

RE: 28528 - Wellons Realty\Lot 1 FH

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Project Customer: Wellons Realty Project Name:
Lot/Block: 1 Subdivision: Forest Hills
Model: Erwin RH
Address:
City: State:

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.4
Wind Code: ASCE 7-16 [All Heights] Design Method: MWFRS (Directional) ASCE 7-16 [All Heights]
Wind Speed: 140 mph Floor Load: N/A psf
Roof Load: 40.0 psf Exposure Category: B
Mean Roof Height (feet): 20

| No. | Seal# | Truss Name | Date |
|-----|-----------|------------|---------|
| 1 | I71695729 | AT1 | 2/28/25 |
| 2 | I71695730 | AT2 | 2/28/25 |
| 3 | I71695731 | PB1 | 2/28/25 |
| 4 | I71695732 | PB2 | 2/28/25 |
| 5 | I71695733 | PB3 | 2/28/25 |
| 6 | I71695734 | PB4 | 2/28/25 |
| 7 | I71695735 | PB5 | 2/28/25 |
| 8 | I71695736 | PB6 | 2/28/25 |
| 9 | I71695737 | PB7 | 2/28/25 |
| 10 | I71695738 | PB8 | 2/28/25 |
| 11 | I71695739 | PB9 | 2/28/25 |
| 12 | I71695740 | T1 | 2/28/25 |
| 13 | I71695741 | T2 | 2/28/25 |
| 14 | I71695742 | T3 | 2/28/25 |
| | I71695743 | T4 | 2/28/25 |
| 16 | I71695744 | T5 | 2/28/25 |
| 17 | I71695745 | T6 | 2/28/25 |
| 18 | I71695746 | TG1 | 2/28/25 |
| 19 | I71695747 | TGE1 | 2/28/25 |
| 20 | I71695748 | TGE2 | 2/28/25 |
| 21 | I71695749 | TGE3 | 2/28/25 |
| 22 | I71695750 | TSGE1 | 2/28/25 |

The truss drawing(s) referenced above have been prepared by
Truss Engineering Co. under my direct supervision based on the parameters
provided by C & R Truss.

Truss Design Engineer's Name: Gilbert, Eric

My license renewal date for the state of North Carolina is December 31, 2025.

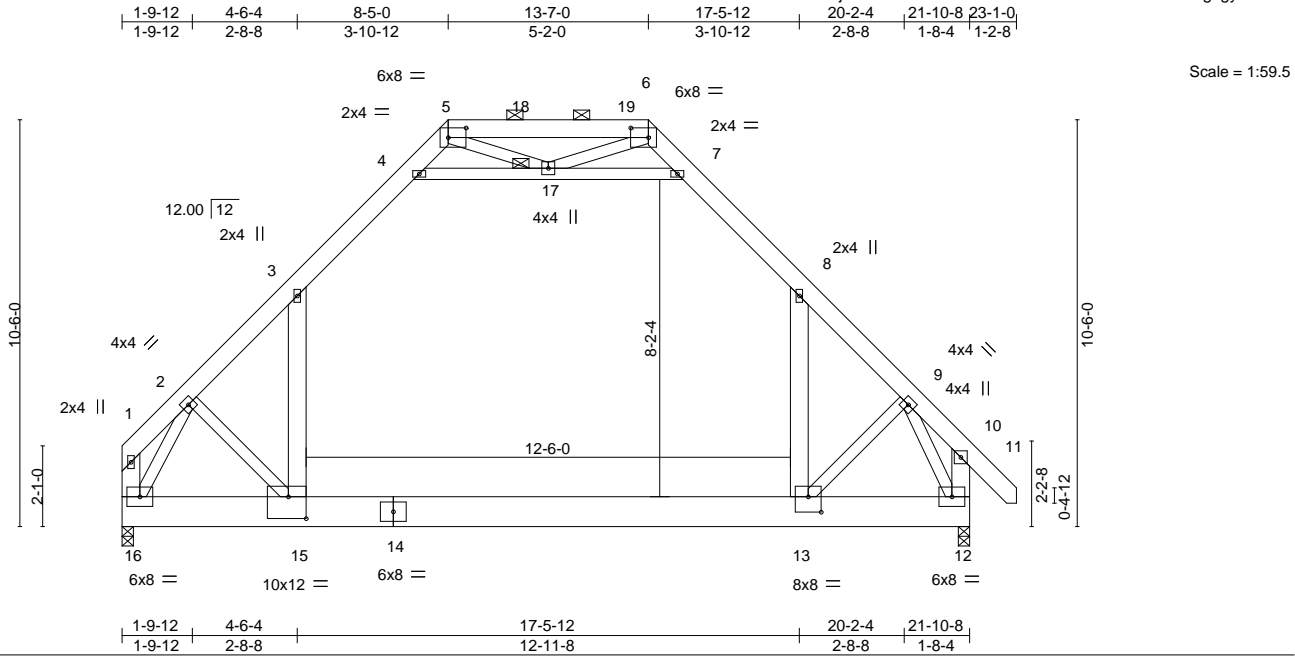
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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.



February 28, 2025

| | | | | | |
|--------------------------|-------|-----------------|-----|-----|-------------------------|
| Job | Truss | Truss Type | Qty | Ply | Wellons Realty\Lot 1 FH |
| 28528 | AT1 | PIGGYBACK ATTIC | 2 | 1 | 171695729 |
| Job Reference (optional) | | | | | |

C&R Truss, Autryville, NC - 28318, 8.530 s Aug 2 2023 MiTek Industries, Inc. Thu Feb 27 10:46:49 2025 Page 1
ID:7zb6xlD8GkKuD1HKiD1DaFzhLjT-daNDm2nVtrAv8fKnvYx6UP4t3kMfEw0lliWfZgzgyu4



| | | | | | | | | | | | |
|-----------------------|--|--|--|-----------|--|----------|-------------|--------|-----|----------------|----------|
| Plate Offsets (X,Y)-- | | [5:0-5-8,0-3-0], [6:0-5-8,0-3-0], [13:0-4-0,0-4-12], [15:0-5-8,0-6-12] | | | | | | | | | |
| 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 0.65 | | Vert(LL) | -0.23 13-15 | >999 | 360 | MT20 | 244/190 |
| TCDL 10.0 | | Lumber DOL 1.15 | | BC 0.30 | | Vert(CT) | -0.31 13-15 | >836 | 240 | | |
| BCLL 0.0 * | | Rep Stress Incr YES | | WB 0.33 | | Horz(CT) | 0.01 12 | n/a | n/a | | |
| BCDL 10.0 | | Code IRC2018/TPI2014 | | Matrix-MS | | Wind(LL) | 0.05 13-15 | >999 | 240 | Weight: 226 lb | FT = 20% |

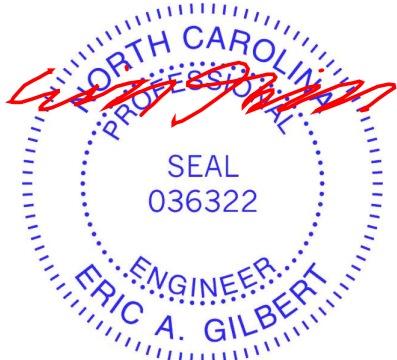
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x10 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except*
3-15,8-13,1-16,10-12: 2x6 SP No.1, 4-7: 2x4 SP 2400F 2.0E

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-4-14 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 17

REACTIONS. (size) 12=0-3-8, 16=0-3-8
Max Horz 16=-287(LC 6)
Max Uplift 12=-70(LC 8), 16=-29(LC 8)
Max Grav 12=1300(LC 15), 16=1218(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1375/61, 3-4=-831/137, 4-5=-232/305, 6-7=-234/307, 7-8=-832/137, 8-9=-1368/62, 5-6=-108/476
BOT CHORD 15-16=-59/818, 13-15=0/852, 12-13=0/653
WEBS 3-15=0/758, 8-13=-11/752, 4-17=-1209/186, 7-17=-1212/185, 9-13=-29/290, 2-16=-1385/0, 9-12=-1396/0

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
 - 6) Ceiling dead load (5.0 psf) on member(s). 3-4, 7-8, 4-17, 7-17
 - 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 13-15
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 70 lb uplift at joint 12 and 29 lb uplift at joint 16.
 - 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - 11) Attic room checked for L/360 deflection.



February 28,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



818 Soundside Road
Edenton, NC 27932

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|-------|-------|-----------------|-----|-----|--------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Wellons Realty\Lot 1 FH | 171695730 |
| 28528 | AT2 | PIGGYBACK ATTIC | 10 | 1 | Job Reference (optional) | |

C&R Truss, Autryville, NC - 28318,

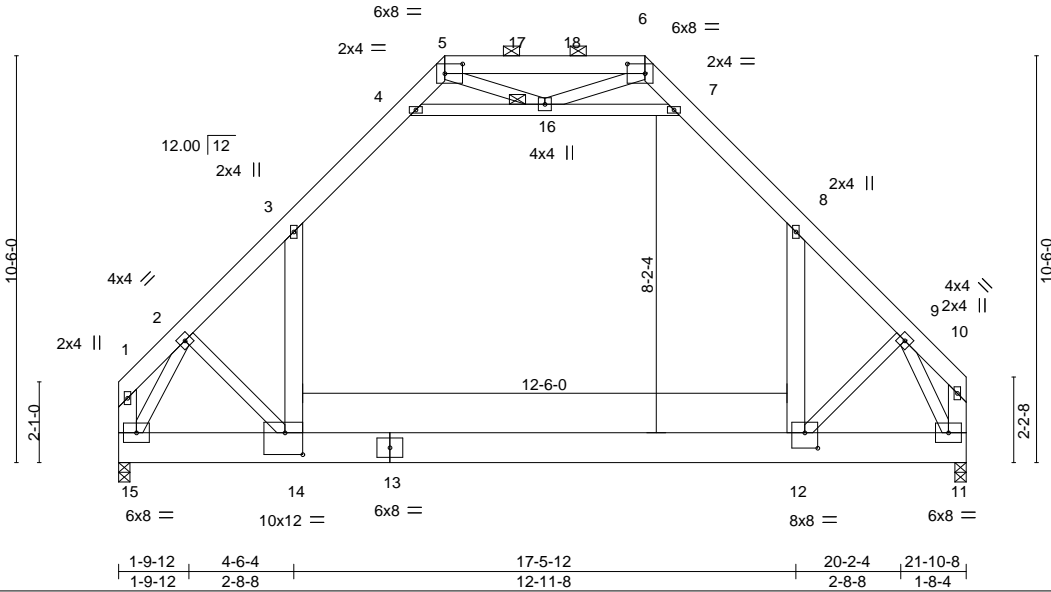
8.530 s Aug 2 2023 MiTek Industries, Inc. Thu Feb 27 10:46:50 2025 Page 1

ID:7zb6xID8GkKuD1HKiD1DaFzhLjT-5mxbzOn7e9lmpv_3FSL1cd2o8iuzNCv_MFp56zgyu3

1-9-12 4-6-4 8-5-0 13-7-0 17-5-12 20-2-4 21-10-8

1-9-12 2-8-8 3-10-12 5-2-0 3-10-12 2-8-8 1-8-4

Scale = 1:59.5



| | | | | | | | | | | | |
|-----------------------|-------|--|------|-------------|------|----------------------------------|-------------|---------------------------|-----|----------------|----------|
| Plate Offsets (X,Y)-- | | [5:0-5-8,0-3-0], [6:0-5-8,0-3-0], [12:0-4-0,0-4-12], [14:0-5-8,0-6-12] | | | | | | | | | |
| 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 | 0.65 | Vert(LL) | -0.23 12-14 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.30 | Vert(CT) | -0.31 12-14 | >834 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.33 | Horz(CT) | 0.01 11 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-MS | | Wind(LL) | 0.05 12-14 | >999 | 240 | Weight: 223 lb | FT = 20% |

LUMBER-

TOP CHORD 2x6 SP No.1

BOT CHORD 2x10 SP 2400F 2.0E

WEBS 2x4 SP No.3 *Except*

3-14,8-12,1-15,10-11: 2x6 SP No.1, 4-7: 2x4 SP 2400F 2.0E

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-4-12 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

JOINTS 1 Brace at Jt(s): 16

REACTIONS. (size) 11=0-3-8, 15=0-3-8

Max Horz 15=268(LC 7)

Max Uplift 11=27(LC 8), 15=27(LC 8)

Max Grav 11=1224(LC 15), 15=1220(LC 14)

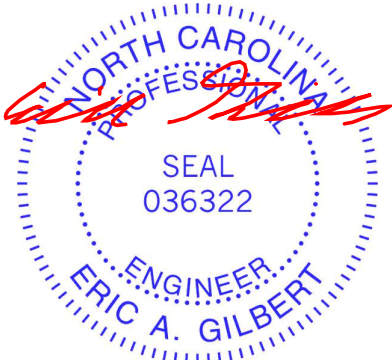
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-1379/57, 3-4=-833/136, 4-5=-231/306, 6-7=-232/307, 7-8=-834/136, 8-9=-1375/57, 5-6=-105/477

BOT CHORD 14-15=-89/804, 12-14=-5/839, 11-12=0/652

WEBS 3-14=0/759, 8-12=-4/754, 4-16=-1211/180, 7-16=-1214/180, 9-12=-35/271, 2-15=-1390/0, 9-11=-1418/0

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
 - Ceiling dead load (5.0 psf) on member(s). 3-4, 7-8, 4-16, 7-16
 - Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 12-14
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 11 and 27 lb uplift at joint 15.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Attic room checked for L/360 deflection.

