERING BY
TRENCO
A MiTek Affiliate

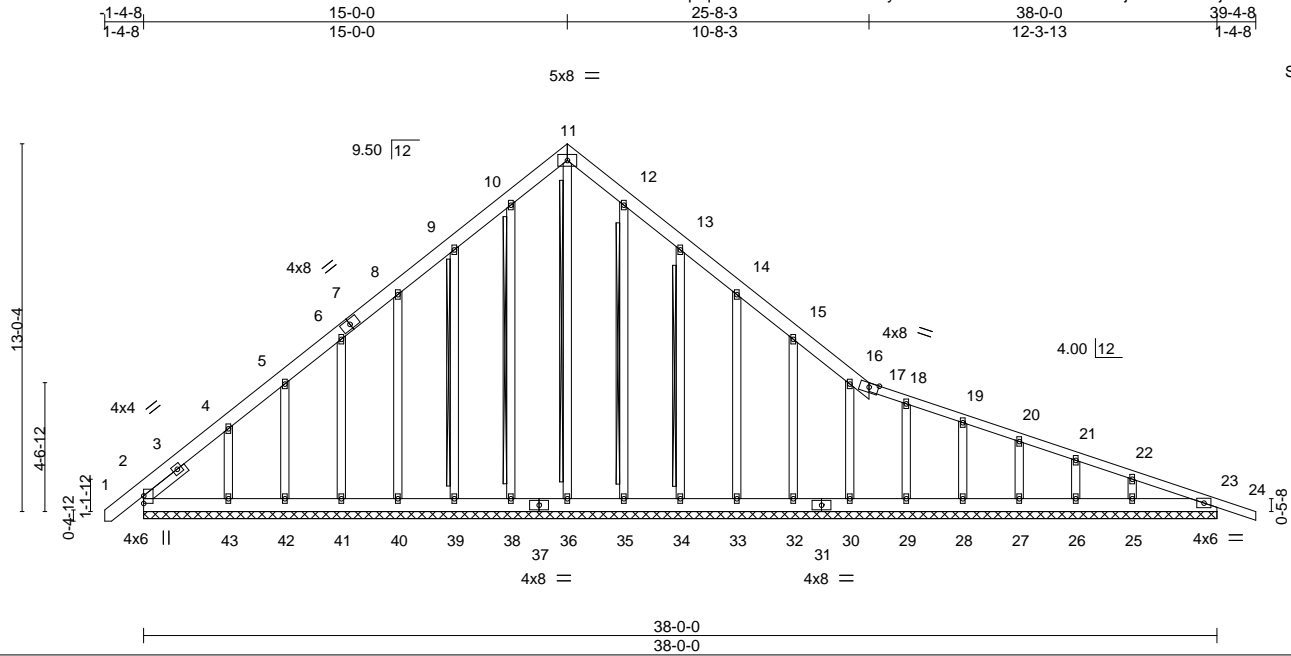
818 Soundside Road
Edenton, NC 27932

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|------------|-------|----------------------|-----|-----|------------------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Watermark/Lot 18 Oak Haven/Harnett | E14661673 |
| J0720-3434 | A1GE | ROOF SPECIAL SUPPORT | 1 | 1 | Job Reference (optional) | |

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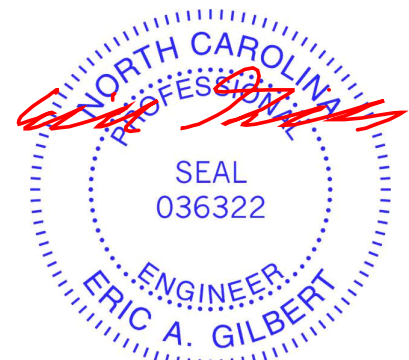
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|----------------------|----------------------|-------|-------------|-----------------------|--------|-----|----------------|-------------|
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. in (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.09 | Vert(LL) -0.00 | 24 | n/r | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.04 | Vert(CT) -0.00 | 24 | n/r | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.26 | Horz(CT) 0.01 | 23 | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | Weight: 341 lb | FT = 20% |

| | |
|--|---|
| LUMBER- | BRACING- |
| TOP CHORD 2x6 SP No.1 *Except* 17-24: 2x4 SP No.1 | 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. |
| BOT CHORD 2x6 SP No.1 | WEBS T-Brace: 2x4 SPF No.2 - 11-36, 10-38, 9-39, 12-35, 13-34 |
| OTHERS 2x4 SP No.2 | Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length. |
| SLIDER Left 2x4 SP No.2 -x 1-10-10 | |

REACTIONS. All bearings 38-0-0.
 (lb) - Max Horz 2=410(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 38, 42, 35, 30, 29, 28, 27, 26, 25
 except 2=150(LC 6), 39=125(LC 10), 40=109(LC 10), 41=113(LC 10),
 43=260(LC 10), 34=129(LC 11), 33=110(LC 11), 32=109(LC 11), 23=104(LC
 7)
 Max Grav All reactions 250 lb or less at joint(s) 38, 39, 40, 41, 42, 35, 34, 33,
 32, 30, 29, 28, 27, 26, 25, 23 except 2=295(LC 19), 36=302(LC 11),
 43=301(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-405/325, 9-10=-232/315, 10-11=-271/360, 11-12=-271/360, 12-13=-232/315,
 22-23=-286/138
 BOT CHORD 2-43=-125/316, 42-43=-125/316, 41-42=-125/316, 40-41=-125/316, 39-40=-125/316,
 38-39=-125/316, 36-38=-125/316, 35-36=-125/316, 34-35=-125/316, 33-34=-125/316,
 32-33=-125/316, 30-32=-125/316, 29-30=-125/316, 28-29=-125/316, 27-28=-125/316,
 26-27=-125/316, 25-26=-125/316, 23-25=-125/316
 WEBS 11-36=-311/168, 4-43=-280/257

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-3-1 to 3-0-0, Exterior(2) 3-0-0 to 10-7-3, Corner(3) 10-7-3 to 19-4-13, Exterior(2) 19-4-13 to 34-11-11, Corner(3) 34-11-11 to 39-4-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable 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) 38, 42, 35, 30, 29, 28, 27, 26, 25, 23 except (it=lb) 2=150, 39=125, 40=109, 41=113, 43=260, 34=129, 33=110, 32=109, 23=104.



| | | | | | |
|-------------------|---------------|------------------------------------|----------|----------|---|
| Job J0720-3434 | Truss A1GE | Truss Type ROOF SPECIAL SUPPORT | Qty 1 | Ply 1 | Watermark/Lot 18 Oak Haven/Harnett E14661673 Job Reference (optional) |
|-------------------|---------------|------------------------------------|----------|----------|---|

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NOTES-

10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road
Edenton, NC 27932

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|------------|-------|------------|-----|-----|------------------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Watermark/Lot 18 Oak Haven/Harnett | E14661674 |
| J0720-3434 | B1 | ATTIC | 4 | 1 | | |

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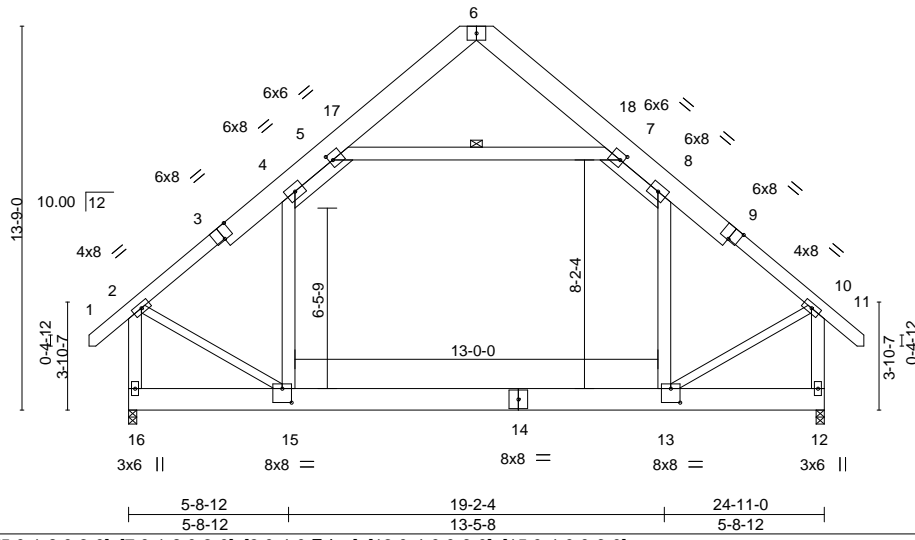
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6x8 =

Scale = 1:82.5



| | |
|-----------------------|--|
| Plate Offsets (X,Y)-- | [3:0-4-0,Edge], [5:0-1-8,0-3-0], [7:0-1-8,0-3-0], [9:0-4-0,Edge], [13:0-4-0,0-6-0], [15:0-4-0,0-6-0] |
|-----------------------|--|

| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
|---------------|----------------------|----------|-------------------------------|----------------|----------|
| TCLL 20.0 | 2-0-0 | TC 0.19 | in (loc) l/defl L/d | MT20 | 244/190 |
| TCDL 10.0 | Plate Grip DOL 1.15 | BC 0.72 | Vert(LL) -0.17 13-15 >999 360 | | |
| BCLL 0.0 * | Lumber DOL 1.15 | WB 0.57 | Vert(CT) -0.26 13-15 >999 240 | | |
| BCDL 10.0 | Rep Stress Incr YES | Matrix-S | Horz(CT) 0.01 12 n/a n/a | | |
| | Code IRC2015/TPI2014 | | Wind(LL) 0.06 15 >999 240 | Weight: 320 lb | FT = 20% |