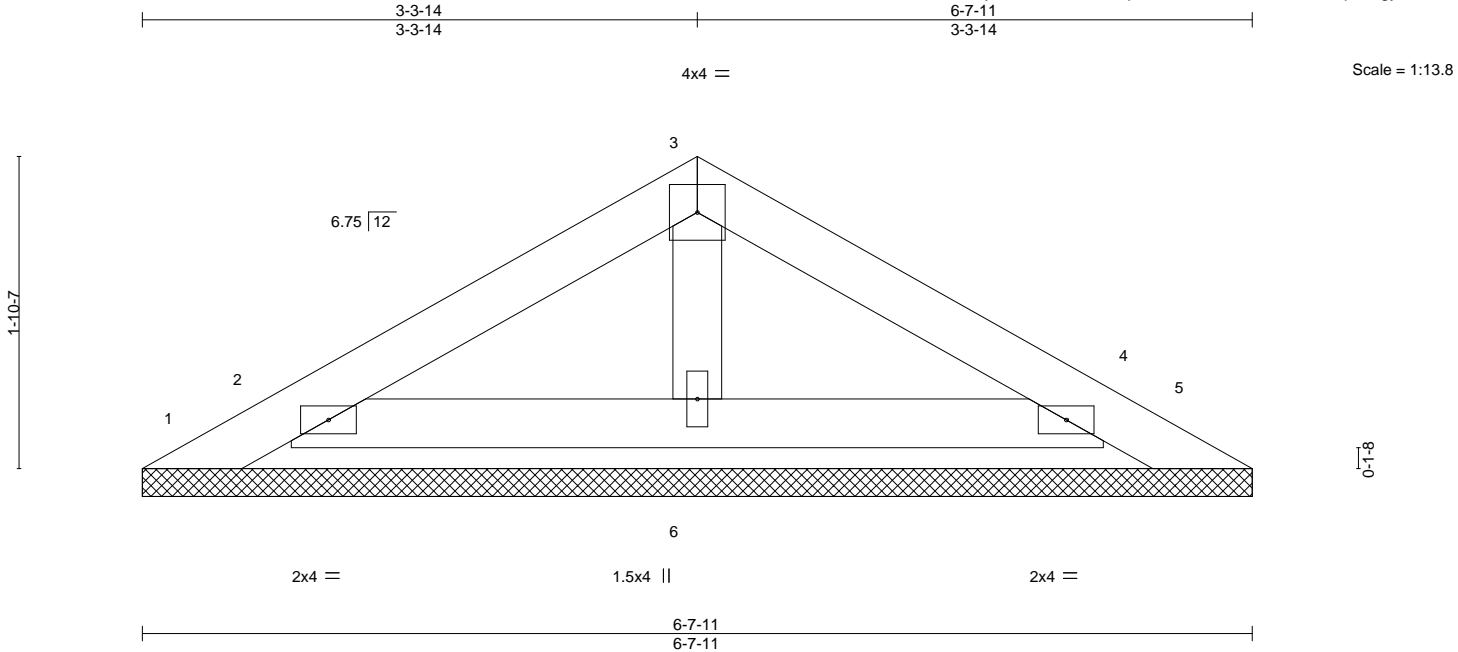


February 28,2025

| | | | | | | |
|-------|-------|------------|-----|-----|--------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Wellons Realty\Lot 1 FH | I71695731 |
| 28528 | PB1 | GABLE | 1 | 1 | Job Reference (optional) | |

C&R Truss, Autryville, NC - 28318,

8.530 s Aug 2 2023 MiTek Industries, Inc. Thu Feb 27 10:46:50 2025 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 0.04 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.06 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.02 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-P | | | | | | Weight: 20 lb | FT = 20% |

LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E
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.

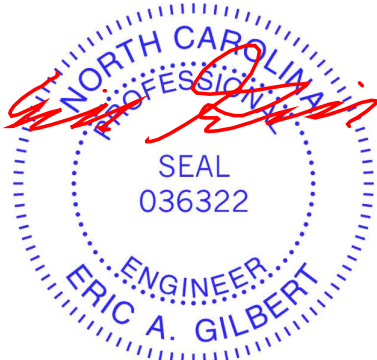
REACTIONS.

All bearings 6-7-11.
(lb) - Max Horz 1=36(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 2, 4
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 2, 4, 6

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TC DL=6.0psf; BC DL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 2, 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



February 28,2025

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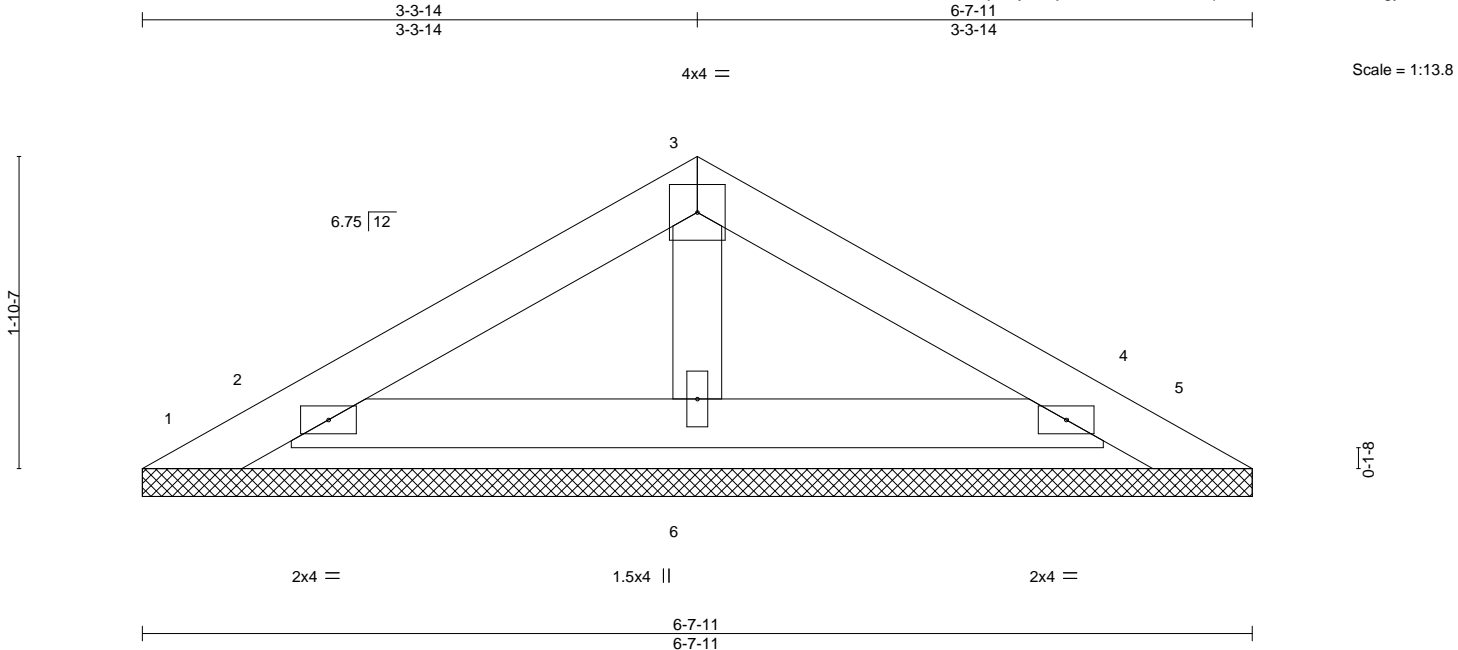
ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

| | | | | | | |
|-------|-------|------------|-----|-----|--------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Wellons Realty\Lot 1 FH | I71695732 |
| 28528 | PB2 | GABLE | 6 | 1 | Job Reference (optional) | |

C&R Truss, Autryville, NC - 28318,

8.530 s Aug 2 2023 MiTek Industries, Inc. Thu Feb 27 10:46:51 2025 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 0.04 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.06 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.02 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-P | | | | | | Weight: 20 lb | FT = 20% |

LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E
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.

All bearings 6-7-11.
(lb) - Max Horz 1=36(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 2, 4
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 2, 4, 6

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TC DL=6.0psf; BC DL=6.0psf; h=20ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 2, 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



February 28,2025

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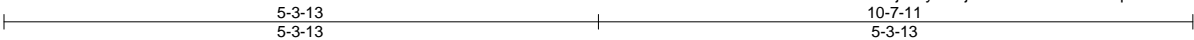


818 Soundside Road
Edenton, NC 27932

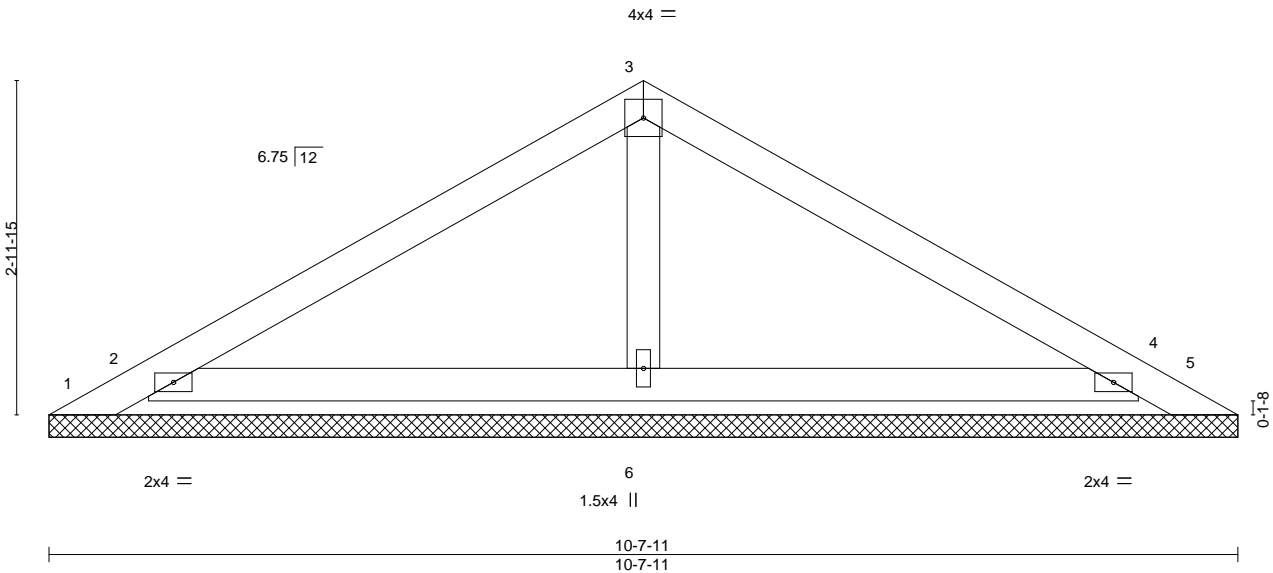
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|-------|-------|------------|-----|-----|--------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Wellons Realty\Lot 1 FH | 171695733 |
| 28528 | PB3 | GABLE | 8 | 1 | Job Reference (optional) | |

C&R Truss, Autryville, NC - 28318,

8.530 s Aug 2 2023 MiTek Industries, Inc. Thu Feb 27 10:46:51 2025 Page 1
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Scale = 1:20.6



| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|----------|----------|------|-------|--------|-----|---------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.13 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.20 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.04 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-P | | | | | | Weight: 35 lb | FT = 20% |

LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E
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.