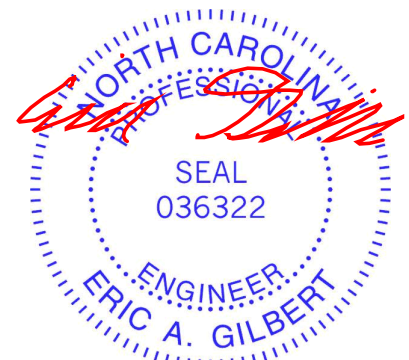
| LUMBER- | BRACING- |
|--|---|
| TOP CHORD 2x10 SP No.1 *Except* 1-3,9-11: 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD 2x10 SP No.1 | BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. |
| WEBS 2x6 SP No.1 *Except* 2-15,10-13: 2x4 SP No.2 | WEBS 1 Row at midpt 5-7 |

REACTIONS. (size) 16=0-3-8, 12=0-3-8
 Max Horz 16=-382(LC 8)
 Max Grav 16=1704(LC 18), 12=1704(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-1636/66, 4-5=-1224/188, 5-6=-333/147, 6-7=-333/147, 7-8=-1223/188,
 8-10=-1636/66, 2-16=-1919/63, 10-12=-1919/63
 BOT CHORD 15-16=-382/380, 13-15=0/1243
 WEBS 5-7=-1053/154, 4-15=-84/571, 8-13=-84/571, 2-15=0/1444, 10-13=0/1445

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-3-1 to 3-1-12, Interior(1) 3-1-12 to 8-1-3, Exterior(2) 8-1-3 to 16-10-13, Interior(1) 16-10-13 to 21-10-4, Exterior(2) 21-10-4 to 26-3-1 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 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 (10.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s). 4-15, 8-13
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-15
- Attic room checked for L/360 deflection.



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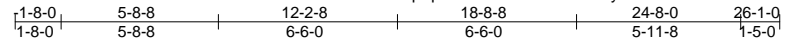
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| <p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for 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, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p> | <p>ENGINEERING BY</p> <p>TRENCO</p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p> |
|--|---|

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|------------|-------|------------|-----|-----|------------------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Watermark/Lot 18 Oak Haven/Harnett | E14661675 |
| J0720-3434 | B1A | ROOF TRUSS | 3 | 1 | | |

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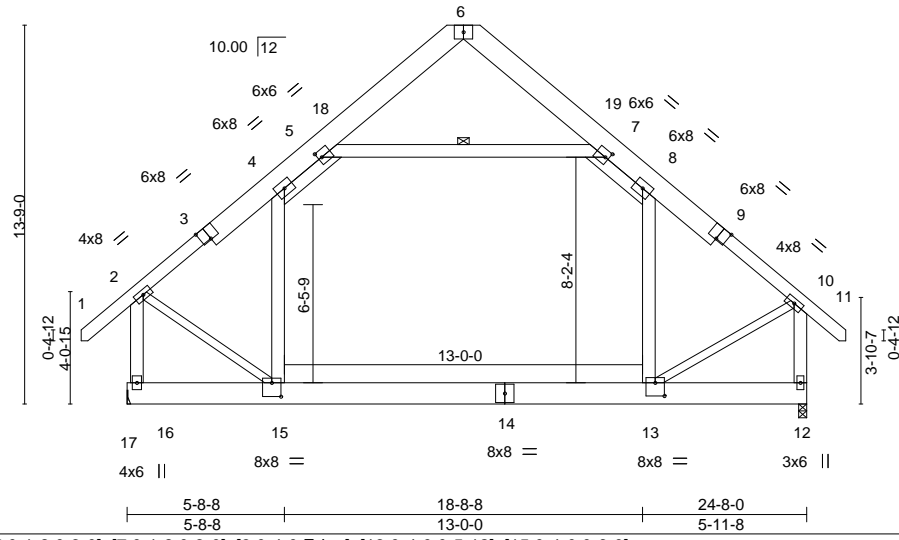
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6x8 =

Scale = 1:83.6



| | |
|------------------------|---|
| Plate Offsets (X, Y)-- | [3:0-4-0,Edge], [5:0-1-8,0-3-0], [7:0-1-8,0-3-0], [9:0-4-0,Edge], [13:0-4-0,0-5-12], [15:0-4-0,0-6-0] |
|------------------------|---|

| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
|---------------|----------------------|----------|-------------------------------|----------------|----------|
| TCLL 20.0 | 2-0-0 | TC 0.20 | in (loc) l/defl L/d | MT20 | 244/190 |
| TCDL 10.0 | Plate Grip DOL 1.15 | BC 0.72 | Vert(LL) -0.16 13-15 >999 360 | | |
| BCLL 0.0 * | Lumber DOL 1.15 | WB 0.55 | Vert(CT) -0.25 13-15 >999 240 | | |
| BCDL 10.0 | Rep Stress Incr YES | Matrix-S | Horz(CT) 0.01 12 n/a n/a | | |
| | Code IRC2015/TPI2014 | | Wind(LL) 0.06 13 >999 240 | Weight: 320 lb | FT = 20% |

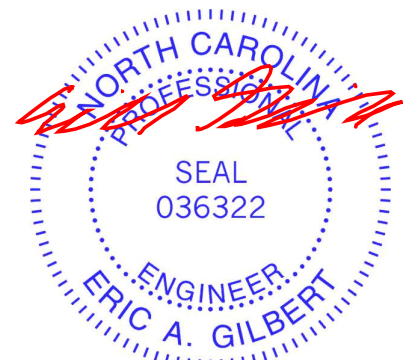
| LUMBER- | BRACING- |
|--|---|
| TOP CHORD 2x10 SP No.1 *Except* 1-3,9-11: 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD 2x10 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: |
| WEBS 2x6 SP No.1 *Except* 2-15,10-13: 2x4 SP No.2 | WEBS 6-0-0 oc bracing: 15-16. 1 Row at midpt 5-7 |

REACTIONS. (size) 16=Mechanical, 12=0-3-8
 Max Horz 16=266(LC 9)
 Max Grav 16=1735(LC 18), 12=1684(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-1563/36, 4-5=-1194/163, 5-6=-345/154, 6-7=-336/156, 7-8=-1181/165,
 8-10=-1585/24, 2-16=-1977/70, 10-12=-1858/55
 BOT CHORD 15-16=-279/290, 13-15=0/1177
 WEBS 4-15=-118/533, 8-13=-94/561, 2-15=0/1468, 10-13=0/1371, 5-7=-1011/113

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-6-9 to 2-10-4, Interior(1) 2-10-4 to 7-9-11, Exterior(2) 7-9-11 to 16-7-5, Interior(1) 16-7-5 to 21-6-12, Exterior(2) 21-6-12 to 25-11-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s). 4-15, 8-13
- 6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-15
- 7) Refer to girder(s) for truss to truss connections.
- 8) Attic room checked for L/360 deflection.



July 24, 2020

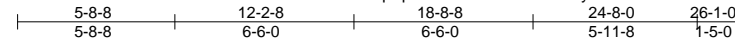
| | |
|--|---|
| <p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not 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, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p> | <p>ENGINEERING BY</p> <p>TRENCO</p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p> |
|--|---|

| | | | | | | |
|------------|-------|------------|-----|-----|------------------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Watermark/Lot 18 Oak Haven/Harnett | E14661676 |
| J0720-3434 | B2 | ROOF TRUSS | 5 | 1 | | |

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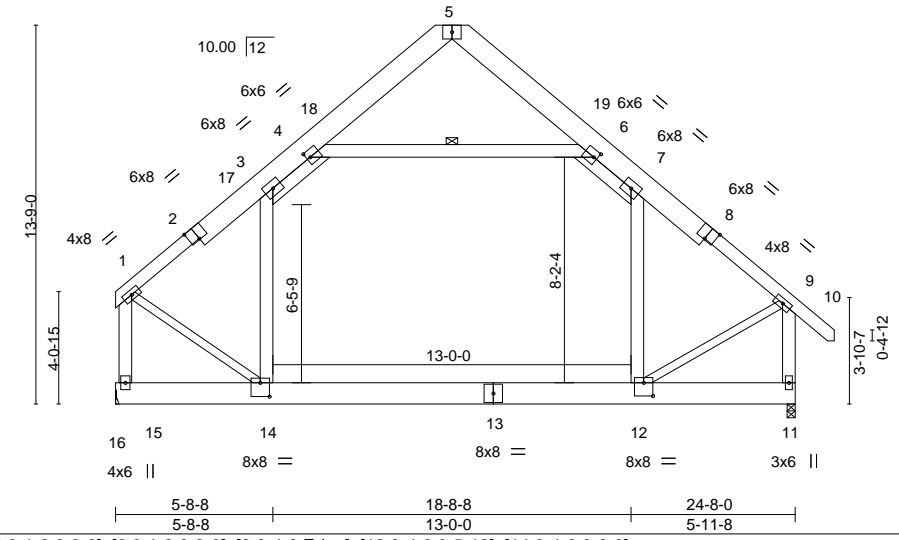
8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 24 13:39:12 2020 Page 1

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6x8 =

Scale = 1:83.6



| | |
|-----------------------|---|
| Plate Offsets (X,Y)-- | [2:0-4-0,Edge], [4:0-1-8,0-3-0], [6:0-1-8,0-3-0], [8:0-4-0,Edge], [12:0-4-0,0-5-12], [14:0-4-0,0-6-0] |
|-----------------------|---|

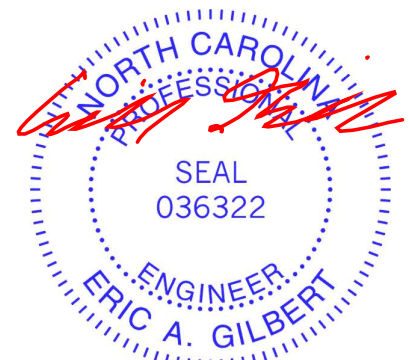
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|----------|----------|----------|--------|------|----------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.20 | Vert(LL) | -0.16 | 12-14 | >999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.72 | Vert(CT) | -0.25 | 12-14 | >999 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.56 | Horz(CT) | 0.01 | 11 | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | Wind(LL) | 0.06 | 12 | >999 | Weight: 315 lb | FT = 20% |

| LUMBER- | BRACING- |
|--|---|
| TOP CHORD 2x10 SP No.1 *Except* 1-2,8-10: 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD 2x10 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: |
| WEBS 2x6 SP No.1 *Except* 1-14,9-12: 2x4 SP No.2 | WEBS 6-0-0 oc bracing: 14-15. 1 Row at midpt 4-6 |

REACTIONS. (size) 15=Mechanical, 11=0-3-8
 Max Horz 15=-254(LC 6)
 Max Grav 15=1641(LC 19), 11=1689(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-3=-1569/4, 3-4=-1199/162, 4-5=-340/151, 5-6=-332/147, 6-7=-1186/160,
 7-9=-1593/21, 1-15=-1893/0, 9-11=-1866/52
 BOT CHORD 14-15=-253/278, 12-14=0/1184
 WEBS 3-14=-128/527, 7-12=-90/562, 1-14=0/1449, 9-12=0/1381, 4-6=-1017/119

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-1, Interior(1) 4-9-1 to 7-9-11, Exterior(2) 7-9-11 to 16-7-5, Interior(1) 16-7-5 to 21-6-12, Exterior(2) 21-6-12 to 25-11-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Ceiling dead load (10.0 psf) on member(s). 3-4, 6-7, 4-6; Wall dead load (5.0psf) on member(s). 3-14, 7-12
 - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-14
 - Refer to girder(s) for truss to truss connections.
 - Attic room checked for L/360 deflection.



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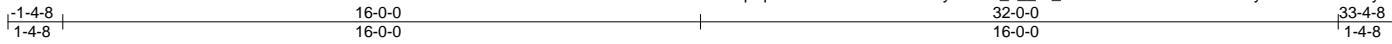
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|------------|-------|------------|-----|-----|------------------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Watermark/Lot 18 Oak Haven/Harnett | E14661678 |
| J0720-3434 | C1GE | GABLE | 1 | 1 | | |

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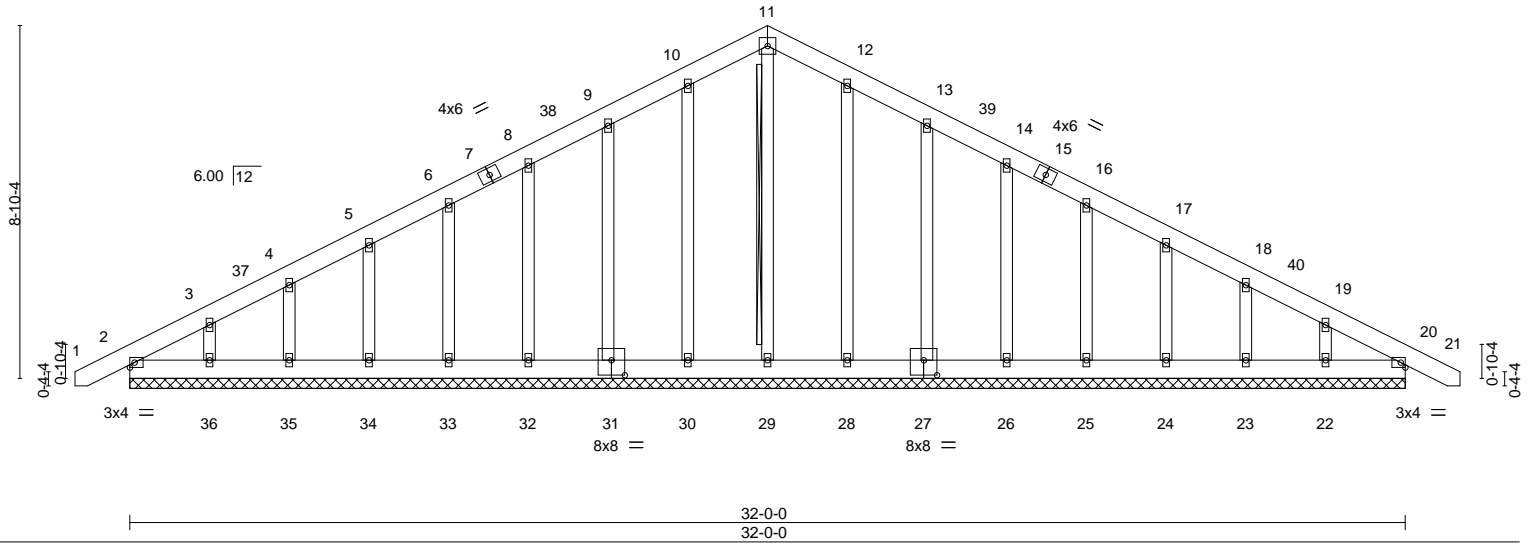
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Job Reference (optional)



5x5 =

Scale = 1:57.8



| | |
|-----------------------|------------------------------------|
| Plate Offsets (X,Y)-- | [27:0-4-0,0-4-8], [31:0-4-0,0-4-8] |
|-----------------------|------------------------------------|

| | | | | | | | | | |
|----------------------|----------------------|-------|-------------|--------------|----------|--------|-----|----------------|-------------|
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.06 | Vert(LL) | -0.00 | 20 | n/r | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.02 | Vert(CT) | -0.00 | 21 | n/r | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.11 | Horz(CT) | 0.00 | 20 | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | |
| | | | | | | | | Weight: 260 lb | FT = 20% |

| | |
|-----------------------|---|
| LUMBER- | BRACING- |
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| OTHERS 2x4 SP No.2 | WEBS T-Brace: 2x4 SPF No.2 - 11-29 |
| | Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. |
| | Brace must cover 90% of web length. |

REACTIONS. All bearings 32-0-0.
 (lb) - Max Horz 2=-174(LC 15)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 20, 30, 31, 32, 33, 34, 35, 28, 27, 26, 25, 24, 23, 22 except 36=-105(LC 10)
 Max Grav All reactions 250 lb or less at joint(s) 2, 20, 29, 30, 31, 32, 33, 34, 35, 36, 28, 27, 26, 25, 24, 23, 22

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 9-10=-96/291, 10-11=-112/366, 11-12=-112/366, 12-13=-96/291

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-2-10 to 3-2-3, Exterior(2) 3-2-3 to 11-7-3, Corner(3) 11-7-3 to 20-4-13, Exterior(2) 20-4-13 to 28-9-13, Corner(3) 28-9-13 to 33-2-10 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 20, 30, 31, 32, 33, 34, 35, 28, 27, 26, 25, 24, 23, 22 except (jt=lb) 36=105.
 - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



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WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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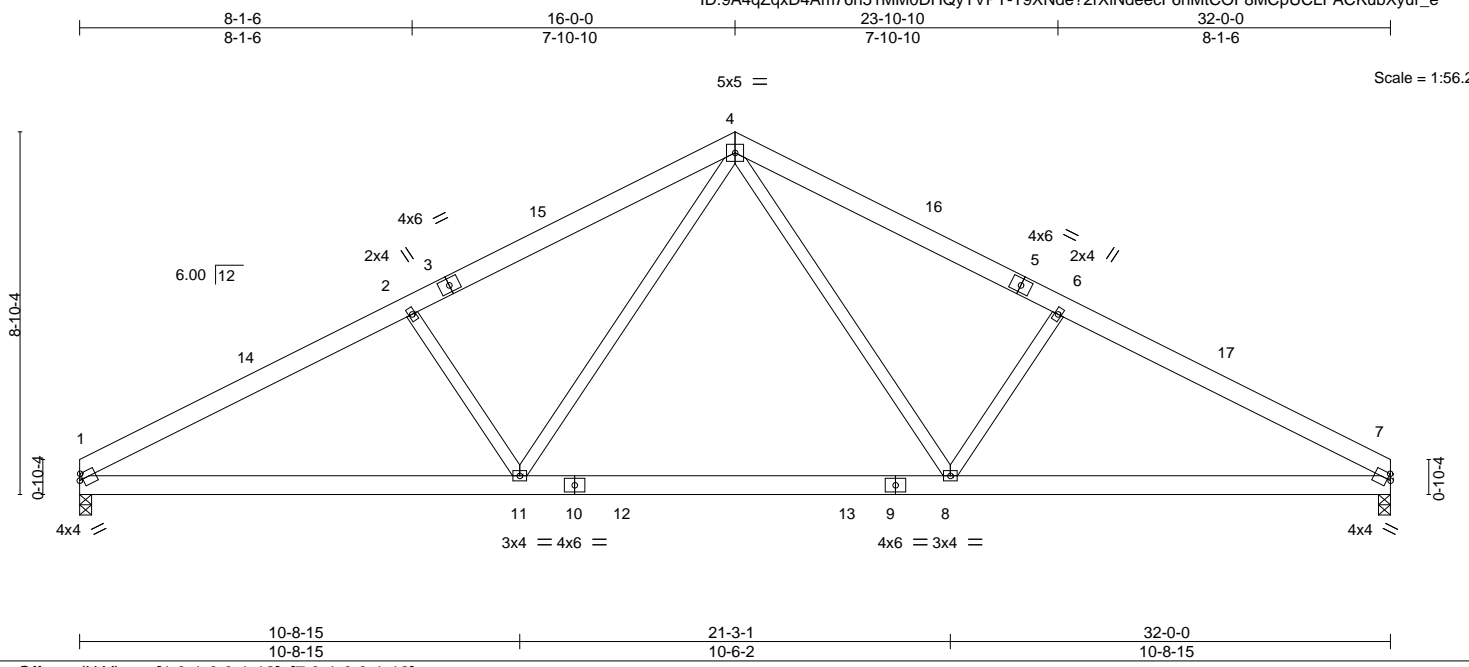
| | | | | | | |
|------------|-------|------------|-----|-----|------------------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Watermark/Lot 18 Oak Haven/Harnett | E14661679 |
| J0720-3434 | C2 | FINK | 4 | 1 | | |