All bearings 10-7-11.
(lb) - Max Horz 1=60(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) except 1=220(LC 13), 5=199(LC 14), 2=151(LC 8), 4=151(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 2=459(LC 13), 4=455(LC 1), 6=289(LC 1)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 4-0-0 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 220 lb uplift at joint 1, 199 lb uplift at joint 5, 151 lb uplift at joint 2 and 151 lb uplift at joint 4.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



February 28, 2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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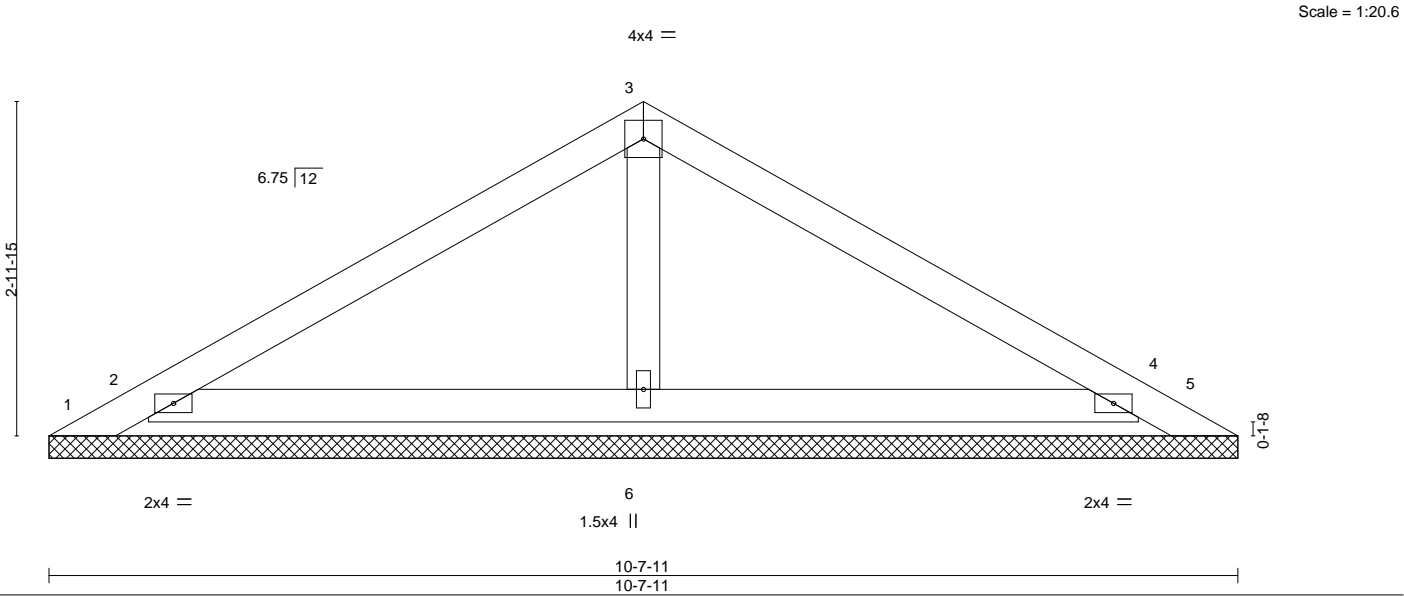
818 Soundside Road
Edenton, NC 27932

| | | | | | |
|--------------------------|-------|------------|-----|-----|-------------------------|
| Job | Truss | Truss Type | Qty | Ply | Wellons Realty\Lot 1 FH |
| 28528 | PB4 | GABLE | 1 | 1 | I71695734 |
| Job Reference (optional) | | | | | |

C&R Truss,
Autryville, NC - 28318,

8.530 s Aug 2 2023 MiTek Industries, Inc.
Thu Feb 27 10:46:52 2025
Page 1
ID:7zb6xID8GkKuD1HKiD1DaFzhLjT-193LO3pNAmyU?73MAgUp61iWOxPzRMICRfkW?zgyu1

5-3-13
5-3-13
10-7-11
5-3-13



| 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 0.13 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.20 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.04 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-P | | | | | | Weight: 35 lb | FT = 20% |

| | | | |
|----------------|-------------------|-----------------|---|
| LUMBER- | | BRACING- | |
| TOP CHORD | 2x4 SP 2400F 2.0E | TOP CHORD | Structural wood sheathing directly applied or 6-0-0 oc purlins. |
| BOT CHORD | 2x4 SP No.2 | BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing. |
| OTHERS | 2x4 SP No.3 | | |

REACTIONS. All bearings 10-7-11.

(lb) - Max Horz 1=60(LC 6)

Max Uplift All uplift 100 lb or less at joint(s) except 1=220(LC 13), 5=199(LC 14), 2=151(LC 8), 4=151(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 2=459(LC 13), 4=455(LC 1), 6=289(LC 1)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 4-0-0 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 220 lb uplift at joint 1, 199 lb uplift at joint 5, 151 lb uplift at joint 2 and 151 lb uplift at joint 4.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



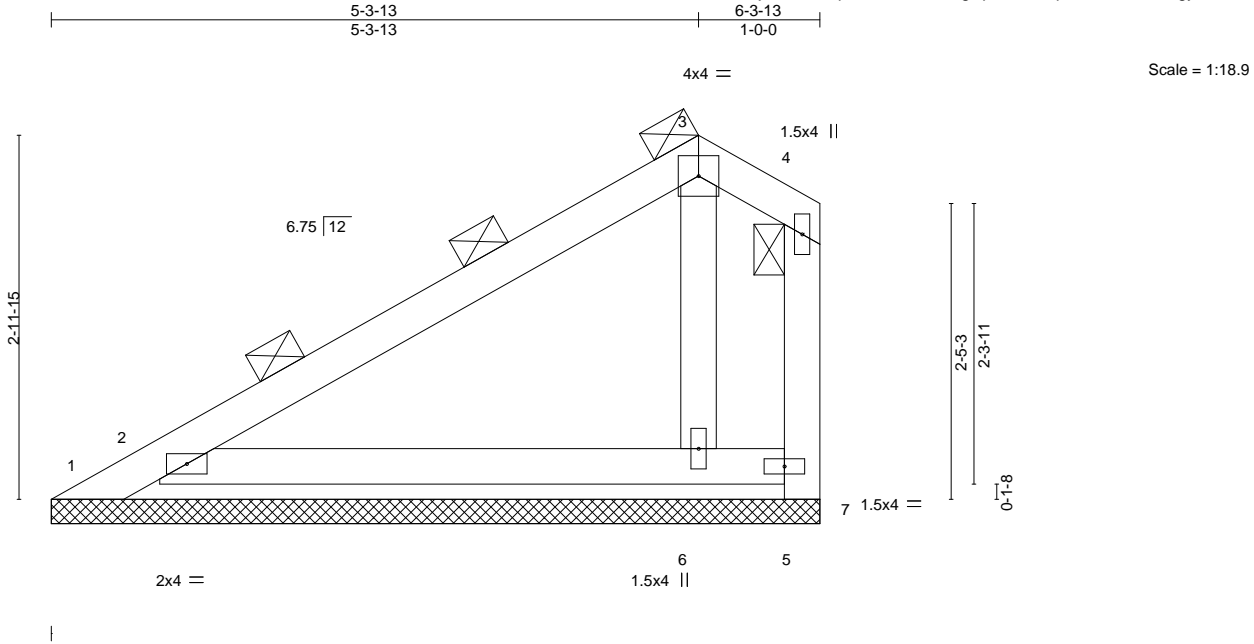
February 28,2025

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|-------|-------|------------|-----|-----|--------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Wellons Realty\Lot 1 FH | I71695736 |
| 28528 | PB6 | GABLE | 2 | 2 | Job Reference (optional) | |

C&R Truss, Autryville, NC - 28318,

8.530 s Aug 2 2023 MiTek Industries, Inc. Thu Feb 27 10:46:52 2025 Page 1

ID:7zb6xID8GkKuD1HKID1DaFzhLjT-193LO3pNAmYU?73MAGUp61iXaxQpRmCkRfwA?zgyu1



| LOADING (psf) | SPACING- | 3-2-0 | CSI. | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|----------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.12 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.14 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL 0.0 * | Rep Stress Incr | NO | WB 0.02 | Horz(CT) | -0.00 | 5 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-P | | | | | | Weight: 51 lb | FT = 20% |

| | | | |
|----------------|-------------------|-----------------|--|
| LUMBER- | | BRACING- | |
| TOP CHORD | 2x4 SP 2400F 2.0E | TOP CHORD | 2-0-0 oc purlins (6-0-0 max.), except end verticals |
| BOT CHORD | 2x4 SP No.2 | | (Switched from sheeted: Spacing > 2-0-0). |
| WEBS | 2x4 SP No.3 | BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing. |
| OTHERS | 2x4 SP No.3 | | |

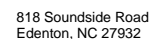
REACTIONS. (size) 1=6-3-13, 2=6-3-13, 5=6-3-13, 6=6-3-13, 7=6-3-13
Max Horz 1=157(LC 7)
Max Uplift 1=-344(LC 13), 2=-226(LC 8), 5=-114(LC 3)
Max Grav 1=168(LC 8), 2=707(LC 13), 6=419(LC 3)

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

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 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 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 4-0-0 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
 - Bearing at joint(s) 1, 2, 5, 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 344 lb uplift at joint 1, 226 lb uplift at joint 2 and 114 lb uplift at joint 5.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



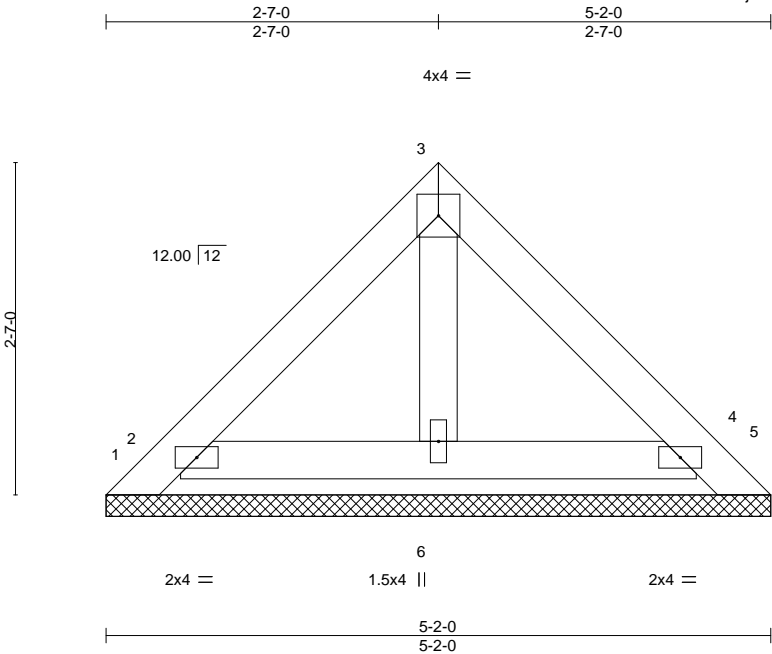
February 28,2025

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|-------|-------|------------|-----|-----|--------------------------|
| Job | Truss | Truss Type | Qty | Ply | Wellons Realty\Lot 1 FH |
| 28528 | PB8 | GABLE | 1 | 1 | I71695738 |
| | | | | | Job Reference (optional) |

C&R Truss, Autryville, NC - 28318,

8.530 s Aug 2 2023 MiTek Industries, Inc. Thu Feb 27 10:46:53 2025 Page 1
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Scale = 1:17.9

| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|----------|----------|------|-------|--------|-----|---------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.03 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.04 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.01 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-P | | | | | | Weight: 19 lb | FT = 20% |

LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

All bearings 5-2-0.
(lb) - Max Horz 1=60(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 5, 2, 4 except 1=102(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 2, 4, 6

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 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 with a clearance greater than 6-0-0 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) 5, 2, 4 except (jt=lb) 1=102.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



February 28, 2025

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Edenton, NC 27932

| | | | | | |
|--------------------------|-------|------------|-----|-----|-------------------------|
| Job | Truss | Truss Type | Qty | Ply | Wellons Realty\Lot 1 FH |
| 28528 | PB9 | GABLE | 12 | 1 | I71695739 |
| Job Reference (optional) | | | | | |

C&R Truss, Autryville, NC - 28318,

8.530 s Aug 2 2023 MiTek Industries, Inc. Thu Feb 27 10:46:54 2025 Page 1

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2-7-0

2-7-0

5-2-0

2-7-0

4x4 =

Scale = 1:17.9

| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|----------|----------|------|-------|--------|-----|---------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.03 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.04 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.01 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-P | | | | | | Weight: 19 lb | FT = 20% |

LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E

BOT CHORD 2x4 SP No.2

OTHERS 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-2-0 oc purlins.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

All bearings 5-2-0.

(lb) - Max Horz 1=60(LC 6)

Max Uplift All uplift 100 lb or less at joint(s) 5, 2, 4 except 1=102(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 5, 2, 4, 6

FORCES.

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

NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

4) Gable requires continuous bottom chord bearing.

5) Gable studs spaced at 4-0-0 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2, 4 except (jt=lb) 1=102.