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Job Reference (optional)



| | | | | | |
|----------------------|----------------------|-------------|------------------------------|----------------|-------------|
| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
| TCLL 20.0 | 2-0-0 | TC 0.39 | in (loc) l/defl L/d | MT20 | 244/190 |
| TCDL 10.0 | Plate Grip DOL 1.15 | BC 0.42 | Vert(LL) -0.15 8-11 >999 360 | | |
| BCLL 0.0 * | Lumber DOL 1.15 | WB 0.29 | Vert(CT) -0.23 8-11 >999 240 | | |
| BCDL 10.0 | Rep Stress Incr YES | Matrix-S | Horz(CT) 0.05 7 n/a n/a | | |
| | Code IRC2015/TPI2014 | | Wind(LL) 0.05 8 >999 240 | Weight: 202 lb | FT = 20% |

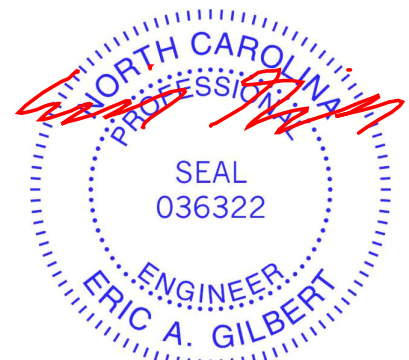
| | |
|-----------------------|---|
| LUMBER- | BRACING- |
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 5-0-8 oc purlins. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS 2x4 SP No.2 | |

REACTIONS. (size) 1=0-3-8, 7=0-3-8
 Max Horz 1=-109(LC 6)
 Max Uplift 1=-107(LC 10), 7=-107(LC 11)
 Max Grav 1=1268(LC 1), 7=1268(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-2114/623, 2-4=-1877/643, 4-6=-1877/643, 6-7=-2114/623
 BOT CHORD 1-11=-429/1788, 8-11=-177/1213, 7-8=-429/1788
 WEBS 2-11=-428/299, 4-11=-173/734, 4-8=-173/734, 6-8=-428/299

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 11-7-3, Exterior(2) 11-7-3 to 20-4-13, Interior(1) 20-4-13 to 27-5-7, Exterior(2) 27-5-7 to 31-10-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=107, 7=107.



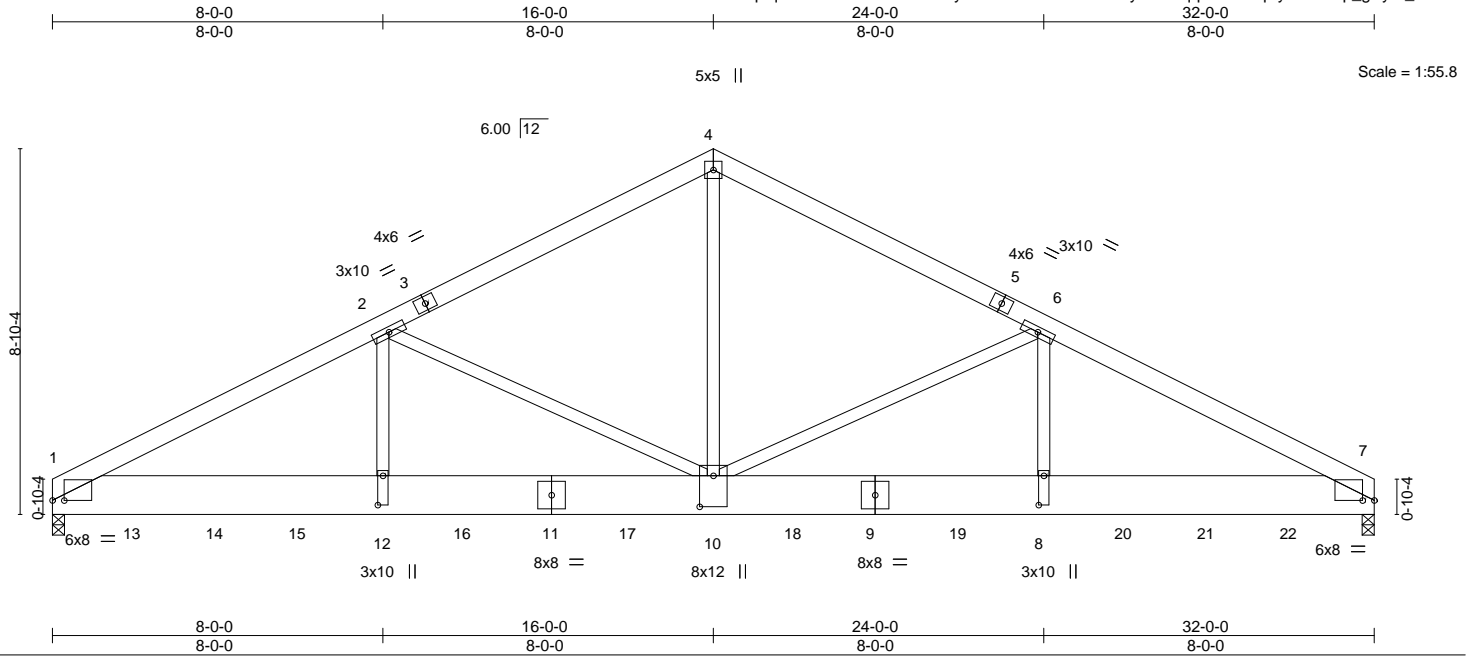
July 24, 2020

| | | | | | | |
|------------|-------|------------|-----|-----|------------------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Watermark/Lot 18 Oak Haven/Harnett | E14661680 |
| J0720-3434 | C3GDR | HOWE | 1 | 2 | Job Reference (optional) | |

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| | |
|-----------------------|---|
| Plate Offsets (X,Y)-- | [1:0-3-6,0-0-0], [7:0-3-6,0-0-0], [8:0-8-8,0-1-8], [10:0-9-0,0-4-0], [12:0-8-8,0-1-8] |
|-----------------------|---|

| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|----------|----------|----------|--------|------|----------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.39 | Vert(LL) | -0.13 | 8-10 | >999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.67 | Vert(CT) | -0.25 | 8-10 | >999 | | |
| BCLL 0.0 * | Rep Stress Incr | NO | WB 0.84 | Horz(CT) | 0.06 | 7 | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | Wind(LL) | 0.12 | 10-12 | >999 | Weight: 568 lb | FT = 20% |

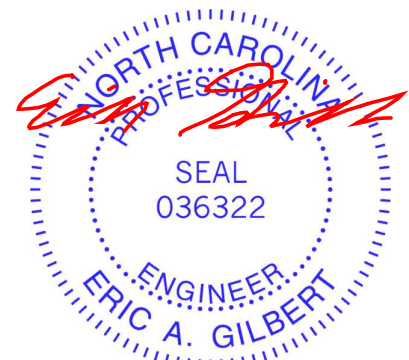
| LUMBER- | BRACING- |
|------------------------|---|
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 5-0-6 oc purlins. |
| BOT CHORD 2x12 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS 2x4 SP No.2 | |

REACTIONS. (size) 1=0-3-8, 7=0-3-8
 Max Horz 1=-106(LC 23)
 Max Uplift 1=-1186(LC 8), 7=-1181(LC 9)
 Max Grav 1=5699(LC 1), 7=5677(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-9810/2045, 2-4=-6906/1482, 4-6=-6906/1483, 6-7=-9826/2050
 BOT CHORD 1-12=-1826/8615, 10-12=-1826/8615, 8-10=-1734/8629, 7-8=-1734/8629
 WEBS 2-12=-458/2319, 4-10=-1187/5599, 6-8=-460/2334, 2-10=-2887/726, 6-10=-2903/731

- NOTES-**
- 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: 2x12 - 2 rows staggered at 0-9-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); 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) 1=1186, 7=1181.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 588 lb down and 153 lb up at 1-11-4, 588 lb down and 153 lb up at 3-11-4, 588 lb down and 153 lb up at 5-11-4, 588 lb down and 153 lb up at 7-11-4, 588 lb down and 153 lb up at 9-11-4, 588 lb down and 153 lb up at 11-11-4, 591 lb down and 154 lb up at 13-11-4, 591 lb down and 154 lb up at 15-11-4, 591 lb down and 154 lb up at 17-11-4, 591 lb down and 154 lb up at 19-11-4, 591 lb down and 154 lb up at 21-11-4, 588 lb down and 153 lb up at 23-11-4, 588 lb down and 153 lb up at 25-11-4, and 588 lb down and 153 lb up at 27-11-4, and 588 lb down and 153 lb up at 29-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard



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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 | Watermark/Lot 18 Oak Haven/Harnett | E14661680 |
| J0720-3434 | C3GDR | HOWE | 1 | 2 | Job Reference (optional) | |

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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: 1-7=-20, 1-4=-60, 4-7=-60

Concentrated Loads (lb)

Vert: 11=-588(F) 12=-588(F) 10=-591(F) 8=-588(F) 9=-591(F) 13=-588(F) 14=-588(F) 15=-588(F) 16=-588(F) 17=-591(F) 18=-591(F) 19=-591(F) 20=-588(F)
 21=-588(F) 22=-588(F)

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| | | | | | | |
|------------|-------|------------|-----|-----|------------------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Watermark/Lot 18 Oak Haven/Harnett | E14661681 |
| J0720-3434 | D1 | COMMON | 10 | 1 | | |

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Scale = 1:68.1

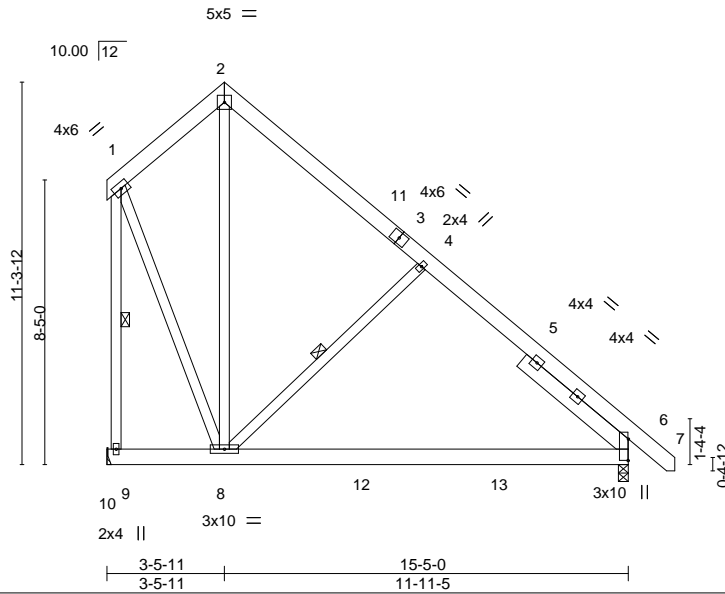


Plate Offsets (X,Y)-- [6:0-7-10,0-0-2]

| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|----------|----------|----------|--------|------|----------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.16 | Vert(LL) | -0.12 | 6-8 | >999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.38 | Vert(CT) | -0.24 | 6-8 | >756 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.15 | Horz(CT) | 0.00 | 6 | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | Wind(LL) | 0.01 | 6-8 | >999 | | |
| | | | | | | | | Weight: 149 lb | FT = 20% |

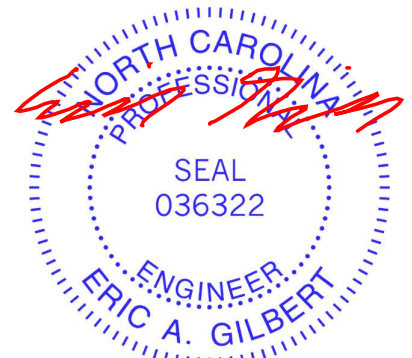
LUMBER-
 TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x4 SP No.2
 SLIDER Right 2x6 SP No.1 -x 4-1-3

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.
 WEBS 1 Row at midpt 4-8, 1-9

REACTIONS. (size) 6=0-3-8, 9=Mechanical
 Max Horz 9=-302(LC 11)
 Max Uplift 6=-4(LC 11), 9=-133(LC 11)
 Max Grav 6=701(LC 18), 9=665(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-294/133, 2-4=-366/106, 4-6=-594/92, 1-9=-749/225
 BOT CHORD 8-9=-294/349, 6-8=0/395
 WEBS 4-8=-440/294, 1-8=-117/575

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-4 to 7-10-7, Interior(1) 7-10-7 to 12-3-4, Exterior(2) 12-3-4 to 16-8-1 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 9=133.



July 24, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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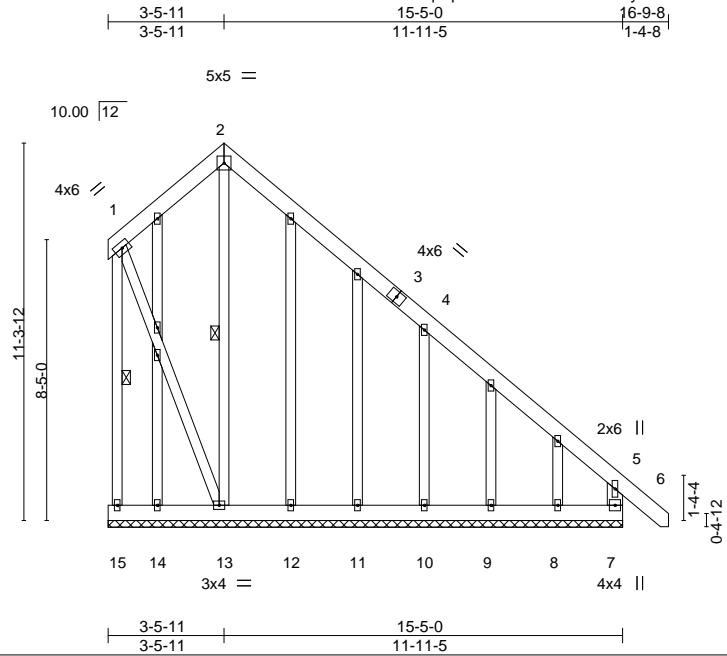
818 Soundside Road
 Edenton, NC 27932

| | | | | | | |
|------------|-------|------------|-----|-----|------------------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Watermark/Lot 18 Oak Haven/Harnett | E14661682 |
| J0720-3434 | D1GE | GABLE | 2 | 1 | | |

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 24 13:39:21 2020 Page 1

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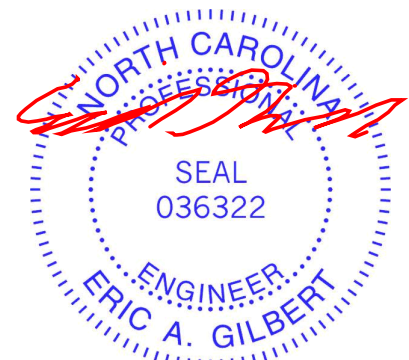
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|----------|----------|----------|--------|-----|----------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.17 | Vert(LL) | 0.00 | 6 | n/r | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.15 | Vert(CT) | 0.00 | 6 | n/r | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.30 | Horz(CT) | 0.00 | 7 | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | |
| | | | | | | | | Weight: 182 lb | FT = 20% |

| LUMBER- | BRACING- |
|---|---|
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS 2x4 SP No.2 *Except* 5-7: 2x6 SP No.1 | WEBS 1 Row at midpt 1-15, 2-13 |
| OTHERS 2x4 SP No.2 | |

REACTIONS. All bearings 15-5-0.
 (lb) - Max Horz 15=-295(LC 11)
 Max Uplift All uplift 100 lb or less at joint(s) 7, 13 except 15=-226(LC 11), 10=-296(LC 11), 8=-145(LC 11)
 Max Grav All reactions 250 lb or less at joint(s) 15, 14, 12, 11, 9, 8 except 7=274(LC 20), 10=535(LC 18), 13=304(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-15=-334/312, 5-7=-262/19
 BOT CHORD 14-15=-225/402, 13-14=-225/402, 12-13=-156/333, 11-12=-156/333, 10-11=-156/333,
 9-10=-156/333, 8-9=-156/333, 7-8=-156/333
 WEBS 4-10=-572/443

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Corner(3) 0-3-4 to 7-10-7, Exterior(2) 7-10-7 to 12-3-4, Corner(3) 12-3-4 to 16-8-1 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable 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, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 13 except (jt=lb) 15=226, 10=296, 8=145.