9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

February 28,2025

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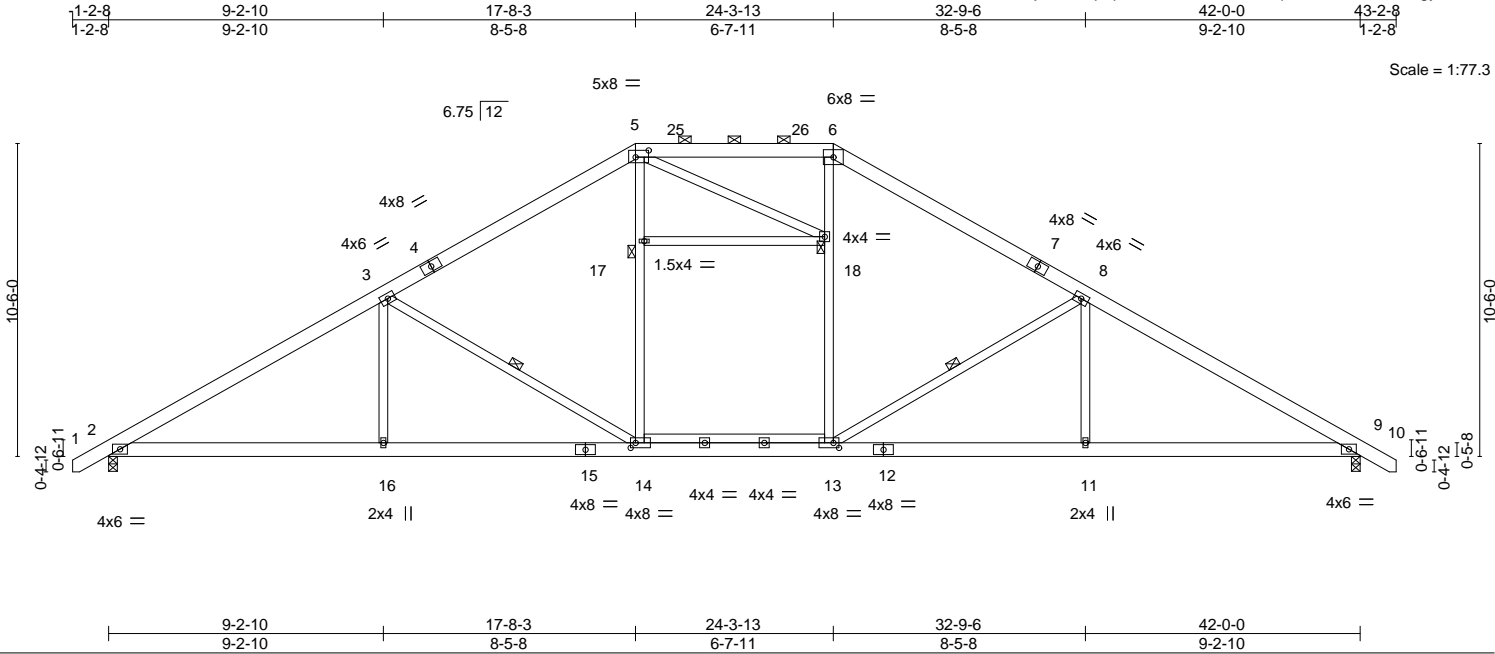
818 Soundside Road

Edenton, NC 27932

| | | | | | |
|--------------------------|-------|----------------|-----|-----|-------------------------|
| Job | Truss | Truss Type | Qty | Ply | Wellons Realty\Lot 1 FH |
| 28528 | T1 | PIGGYBACK BASE | 6 | 1 | 171695740 |
| Job Reference (optional) | | | | | |

C&R Truss, Autryville, NC - 28318,

8.530 s Aug 2 2023 MiTek Industries, Inc. Thu Feb 27 10:46:54 2025 Page 1
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| | | | | | | | | | |
|-----------------------|----------------------|--|-----------|----------|-------------|--------|-----|----------------|----------|
| Plate Offsets (X,Y)-- | | [5:0-5-4,0-2-12], [13:0-2-4,0-2-0], [14:0-2-0,0-2-0] | | | | | | | |
| 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 0.28 | Vert(LL) | -0.18 11-13 | >999 | 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.27 | Vert(CT) | -0.27 11-13 | >999 | 240 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.54 | Horz(CT) | 0.06 9 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-AS | Wind(LL) | -0.10 14-16 | >999 | 240 | Weight: 315 lb | FT = 20% |

LUMBER-

TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP 2400F 2.0E *Except*
13-14: 2x4 SP No.2
WEBS 2x4 SP No.3

REACTIONS. (size) 2=0-3-8, 9=0-3-8
Max Horz 2=233(LC 6)
Max Uplift 2=167(LC 8), 9=167(LC 8)
Max Grav 2=1746(LC 1), 9=1746(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2861/254, 3-5=-2127/273, 5-6=-1757/282, 6-8=-2127/273, 8-9=-2861/254
BOT CHORD 2-16=-92/2502, 14-16=-92/2502, 13-14=0/1785, 11-13=-92/2402, 9-11=-92/2402
WEBS 3-16=0/378, 3-14=-859/163, 14-17=0/605, 5-17=0/606, 13-18=0/604, 6-18=0/612,
8-13=-860/163, 8-11=0/378

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TC DL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=42ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=167, 9=167.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) 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.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 28,2025

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818 Soundside Road
Edenton, NC 27932

| | | | | | | |
|-------|-------|----------------|-----|-----|--------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Wellons Realty\Lot 1 FH | 171695741 |
| 28528 | T2 | PIGGYBACK BASE | 1 | 1 | Job Reference (optional) | |

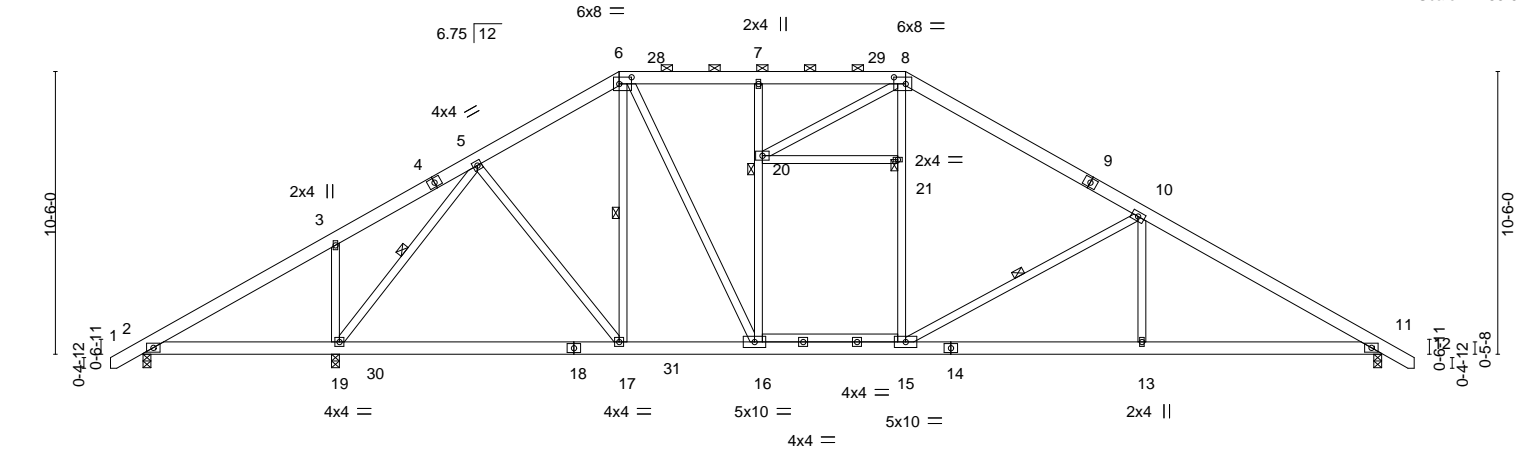
C&R Truss, Autryville, NC - 28318,

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|-------|--------|---------|--------|--------|---------|--------|---------|--------|
| 1-2-8 | 7-1-12 | 12-4-15 | 17-8-3 | 23-0-0 | 28-3-13 | 37-1-2 | 46-0-0 | 47-2-8 |
| 1-2-8 | 7-1-12 | 5-3-3 | 5-3-3 | 5-3-13 | 5-3-13 | 8-9-5 | 8-10-14 | 1-2-8 |

Scale = 1:85.6



| | | | | | | |
|-----------------------|----------------------------------|--------|--------|---------|--------|---------|
| | 7-1-12 | 17-8-3 | 23-0-0 | 28-3-13 | 37-1-2 | 46-0-0 |
| | 7-1-12 | 10-6-7 | 5-3-13 | 5-3-13 | 8-9-5 | 8-10-14 |
| Plate Offsets (X,Y)-- | [6:0-5-8,0-3-0], [8:0-5-4,0-3-0] | | | | | |

| 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 0.28 | Vert(LL) | -0.15 17-19 | >999 | 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.42 | Vert(CT) | -0.23 13-15 | >999 | 240 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.73 | Horz(CT) | 0.05 11 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-AS | Wind(LL) | 0.07 13-15 | >999 | 240 | Weight: 368 lb | FT = 20% |

| | |
|--------------------------------|--|
| LUMBER- | BRACING- |
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied, except |
| BOT CHORD 2x6 SP No.1 *Except* | 2-0-0 oc purlins (6-0-0 max.): 6-8. |
| 15-16: 2x4 SP No.2 | BOT CHORD Rigid ceiling directly applied. |
| WEBS 2x4 SP No.3 | WEBS 1 Row at midpt 5-19, 6-17, 10-15 |
| | JOINTS 1 Brace at Jt(s): 20, 21 |

| | |
|-------------------|--|
| REACTIONS. | (size) 2=0-3-8, 19=0-3-8, 11=0-3-8 |
| | Max Horz 2=-238(LC 6) |
| | Max Uplift 2=-57(LC 8), 19=-144(LC 8), 11=-157(LC 8) |
| | Max Grav 2=399(LC 1), 19=2351(LC 13), 11=1684(LC 14) |

| | |
|----------------|---|
| FORCES. | (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. |
| TOP CHORD | 2-3=-416/343, 3-5=-385/297, 5-6=-1684/234, 6-7=-1678/263, 7-8=-1670/263, 8-10=-2035/249, 10-11=-2752/235 |
| BOT CHORD | 2-19=-218/270, 17-19=0/1098, 16-17=0/1411, 15-16=0/1608, 13-15=-80/2322, 11-13=-80/2322 |
| WEBS | 3-19=-434/178, 5-19=-1866/90, 5-17=0/529, 6-16=-65/675, 16-20=-424/82, 7-20=-388/82, 15-21=0/606, 8-21=0/607, 10-15=-846/167, 10-13=0/392 |

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=46ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are 4x6 MT20 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 with a clearance greater than 6-0-0 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) 2 except (jt=lb) 19=144, 11=157.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 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.
 - 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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WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacompnents.com)

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

| | | | | | | |
|-------|-------|----------------|-----|-----|-------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Wellons Realty\Lot 1 FH | 171695742 |
| 28528 | T3 | PIGGYBACK BASE | 5 | 1 | | |