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ENGINEERING BY
TRENCO
 A MiTek Affiliate

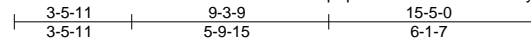
818 Soundside Road
 Edenton, NC 27932

| | | | | | | |
|------------|-------|------------|-----|-----|------------------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Watermark/Lot 18 Oak Haven/Harnett | E14661683 |
| J0720-3434 | D2 | COMMON | 5 | 1 | Job Reference (optional) | |

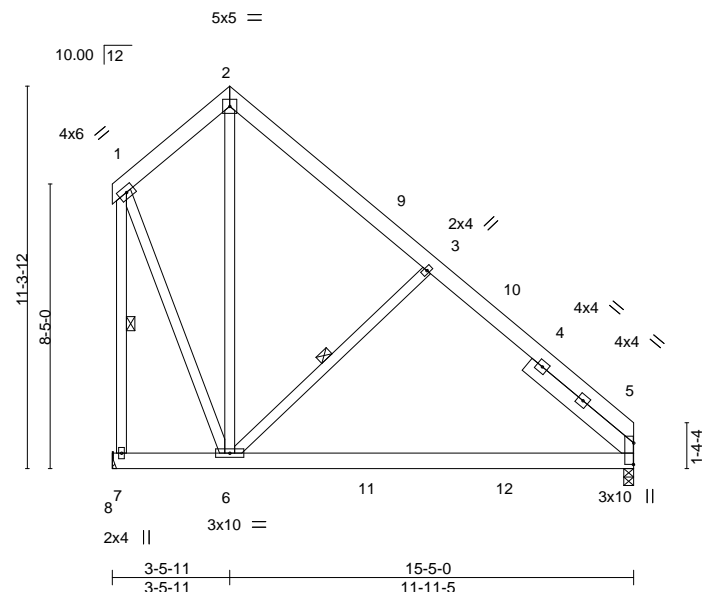
Comtech, Inc. Fayetteville, NC - 28314,

8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 24 13:39:21 2020 Page 1

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Scale = 1:68.1



| | |
|-----------------------|------------------|
| Plate Offsets (X,Y)-- | [5:0-7-10,0-0-2] |
|-----------------------|------------------|

| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
|---------------|----------------------|----------|-----------------------------|----------------|----------|
| TCLL 20.0 | 2-0-0 | TC 0.16 | in (loc) l/defl L/d | MT20 | 244/190 |
| TCDL 10.0 | Plate Grip DOL 1.15 | BC 0.39 | Vert(LL) -0.13 5-6 >999 360 | | |
| BCLL 0.0 * | Lumber DOL 1.15 | WB 0.16 | Vert(CT) -0.25 5-6 >741 240 | | |
| BCDL 10.0 | Rep Stress Incr YES | Matrix-S | Horz(CT) 0.00 5 n/a n/a | | |
| | Code IRC2015/TPI2014 | | Wind(LL) 0.01 5-6 >999 240 | Weight: 145 lb | FT = 20% |

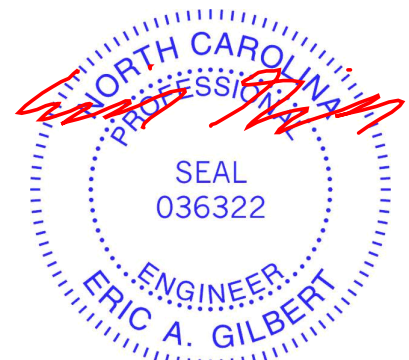
| LUMBER- | BRACING- |
|-----------------------------------|---|
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. |
| WEBS 2x4 SP No.2 | WEBS 1 Row at midpt 3-6, 1-7 |
| SLIDER Right 2x6 SP No.1 -x 4-1-3 | |

REACTIONS. (size) 5=0-3-8, 7=Mechanical
 Max Horz 7=-296(LC 11)
 Max Uplift 7=-134(LC 11)
 Max Grav 5=628(LC 18), 7=668(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-294/136, 2-3=-368/111, 3-5=-597/99, 1-7=-754/233
 BOT CHORD 6-7=-300/344, 5-6=0/395
 WEBS 3-6=-438/314, 1-6=-124/579

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-4 to 7-10-7, Interior(1) 7-10-7 to 11-0-3, Exterior(2) 11-0-3 to 15-5-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 7=134.



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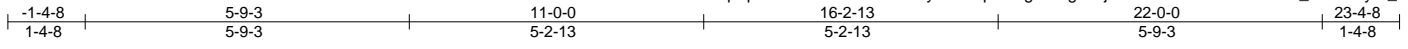
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|------------|-------|------------|-----|-----|------------------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Watermark/Lot 18 Oak Haven/Harnett | E14661684 |
| J0720-3434 | G1 | QUEENPOST | 6 | 1 | | |

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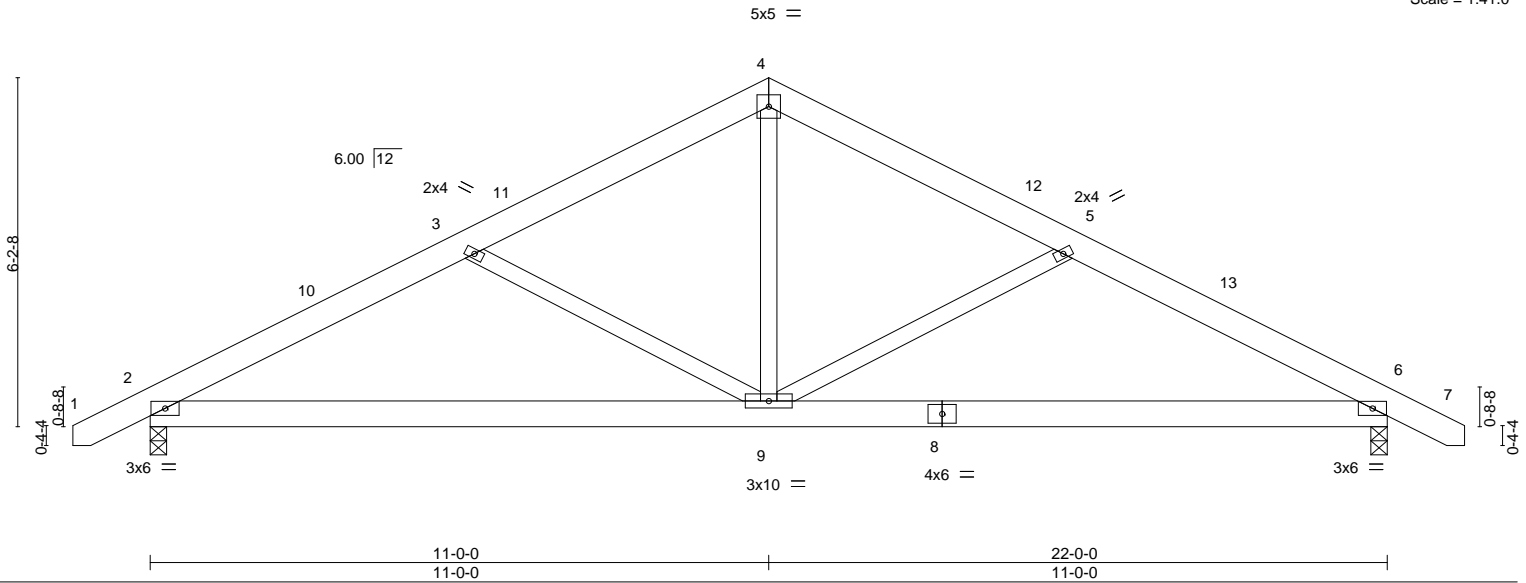
8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 24 13:39:22 2020 Page 1

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Job Reference (optional)



Scale = 1:41.0



| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|----------|----------|-----------|--------|-----|----------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.12 | Vert(LL) | -0.07 2-9 | >999 | 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.41 | Vert(CT) | -0.15 2-9 | >999 | 240 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.22 | Horz(CT) | 0.02 6 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | Wind(LL) | 0.02 9 | >999 | 240 | | |
| | | | | | | | | Weight: 142 lb | FT = 20% |

LUMBER-
 TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x4 SP No.2

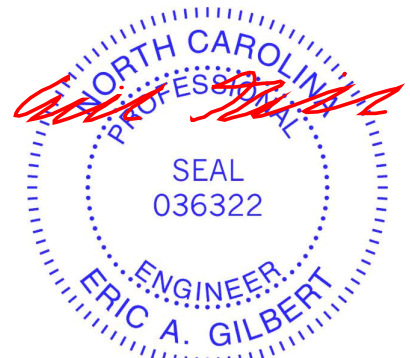
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=0-3-8, 2=0-3-8
 Max Horz 2=80(LC 9)
 Max Uplift 6=93(LC 11), 2=93(LC 10)
 Max Grav 6=950(LC 1), 2=950(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1378/465, 3-4=-1054/361, 4-5=-1054/361, 5-6=-1378/465
 BOT CHORD 2-9=-288/1162, 6-9=-288/1162
 WEBS 3-9=-352/240, 4-9=-105/613, 5-9=-352/240

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-2-10 to 3-2-3, Interior(1) 3-2-3 to 6-7-3, Exterior(2) 6-7-3 to 15-4-13, Interior(1) 15-4-13 to 18-9-13, Exterior(2) 18-9-13 to 23-2-10 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2.



July 24, 2020

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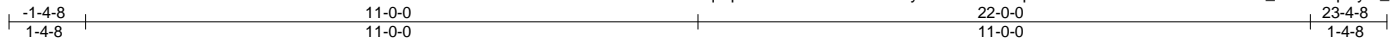
818 Soundside Road
 Edenton, NC 27932

| | | | | | |
|-------------------|---------------|---------------------|----------|----------|---|
| Job J0720-3434 | Truss G1GE | Truss Type GABLE | Qty 1 | Ply 1 | Watermark/Lot 18 Oak Haven/Harnett E14661685 |
|-------------------|---------------|---------------------|----------|----------|---|

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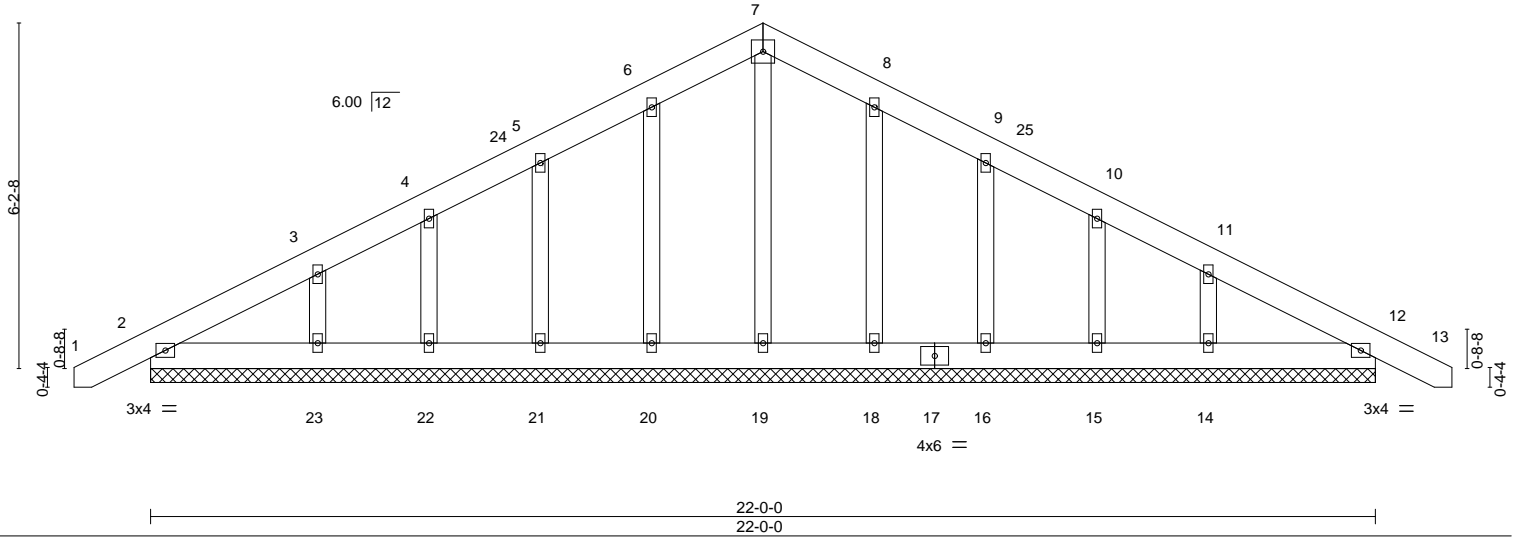
8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 24 13:39:23 2020 Page 1

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5x5 =

Scale = 1:41.4



| 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 0.04 | Vert(LL) | -0.00 | 12 | n/r | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.02 | Vert(CT) | 0.00 | 12 | n/r | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.06 | Horz(CT) | 0.00 | 12 | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | |
| | | | | | | | | Weight: 158 lb | FT = 20% |

LUMBER-
 TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 OTHERS 2x4 SP No.2

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

REACTIONS. All bearings 22-0-0.
 (lb) - Max Horz 2=124(LC 14)
 Max Uplift All uplift 100 lb or less at joint(s) 12, 2, 20, 21, 22, 18, 16, 15 except 23=-109(LC 10), 14=-106(LC 11)
 Max Grav All reactions 250 lb or less at joint(s) 12, 2, 19, 20, 21, 22, 23, 18, 16, 15, 14

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 6-7=-81/279, 7-8=-81/279

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-2-10 to 3-0-0, Exterior(2) 3-0-0 to 6-7-3, Corner(3) 6-7-3 to 15-4-13, Exterior(2) 15-4-13 to 18-9-13, Corner(3) 18-9-13 to 23-2-10 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable 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) 12, 2, 20, 21, 22, 18, 16, 15 except (jt=lb) 23=109, 14=106.



July 24, 2020

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818 Soundside Road
 Edenton, NC 27932

| | | | | | | |
|------------|-------|--------------|-----|-----|------------------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Watermark/Lot 18 Oak Haven/Harnett | E14661686 |
| J0720-3434 | M1 | ROOF SPECIAL | 3 | 1 | Job Reference (optional) | |

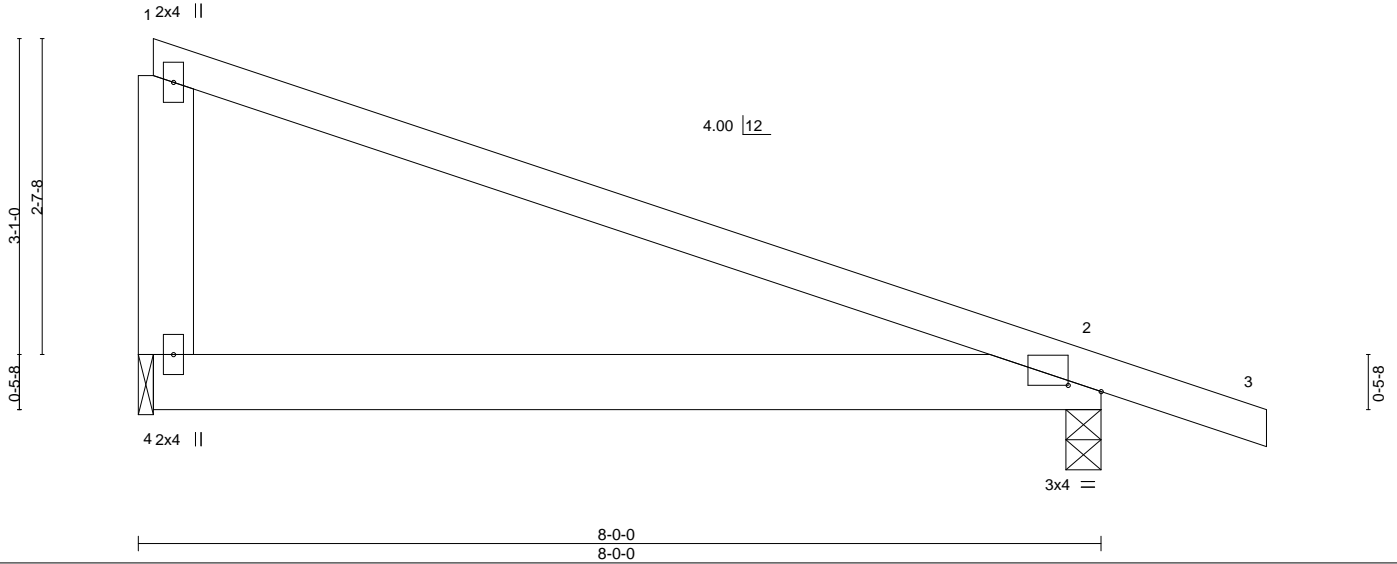
Comtech, Inc. Fayetteville, NC - 28314,

8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 24 13:39:24 2020 Page 1

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Scale = 1:19.1



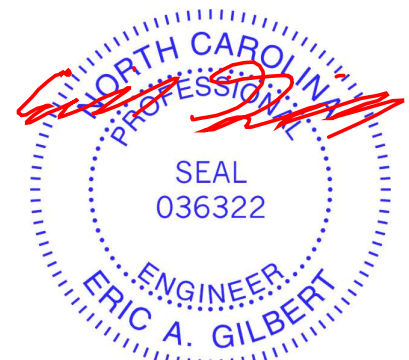
| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
|---------------|----------------------|----------|-----------------------------|---------------|----------|
| TCLL 20.0 | 2-0-0 | TC 0.83 | in (loc) l/defl L/d | MT20 | 244/190 |
| TCDL 10.0 | Plate Grip DOL 1.15 | BC 0.26 | Vert(LL) -0.05 2-4 >999 360 | | |
| BCLL 0.0 * | Lumber DOL 1.15 | WB 0.00 | Vert(CT) -0.09 2-4 >999 240 | | |
| BCDL 10.0 | Rep Stress Incr YES | Matrix-P | Horz(CT) 0.00 2 n/a n/a | | |
| | Code IRC2015/TPI2014 | | Wind(LL) 0.10 2-4 >916 240 | Weight: 38 lb | FT = 20% |

| LUMBER- | BRACING- |
|-----------------------|---|
| TOP CHORD 2x4 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 5-3-4 oc purlins, except end verticals. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS 2x6 SP No.1 | |

REACTIONS. (size) 2=0-3-8, 4=0-1-8
 Max Horz 4=-105(LC 7)
 Max Uplift 2=-171(LC 7), 4=-135(LC 7)
 Max Grav 2=405(LC 1), 4=296(LC 1)

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

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=171, 4=135.



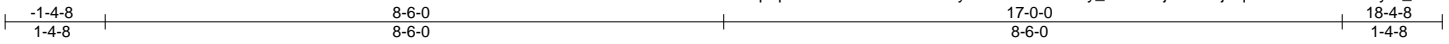
July 24, 2020

| | | | | | | |
|------------|-------|------------|-----|-----|------------------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Watermark/Lot 18 Oak Haven/Harnett | E14661687 |
| J0720-3434 | P1 | KINGPOST | 5 | 1 | Job Reference (optional) | |