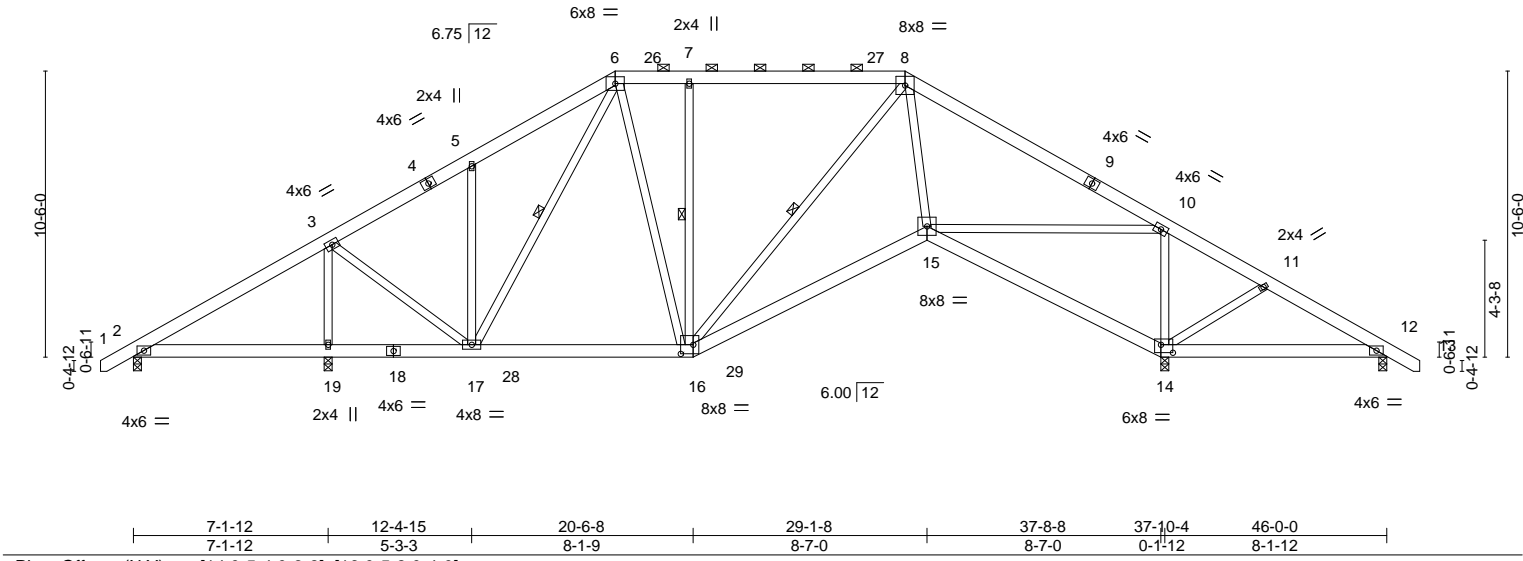
C&R Truss, Autryville, NC - 28318,

8.530 s Aug 2 2023 MiTek Industries, Inc. Thu Feb 27 10:46:56 2025 Page 1

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| | | | | | | | | | | |
|-------|--------|---------|--------|--------|---------|--------|--------|---------|--------|--------|
| 1-2-8 | 7-1-12 | 12-4-15 | 17-8-3 | 20-6-8 | 28-3-13 | 33-0-3 | 37-8-8 | 41-5-11 | 46-0-0 | 47-2-8 |
| 1-2-8 | 7-1-12 | 5-3-3 | 5-3-3 | 2-10-5 | 7-9-5 | 4-8-5 | 4-8-5 | 3-9-3 | 4-6-5 | 1-2-8 |

Scale = 1:84.6



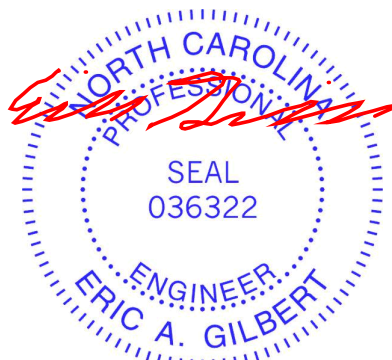
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|-----------|----------|-------------|--------|-----|----------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.34 | Vert(LL) | -0.07 16-17 | >999 | 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.28 | Vert(CT) | -0.12 16-17 | >999 | 240 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.66 | Horz(CT) | 0.06 14 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-AS | Wind(LL) | 0.02 15-16 | >999 | 240 | Weight: 361 lb | FT = 20% |

| LUMBER- | BRACING- |
|-----------------------|--|
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied, except |
| BOT CHORD 2x6 SP No.1 | 2-0-0 oc purlins (6-0-0 max.): 6-8. |
| WEBS 2x4 SP No.3 | BOT CHORD Rigid ceiling directly applied. |
| | WEBS 1 Row at midpt 7-16, 8-16, 6-17 |

REACTIONS. All bearings 0-3-8.
(lb) - Max Horz 2=238(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 2, 14 except 12=118(LC 19), 19=122(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 12 except 2=262(LC 19), 14=2025(LC 1), 19=1643(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-64/311, 3-5=-843/164, 5-6=-824/266, 6-7=-787/234, 7-8=-782/232,
8-10=-1259/124, 10-11=0/756, 11-12=0/567
BOT CHORD 16-17=0/790, 15-16=0/1121, 14-15=-734/39, 12-14=-418/0
WEBS 3-19=-1491/174, 3-17=-1/997, 5-17=-296/143, 6-16=-3/406, 7-16=-394/90, 8-16=-333/0,
8-15=0/387, 10-15=0/1591, 10-14=-1430/149

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCCL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=46ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 14 except (jt=lb) 12=118, 19=122.
 - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 8) 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.
 - 9) 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 | Wellons Realty\Lot 1 FH | 171695743 |
| 28528 | T4 | PIGGYBACK BASE | 2 | 1 | Job Reference (optional) | |

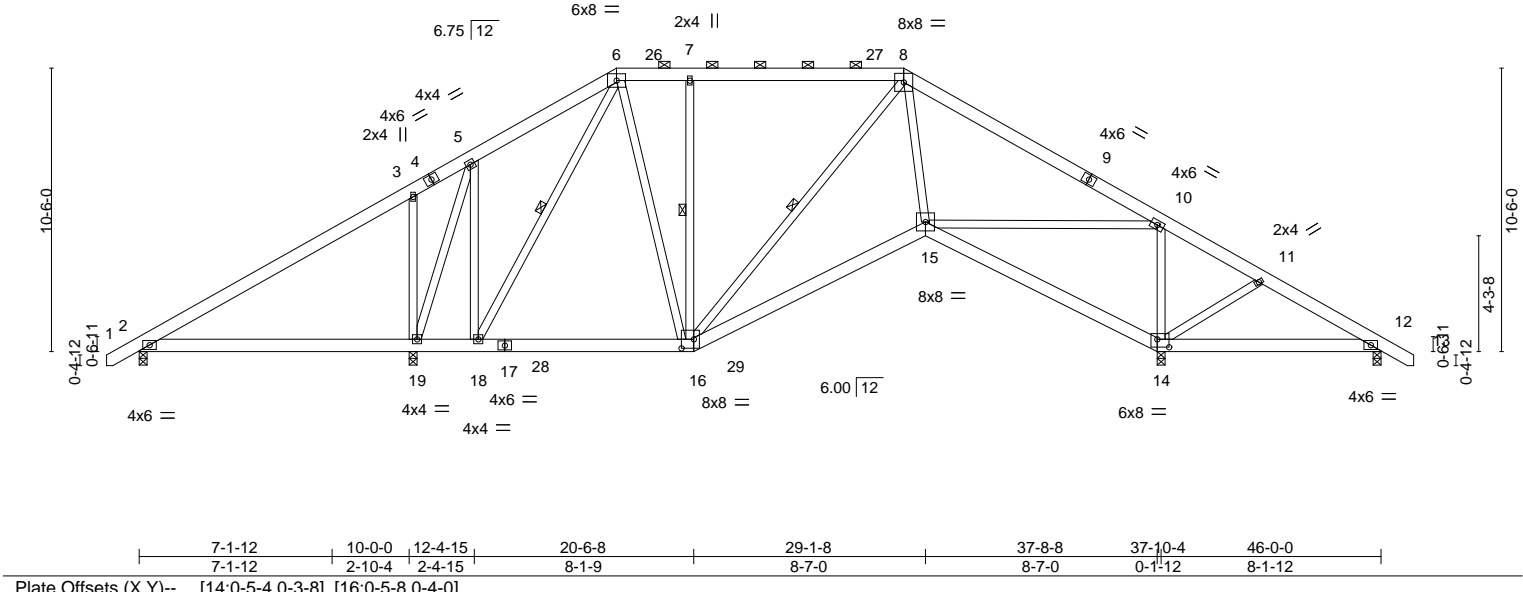
C&R Truss, Autryville, NC - 28318,

8.530 s Aug 2 2023 MiTek Industries, Inc. Thu Feb 27 10:46:56 2025 Page 1

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| | | | | | | | | | | |
|-------|--------|---------|--------|--------|---------|--------|--------|---------|--------|--------|
| 1-2-8 | 7-1-12 | 12-4-15 | 17-8-3 | 20-6-8 | 28-3-13 | 33-0-3 | 37-8-8 | 41-5-11 | 46-0-0 | 47-2-8 |
| 1-2-8 | 7-1-12 | 5-3-3 | 5-3-3 | 2-10-5 | 7-9-5 | 4-8-5 | 4-8-5 | 3-9-3 | 4-6-5 | 1-2-8 |

Scale = 1:85.3



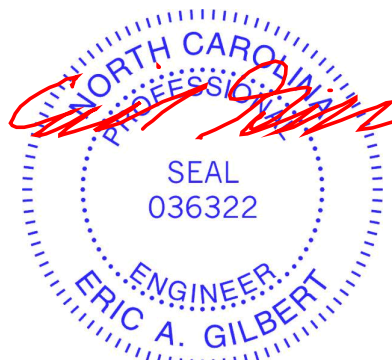
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|-----------|----------|-------------|--------|-----|----------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.35 | Vert(LL) | -0.06 16-18 | >999 | 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.27 | Vert(CT) | -0.11 19-22 | >999 | 240 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.73 | Horz(CT) | 0.06 14 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-AS | Wind(LL) | 0.04 19-22 | >999 | 240 | Weight: 364 lb | FT = 20% |

| | |
|-----------------------|--|
| LUMBER- | BRACING- |
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied, except |
| BOT CHORD 2x6 SP No.1 | 2-0-0 oc purlins (6-0-0 max.): 6-8. |
| WEBS 2x4 SP No.3 | BOT CHORD Rigid ceiling directly applied. |
| | WEBS 1 Row at midpt 7-16, 8-16, 6-18 |

REACTIONS. All bearings 0-3-8.
(lb) - Max Horz 2=238(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 2, 14 except 12=107(LC 8), 19=140(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 12 except 2=432(LC 19), 14=1873(LC 1), 19=1569(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 5-6=-432/205, 6-7=-641/212, 7-8=-636/211, 8-10=-1113/107, 10-11=0/683, 11-12=0/493
BOT CHORD 18-19=0/373, 16-18=0/583, 15-16=0/975, 14-15=-658/24, 12-14=-355/0
WEBS 5-18=0/588, 6-16=-16/489, 7-16=-395/88, 8-16=-375/0, 8-15=0/370, 10-15=0/1393,
10-14=-1314/133, 6-18=-544/0, 3-19=-621/228, 5-19=-751/0

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=46ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 14 except (jt=lb) 12=107, 19=140.
 - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 8) 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.
 - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



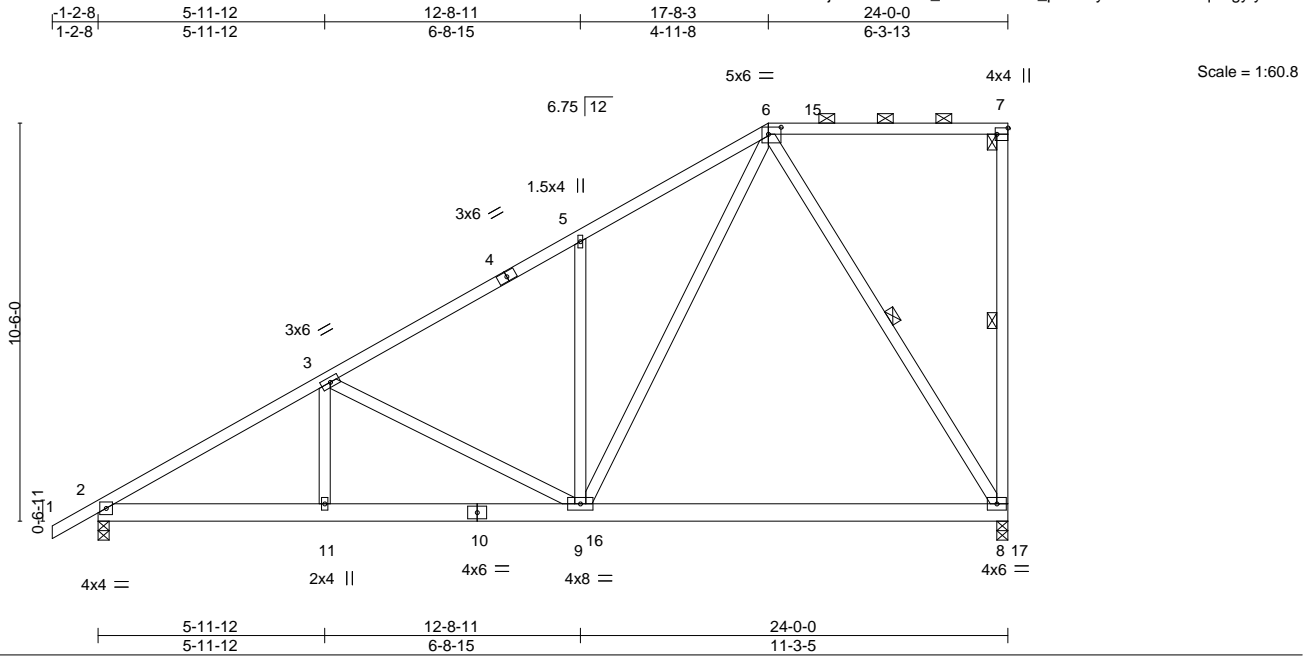
February 28, 2025

| | | | | | |
|-------|-------|----------------|-----|-----|--------------------------|
| Job | Truss | Truss Type | Qty | Ply | Wellons Realty\Lot 1 FH |
| 28528 | T5 | Piggyback Base | 1 | 1 | 171695744 |
| | | | | | Job Reference (optional) |