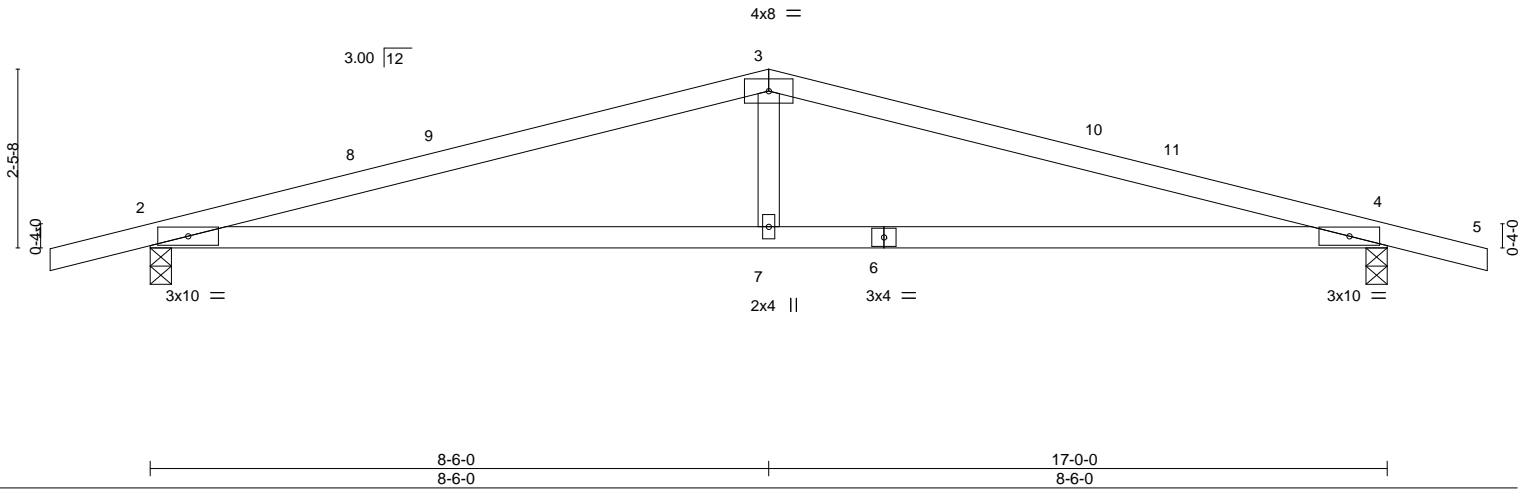
Comtech, Inc. Fayetteville, NC - 28314,

8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 24 13:39:25 2020 Page 1

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Scale = 1:31.7



| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|----------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.98 | Vert(LL) | 0.31 | 4-7 | >653 | 240 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.63 | Vert(CT) | -0.27 | 4-7 | >746 | 240 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.09 | Horz(CT) | 0.03 | 4 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | Weight: 59 lb | FT = 20% |

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

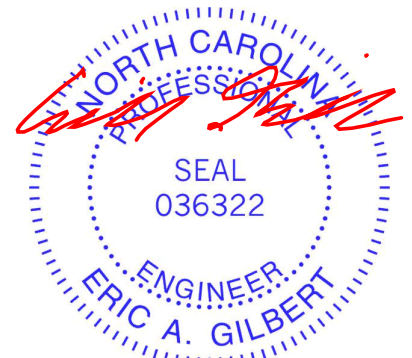
BRACING-
 TOP CHORD Structural wood sheathing directly applied.
 BOT CHORD Rigid ceiling directly applied or 4-3-13 oc bracing.

REACTIONS. (size) 4=0-3-8, 2=0-3-8
 Max Horz 2=-30(LC 7)
 Max Uplift 4=-311(LC 7), 2=-311(LC 6)
 Max Grav 4=760(LC 1), 2=760(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1567/1711, 3-4=-1567/1711
 BOT CHORD 2-7=-1568/1458, 4-7=-1568/1458
 WEBS 3-7=-507/401

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-4-8 to 3-0-5, Interior(1) 3-0-5 to 4-1-3, Exterior(2) 4-1-3 to 12-10-13, Interior(1) 12-10-13 to 13-11-11, Exterior(2) 13-11-11 to 18-4-8 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=311, 2=311.



July 24, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



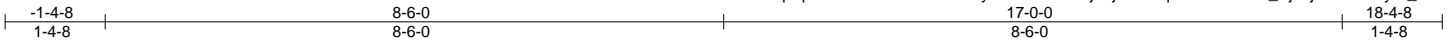
818 Soundside Road
 Edenton, NC 27932

| | | | | | | |
|------------|-------|------------|-----|-----|------------------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Watermark/Lot 18 Oak Haven/Harnett | E14661688 |
| J0720-3434 | P1GE | GABLE | 1 | 1 | Job Reference (optional) | |

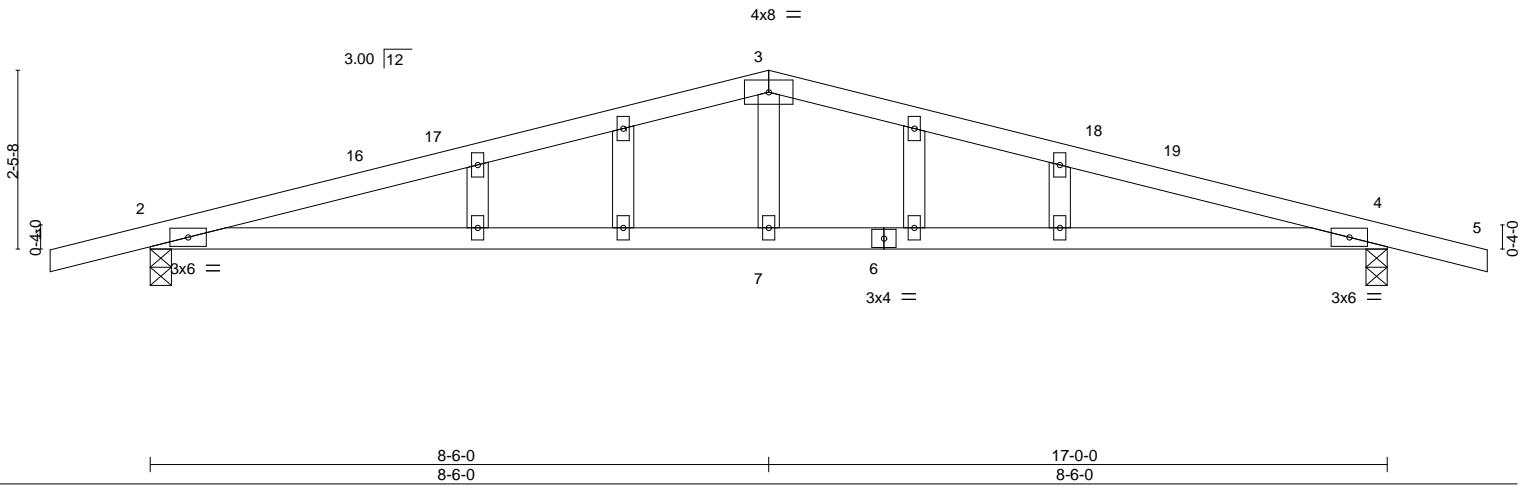
Comtech, Inc. Fayetteville, NC - 28314,

8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 24 13:39:26 2020 Page 1

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Scale = 1:31.7



| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|----------|----------|----------|--------|------|---------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.98 | Vert(LL) | -0.11 | 4-7 | >999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.63 | Vert(CT) | -0.27 | 4-7 | >746 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.09 | Horz(CT) | 0.03 | 4 | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | Wind(LL) | 0.11 | 2-7 | >999 | Weight: 65 lb | FT = 20% |

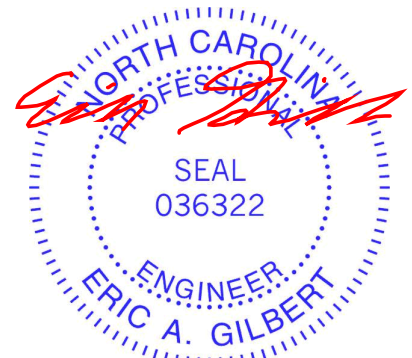
LUMBER-
 TOP CHORD 2x4 SP No.1
 BOT CHORD 2x4 SP No.1
 WEBS 2x4 SP No.2
 OTHERS 2x4 SP No.2

BRACING-
 TOP CHORD Structural wood sheathing directly applied.
 BOT CHORD Rigid ceiling directly applied or 9-11-5 oc bracing.

REACTIONS. (size) 4=0-3-8, 2=0-3-8
 Max Horz 2=-50(LC 11)
 Max Uplift 4=-250(LC 7), 2=-250(LC 6)
 Max Grav 4=760(LC 1), 2=760(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1567/493, 3-4=-1567/493
 BOT CHORD 2-7=-385/1458, 4-7=-385/1458
 WEBS 3-7=0/401

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-4-8 to 3-0-5, Interior(1) 3-0-5 to 4-1-3, Exterior(2) 4-1-3 to 12-10-13, Interior(1) 12-10-13 to 13-11-11, Exterior(2) 13-11-11 to 18-4-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=250, 2=250.



July 24, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

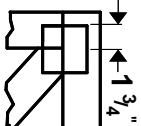
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



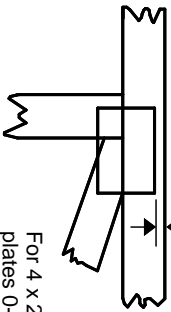
818 Soundside Road
 Edenton, NC 27932

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- 1/16" from outside edge of truss.



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

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

PLATE SIZE

4 X 4

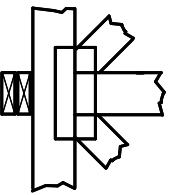
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



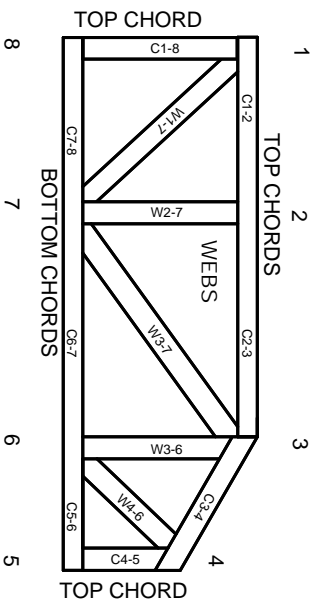
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System

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



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.
Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

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MITek Engineering Reference Sheet: Mill-7473 rev. 5/19/2020



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