C&R Truss, Autryville, NC - 28318,

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| | | | | | | | | | | | | |
|-----------------------|-------|---------------------------------|-------|-----------|------|----------|----------|--------|------|--------|----------------|----------|
| Plate Offsets (X,Y)-- | | [6:0-4-0,0-2-4], [7: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 | 0.25 | Vert(LL) | -0.24 | 8-9 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.53 | Vert(CT) | -0.36 | 8-9 | >803 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.57 | Horz(CT) | 0.02 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-AS | | Wind(LL) | 0.05 | 8-9 | >999 | 240 | Weight: 171 lb | FT = 20% |

| | |
|--|---|
| LUMBER- | BRACING- |
| TOP CHORD 2x4 SP 2400F 2.0E | TOP CHORD Structural wood sheathing directly applied, except end verticals, and |
| BOT CHORD 2x6 SP No.1 | 2-0-0 oc purlins (6-0-0 max.): 6-7. |
| WEBS 2x4 SP No.3 *Except* | BOT CHORD Rigid ceiling directly applied. |
| 7-8: 2x4 SP 2400F 2.0E, 6-8: 2x4 SP No.2 | WEBS 1 Row at midpt 7-8, 6-8 |

REACTIONS. (size) 8=0-3-8, 2=0-3-8
Max Horz 2=394(LC 7)
Max Uplift 8=141(LC 5), 2=105(LC 8)
Max Grav 8=1161(LC 13), 2=1035(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1525/118, 3-5=-1140/125, 5-6=-1152/241
BOT CHORD 2-11=-214/1404, 9-11=-214/1404, 8-9=-161/523
WEBS 3-9=-495/118, 5-9=-361/176, 6-9=-136/1121, 6-8=-905/149

- NOTES-
- 1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Provide adequate drainage to prevent water ponding.
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=141, 2=105.
 - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 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) 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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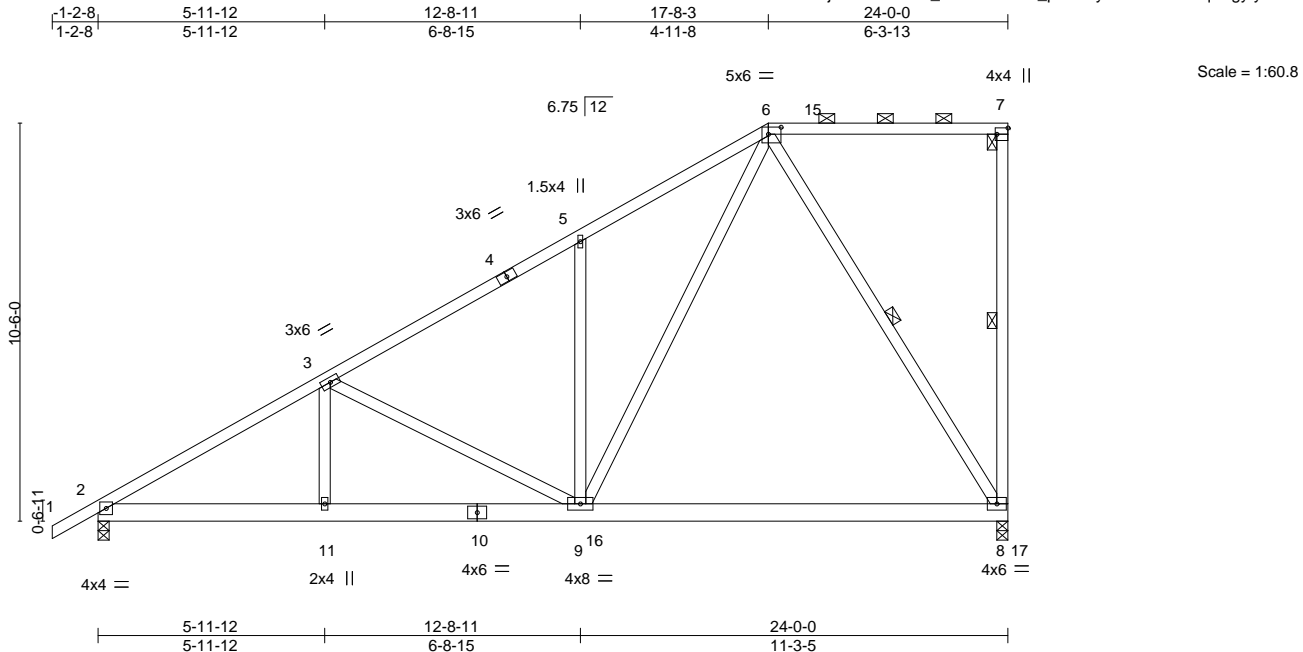
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|-------|-------|----------------|-----|-----|-------------------------|
| Job | Truss | Truss Type | Qty | Ply | Wellons Realty\Lot 1 FH |
| 28528 | T6 | Piggyback Base | 8 | 1 | I71695745 |

C&R Truss, Autryville, NC - 28318,

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Job Reference (optional)



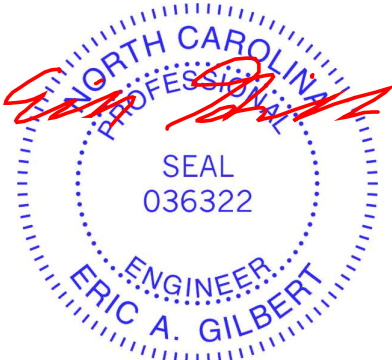
| | | | | | | | | | | | |
|-----------------------|-------|---------------------------------|--|-----------|--|--------------------|--|------------|--|-------------------------|--|
| Plate Offsets (X,Y)-- | | [6:0-4-0,0-2-4], [7:Edge,0-3-8] | | | | | | | | | |
| LOADING (psf) | | SPACING-2-0-0 | | CSI. | | DEFL. in (loc) | | l/defl L/d | | PLATES GRIP | |
| TCLL | 20.0 | Plate Grip DOL 1.15 | | TC 0.25 | | Vert(LL) -0.24 8-9 | | >999 360 | | MT20 244/190 | |
| TCDL | 10.0 | Lumber DOL 1.15 | | BC 0.53 | | Vert(CT) -0.36 8-9 | | >803 240 | | | |
| BCLL | 0.0 * | Rep Stress Incr YES | | WB 0.57 | | Horz(CT) 0.02 8 | | n/a n/a | | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-AS | | Wind(LL) 0.05 8-9 | | >999 240 | | Weight: 171 lb FT = 20% | |

| | |
|--|---|
| LUMBER- | BRACING- |
| TOP CHORD 2x4 SP 2400F 2.0E | TOP CHORD Structural wood sheathing directly applied, except end verticals, and |
| BOT CHORD 2x6 SP No.1 | 2-0-0 oc purlins (6-0-0 max.): 6-7. |
| WEBS 2x4 SP No.3 *Except* | BOT CHORD Rigid ceiling directly applied. |
| 7-8: 2x4 SP 2400F 2.0E, 6-8: 2x4 SP No.2 | WEBS 1 Row at midpt 7-8, 6-8 |

REACTIONS. (size) 8=0-3-8, 2=0-3-8
 Max Horz 2=394(LC 7)
 Max Uplift 8=141(LC 5), 2=105(LC 8)
 Max Grav 8=1161(LC 13), 2=1035(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1525/118, 3-5=-1140/125, 5-6=-1152/241
 BOT CHORD 2-11=-214/1404, 9-11=-214/1404, 8-9=-161/523
 WEBS 3-9=-495/118, 5-9=-361/176, 6-9=-136/1121, 6-8=-905/149

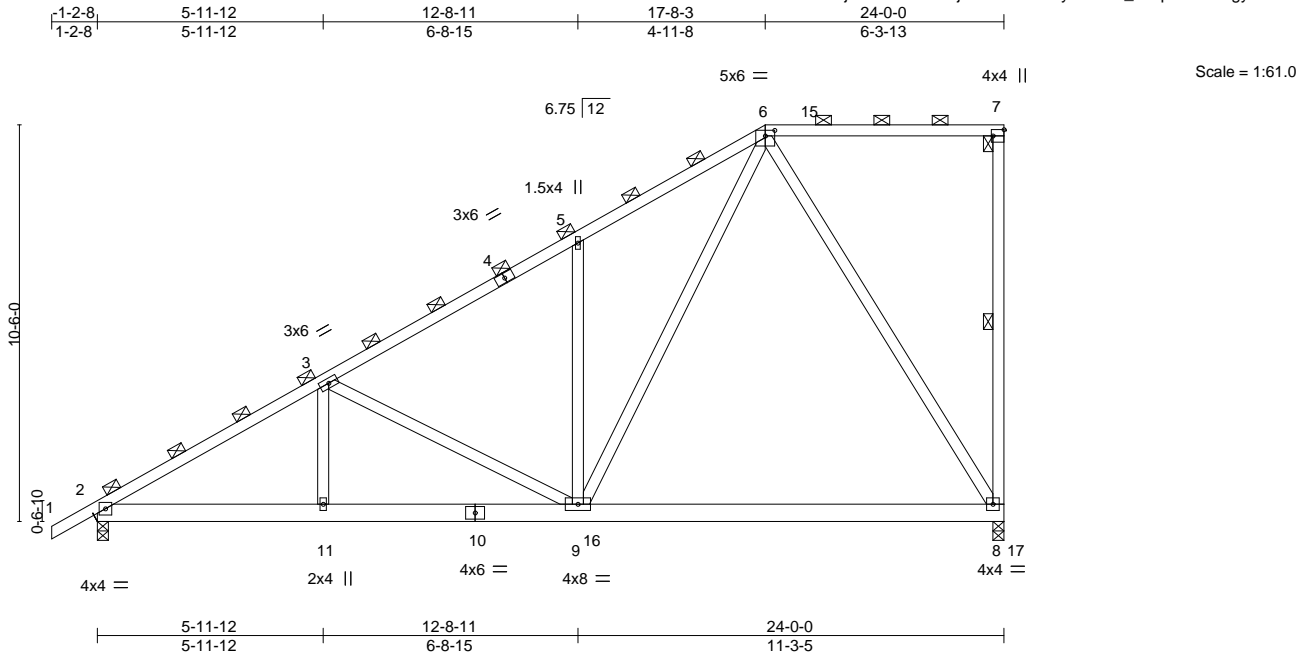
- NOTES-**
- 1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Provide adequate drainage to prevent water ponding.
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=141, 2=105.
 - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 28,2025

| | | | | | |
|-------|-------|----------------|-----|-----|-------------------------|
| Job | Truss | Truss Type | Qty | Ply | Wellons Realty\Lot 1 FH |
| 28528 | TG1 | PIGGYBACK BASE | 2 | 2 | 171695746 |

C&R Truss, Autryville, NC - 28318, 8.530 s Aug 2 2023 MiTek Industries, Inc. Thu Feb 27 10:46:58 2025 Page 1
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| | | | |
|-----------------------|----------------------|----------------------------------|-----------------------------|
| Plate Offsets (X,Y)-- | | [6:0-3-0,0-1-12], [7:Edge,0-3-8] | |
| LOADING (psf) | SPACING- | CSI. | DEFL. |
| TCLL 20.0 | Plate Grip DOL 1.15 | TC 0.23 | in (loc) l/defl L/d |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.48 | Vert(LL) -0.19 8-9 >999 360 |
| BCLL 0.0 * | Rep Stress Incr NO | WB 0.75 | Vert(CT) -0.29 8-9 >982 240 |
| BCDL 10.0 | Code IRC2018/TPI2014 | Matrix-MS | Horz(CT) 0.01 8 n/a n/a |
| | | | Wind(LL) 0.04 8-9 >999 240 |
| | | | PLATES GRIP |
| | | | MT20 244/190 |
| | | | Weight: 343 lb FT = 20% |

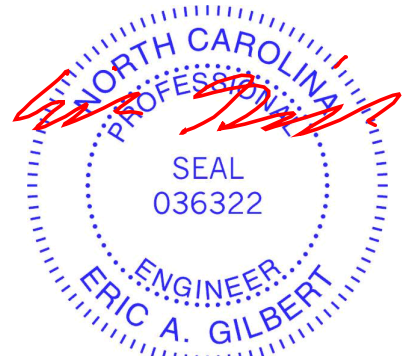
LUMBER-
TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.3 *Except*
7-8: 2x4 SP 2400F 2.0E, 6-8: 2x4 SP No.2

BRACING-
TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals
(Switched from sheeted: Spacing > 2-0-0).
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 7-8

REACTIONS. (size) 8=0-3-8, 2=0-3-8
Max Horz 2=624(LC 7)
Max Uplift 8=223(LC 5), 2=166(LC 8)
Max Grav 8=1838(LC 13), 2=1639(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2415/188, 3-5=-1811/195, 5-6=-1839/379, 7-8=-282/110
BOT CHORD 2-11=-338/2222, 9-11=-338/2222, 8-9=-251/822
WEBS 3-11=-9/287, 3-9=-780/192, 5-9=-589/280, 6-9=-208/1804, 6-8=-1440/229

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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) 8=223, 2=166.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 28,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacompnents.com)

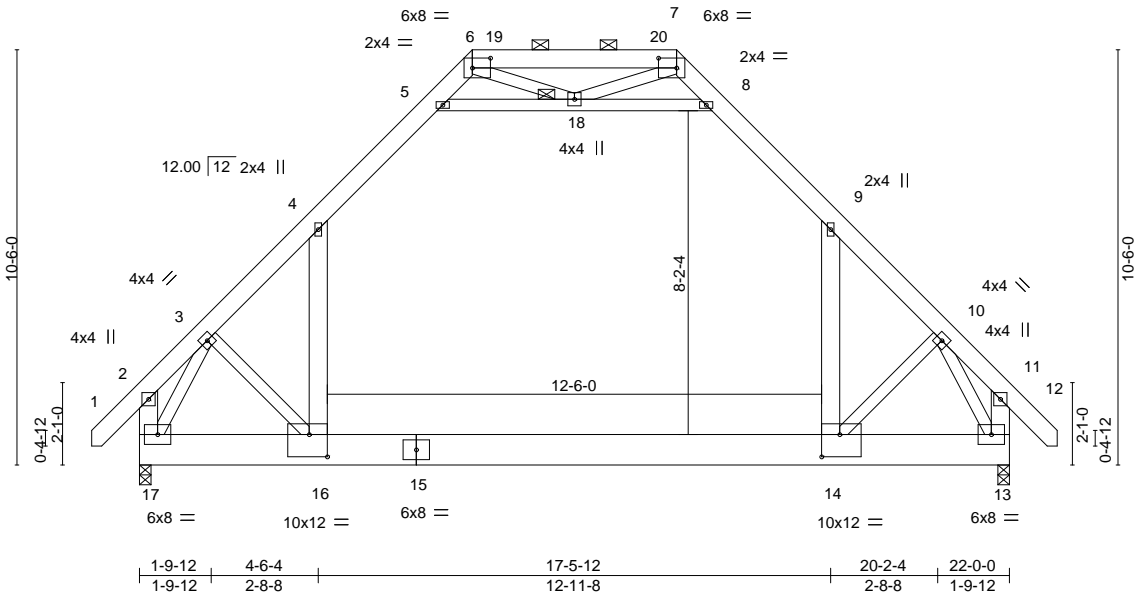
ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

| | | | | | |
|--------------------------|-------|-----------------|-----|-----|-------------------------|
| Job | Truss | Truss Type | Qty | Ply | Wellons Realty\Lot 1 FH |
| 28528 | TGE1 | PIGGYBACK ATTIC | 1 | 1 | 171695747 |
| Job Reference (optional) | | | | | |

C&R Truss, Autryville, NC - 28318, 8.530 s Aug 2 2023 MiTek Industries, Inc. Thu Feb 27 10:46:59 2025 Page 1
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| | | | | | | | | |
|-------|--------|-------|---------|--------|---------|--------|--------|--------|
| 1-2-8 | 1-9-12 | 4-6-4 | 8-5-0 | 13-7-0 | 17-5-12 | 20-2-4 | 22-0-0 | 23-2-8 |
| 1-2-8 | 1-9-12 | 2-8-8 | 3-10-12 | 5-2-0 | 3-10-12 | 2-8-8 | 1-9-12 | 1-2-8 |



| | | | | | | | | | | | |
|-----------------------|--|--|--|-----------|--|----------------|----------|--------|-----|----------------|----------|
| Plate Offsets (X,Y)-- | | [6:0-5-8,0-3-0], [7:0-5-8,0-3-0], [14:0-5-8,0-6-12], [16:0-5-8,0-6-12] | | | | | | | | | |
| 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 0.65 | | Vert(LL) -0.23 | 14-16 | >999 | 360 | MT20 | 244/190 |
| TCDL 10.0 | | Lumber DOL 1.15 | | BC 0.30 | | Vert(CT) -0.31 | 14-16 | >829 | 240 | | |
| BCLL 0.0 * | | Rep Stress Incr YES | | WB 0.33 | | Horz(CT) 0.01 | 13 | n/a | n/a | | |
| BCDL 10.0 | | Code IRC2018/TPI2014 | | Matrix-MS | | Wind(LL) 0.05 | 14-16 | >999 | 240 | Weight: 231 lb | FT = 20% |

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x10 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except*
4-16,9-14,2-17,11-13: 2x6 SP No.1, 5-8: 2x4 SP 2400F 2.0E

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-4-6 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 18

REACTIONS. (size) 13=0-3-8, 17=0-3-8
Max Horz 17=-300(LC 6)
Max Uplift 13=-72(LC 8), 17=-72(LC 8)
Max Grav 13=1301(LC 15), 17=1301(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-1383/64, 4-5=-837/138, 5-6=-230/312, 7-8=-230/312, 8-9=-836/138, 9-10=-1383/64, 6-7=-101/484
BOT CHORD 16-17=-59/810, 14-16=0/859, 13-14=0/700
WEBS 4-16=0/764, 9-14=0/764, 5-18=-1225/190, 8-18=-1225/190, 3-17=-1380/0, 10-13=-1379/0

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
 - 6) Ceiling dead load (5.0 psf) on member(s). 4-5, 8-9, 5-18, 8-18
 - 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 14-16
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 17.
 - 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - 11) Attic room checked for L/360 deflection.



February 28,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
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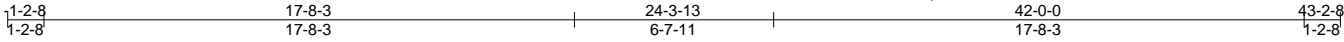
ENGINEERING BY
TRENCO
A MITEK Affiliate
818 Soundside Road
Edenton, NC 27932

| | | | | | | |
|--------------------------|-------|------------|-----|-----|-------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Wellons Realty\Lot 1 FH | 171695748 |
| 28528 | TGE2 | GABLE | 1 | 1 | | |
| Job Reference (optional) | | | | | | |

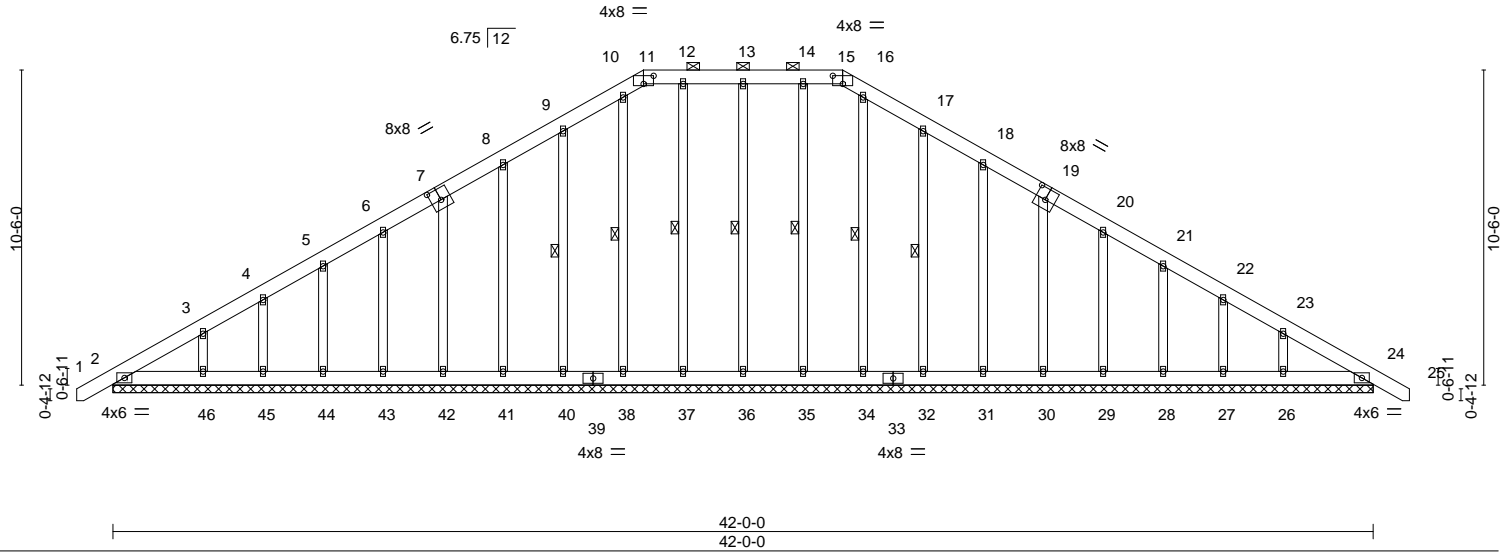
C&R Truss, Autryville, NC - 28318,

8.530 s Aug 2 2023 MiTek Industries, Inc. Thu Feb 27 10:46:59 2025 Page 1

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Scale = 1:76.8



| | | | | | | | | | | | | |
|-----------------------|-------|---|-------|----------|------|----------|----------|--------|-----|--------|----------------|----------|
| Plate Offsets (X,Y)-- | | [7:0-4-0,0-4-8], [11:0-4-0,0-3-4], [15:0-4-0,0-3-4], [19:0-4-0,0-4-8] | | | | | | | | | | |
| 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 | 0.03 | Vert(LL) | 0.00 | 24 | n/r | 120 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.01 | Vert(CT) | 0.00 | 24 | n/r | 120 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.13 | Horz(CT) | 0.00 | 24 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | | | | | | Weight: 384 lb | FT = 20% |

LUMBER-

TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP 2400F 2.0E
OTHERS 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 11-15.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 13-36, 12-37, 10-38, 9-40, 14-35, 16-34, 17-32

REACTIONS.

All bearings 42-0-0.
(lb) - Max Horz 2--233(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 2, 24, 36, 40, 41, 42, 43, 44, 45, 46, 32, 31, 30, 29, 28, 27, 26
Max Grav All reactions 250 lb or less at joint(s) 2, 24, 36, 37, 38, 40, 41, 42, 43, 44, 45, 46, 35, 34, 32, 31, 30, 29, 28, 27, 26

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=42ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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) Provide adequate drainage to prevent water ponding.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 24, 36, 40, 41, 42, 43, 44, 45, 46, 32, 31, 30, 29, 28, 27, 26.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 28,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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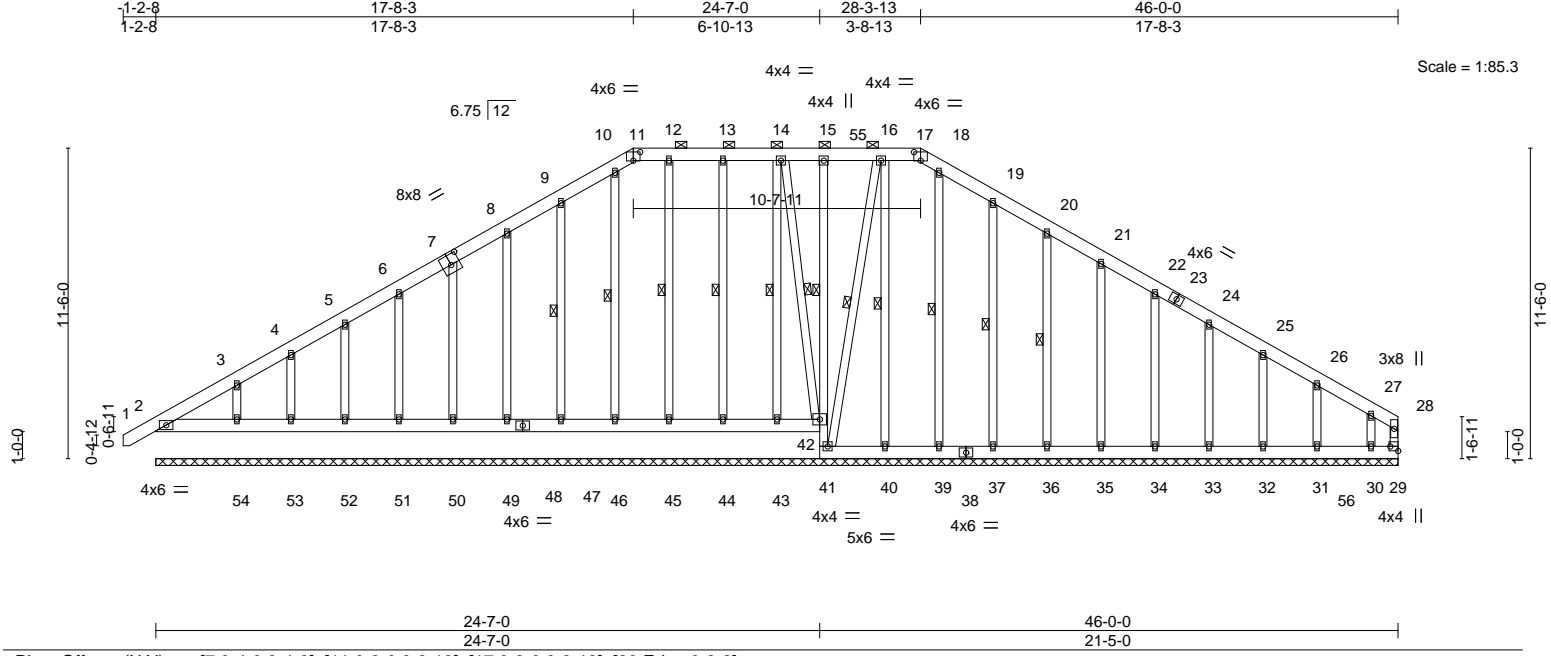
818 Soundside Road
Edenton, NC 27932

| | | | | | | |
|-------|-------|------------|-----|-----|--------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Wellons Realty\Lot 1 FH | 171695749 |
| 28528 | TGE3 | GABLE | 1 | 1 | Job Reference (optional) | |

C&R Truss, Autryville, NC - 28318,

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| | | | |
|-----------------------|----------------------|--|--------------------------|
| Plate Offsets (X,Y)-- | | [7:0-4-0,0-4-8], [11:0-3-0,0-3-13], [17:0-3-0,0-3-13], [29:Edge,0-3-8] | |
| LOADING (psf) | SPACING- | 2-0-0 | CSI. |
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.08 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.28 |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.13 |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-S |
| | | | DEFL. |
| | | | in (loc) l/defl L/d |
| | | | Vert(LL) 0.00 1 n/r 120 |
| | | | Vert(CT) 0.00 1 n/r 120 |
| | | | Horz(CT) 0.01 28 n/a n/a |
| | | | PLATES GRIP |
| | | | MT20 244/190 |
| | | | Weight: 476 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, and 2-0-0 oc purlins (6-0-0 max.): 11-17. |
| BOT CHORD 2x6 SP No.1 *Except* 15-41: 2x4 SP 2400F 2.0E | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 1 Row at midpt 15-42 |
| WEBS 2x4 SP No.3 | WEBS 1 Row at midpt 14-43, 13-44, 12-45, 10-46, 9-47, 16-40, 18-39, 19-37, 20-36, 14-42, 16-41 |
| OTHERS 2x4 SP No.3 | |

| | |
|-----------------|---|
| REACTIONS. | All bearings 46-0-0. |
| (lb) - Max Horz | 2=264(LC 7) |
| Max Uplift | All uplift 100 lb or less at joint(s) 29, 28, 2, 44, 47, 49, 50, 51, 52, 53, 54, 37, 36, 35, 34, 33, 31, 42 except 32=100(LC 34), 30=159(LC 8) |
| Max Grav | All reactions 250 lb or less at joint(s) 28, 2, 41, 43, 44, 45, 46, 47, 49, 50, 51, 52, 53, 54, 40, 39, 37, 36, 35, 34, 33, 32, 42 except 29=910(LC 2), 31=851(LC 2), 30=971(LC 22) |

| | |
|-----------|---|
| FORCES. | (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. |
| TOP CHORD | 9-10=140/279, 10-11=112/258, 11-12=104/266, 12-13=104/266, 13-14=104/266, 14-15=104/266, 15-16=104/266, 16-17=109/266, 17-18=112/259, 18-19=123/279 |

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=46ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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.
 - Provide adequate drainage to prevent water ponding.
 - 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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
 - Bearing at joint(s) 28, 42 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 29, 28, 2, 44, 47, 49, 50, 51, 52, 53, 54, 37, 36, 35, 34, 33, 31, 42 except (jt=lb) 32=100, 30=159.
 - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 43, 44, 45, 46, 47, 49, 50, 51, 52, 53, 54.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 28,2025

| | | | | | |
|-------|-------|------------|-----|-----|--------------------------|
| Job | Truss | Truss Type | Qty | Ply | Wellons Realty\Lot 1 FH |
| 28528 | TGE3 | GABLE | 1 | 1 | I71695749 |
| | | | | | Job Reference (optional) |

NOTES-
15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1178 lb down and 88 lb up at 43-11-4, and 1189 lb down and 77 lb up at 45-10-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-11=-60, 11-17=-60, 17-28=-60, 2-42=-20, 29-41=-20
Concentrated Loads (lb)
Vert: 29=-910 56=-899

 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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Edenton, NC 27932

| | | | | | | |
|-------|-------|------------|-----|-----|--------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Wellons Realty\Lot 1 FH | 171695750 |
| 28528 | TSGE1 | GABLE | 1 | 1 | Job Reference (optional) | |

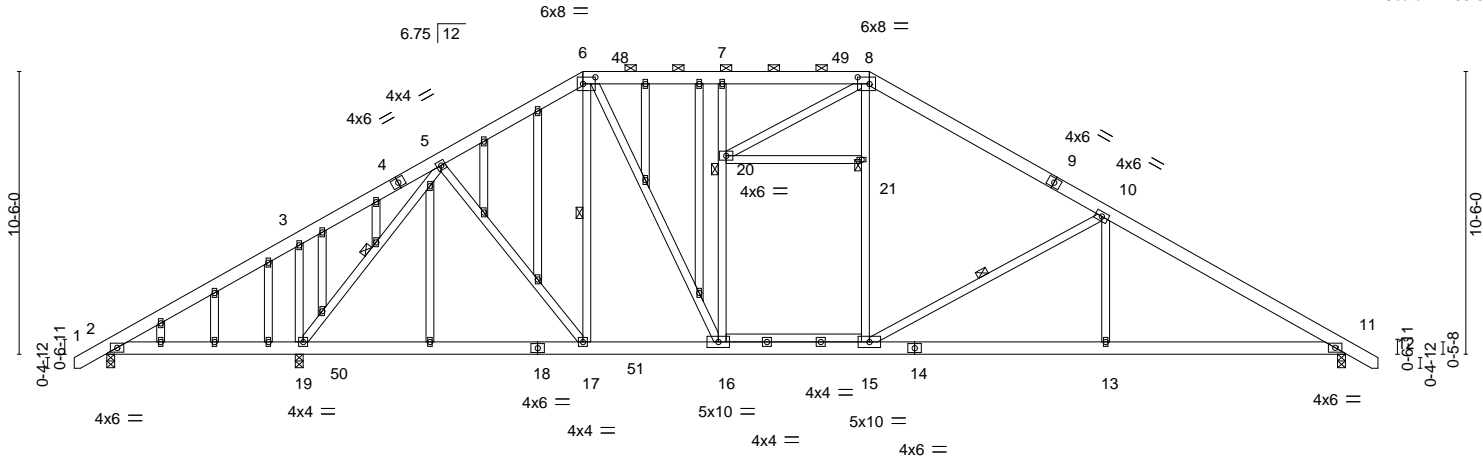
C&R Truss, Autryville, NC - 28318,

8.530 s Aug 2 2023 MiTek Industries, Inc. Thu Feb 27 10:47:02 2025 Page 1

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1-2-8 7-1-12 12-4-15 17-8-3 23-0-0 28-3-13 37-1-2 46-0-0 47-2-8
1-2-8 7-1-12 5-3-3 5-3-3 5-3-13 5-3-13 8-9-5 8-10-14 1-2-8

Scale = 1:85.6



7-1-12 17-8-3 23-0-0 28-3-13 37-1-2 46-0-0
7-1-12 10-6-7 5-3-13 5-3-13 8-9-5 8-10-14

Plate Offsets (X,Y)-- [6:0-5-8,0-3-0], [8:0-5-4,0-3-0]

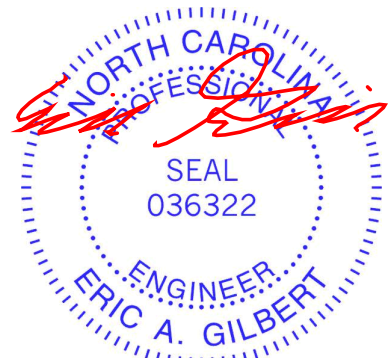
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|-----------|----------|----------|--------|------|--------|-------------------------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.28 | Vert(LL) | -0.15 | 17-19 | >999 | 360 | MT20 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.42 | Vert(CT) | -0.23 | 13-15 | >999 | 240 | 244/190 |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.73 | Horz(CT) | 0.05 | 11 | n/a | n/a | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-AS | Wind(LL) | 0.07 | 13-15 | >999 | 240 | |
| | | | | | | | | | Weight: 425 lb FT = 20% |

| LUMBER- | BRACING- |
|--------------------------------|--|
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied, except |
| BOT CHORD 2x6 SP No.1 *Except* | 2-0-0 oc purlins (6-0-0 max.): 6-8. |
| 15-16: 2x4 SP No.2 | BOT CHORD Rigid ceiling directly applied. |
| WEBS 2x4 SP No.3 | WEBS 1 Row at midpt 5-19, 6-17, 10-15 |
| OTHERS 2x4 SP No.3 | JOINTS 1 Brace at Jt(s): 20, 21 |

REACTIONS. (size) 2=0-3-8, 19=0-3-8, 11=0-3-8
Max Horz 2=-238(LC 6)
Max Uplift 2=-57(LC 8), 19=-144(LC 8), 11=-157(LC 8)
Max Grav 2=399(LC 1), 19=2351(LC 13), 11=1684(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-416/343, 3-5=-385/297, 5-6=-1684/234, 6-7=-1678/263, 7-8=-1670/263,
8-10=-2035/249, 10-11=-2752/235
BOT CHORD 2-19=-218/270, 17-19=0/1098, 16-17=0/1411, 15-16=0/1608, 13-15=-80/2322,
11-13=-80/2322
WEBS 3-19=-434/178, 5-19=-1866/90, 5-17=0/529, 6-16=-65/675, 16-20=-424/82,
7-20=-388/82, 15-21=0/606, 8-21=0/607, 10-15=-846/167, 10-13=0/392

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=46ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; 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) Provide adequate drainage to prevent water ponding.
 - 5) All plates are 2x4 MT20 unless otherwise indicated.
 - 6) Gable studs spaced at 2-0-0 oc.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=1b) 19=144, 11=157.
 - 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 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.
 - 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 28, 2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

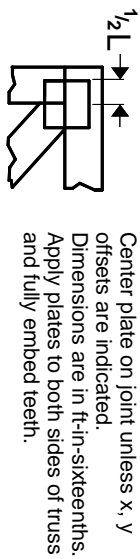
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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 and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacompoments.com)

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TRENCO
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818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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

PLATE SIZE

4 X 4

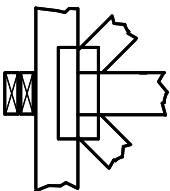
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

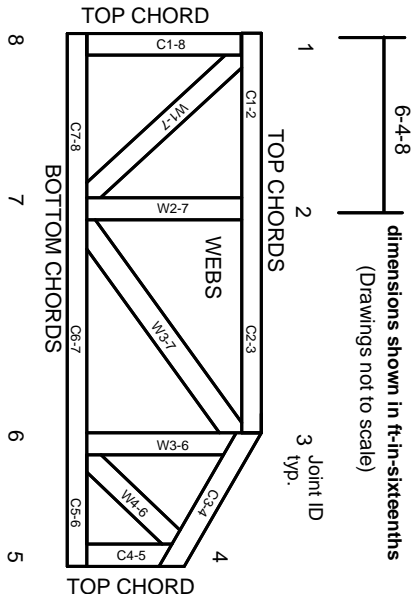


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

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

Lumber design values are in accordance with ANSI/TP1 1 section 6.3. These truss designs rely on lumber values established by others.

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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.
21. The design does not take into account any dynamic or other loads other than those expressly stated.

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MITek Engineering Reference Sheet: MII-7473 rev. 1/2/2023