

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: Master-120
DR Horton; Cali; M; Master.RT120

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

Pages or sheets covered by this seal: I63654179 thru I63654196

My license renewal date for the state of North Carolina is December 31, 2024.

North Carolina COA: C-0844



February 16,2024

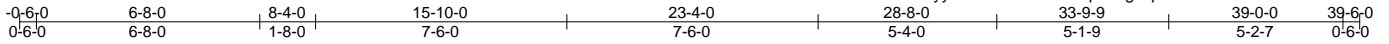
Gilbert, Eric

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.

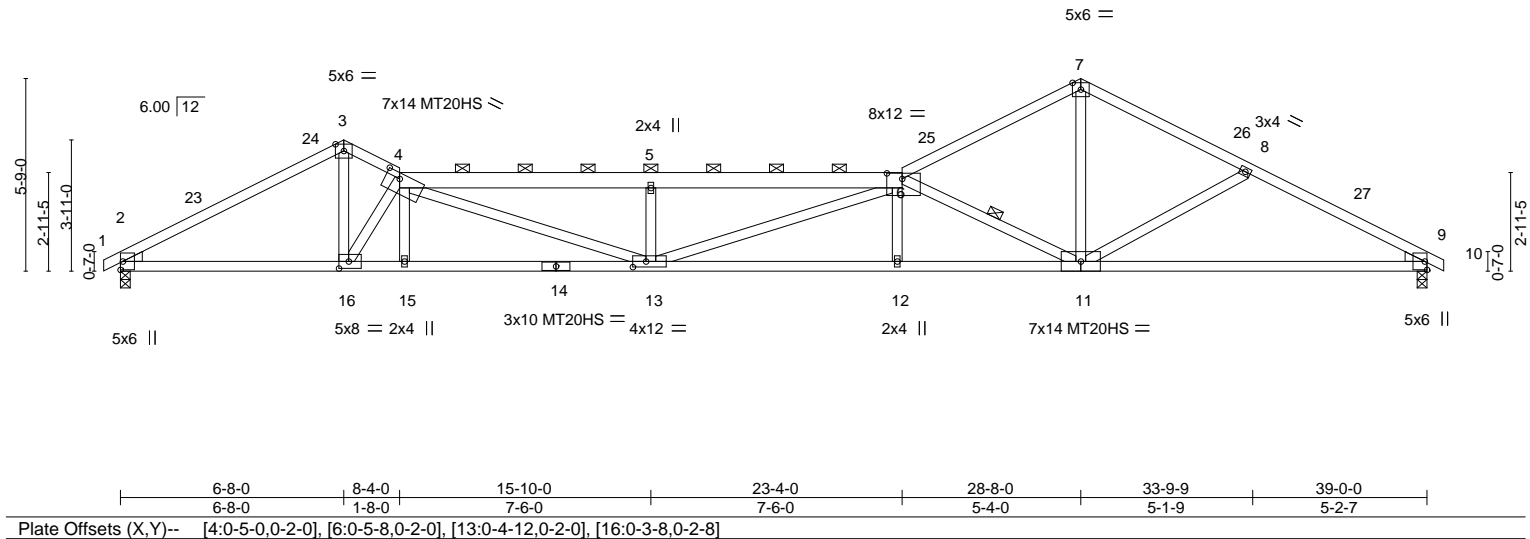
| | | | | | | |
|------------|-------|------------|-----|-----|----------------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | DR Horton; Cali; M; Master.RT120 | 163654179 |
| MASTER-120 | A01 | SPECIAL | 1 | 1 | | |

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.630 s Aug 30 2023 MiTek Industries, Inc. Thu Feb 15 10:42:26 2024 Page 1

ID:GkdJTsrewC8FsrdsGJOzyyZcn-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:68.8



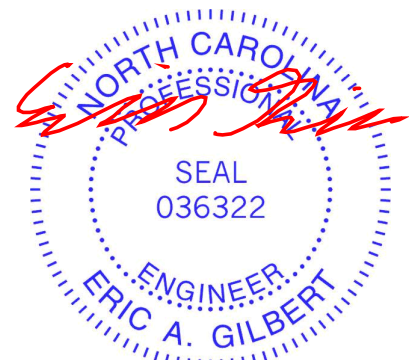
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP | |
|---------------|----------------------|-------|-----------|----------|----------|--------|------|--------|--------|-------------------------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.80 | Vert(LL) | -0.52 | 12-13 | >906 | 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.74 | Vert(CT) | -1.07 | 12-13 | >439 | 240 | MT20HS | 187/143 |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.95 | Horz(CT) | 0.18 | 9 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-MS | Wind(LL) | 0.33 | 12-13 | >999 | 240 | | Weight: 203 lb FT = 20% |

| LUMBER- | BRACING- |
|--|---|
| TOP CHORD 2x4 SP No.2 *Except* 4-6: 2x6 SP No.2 | TOP CHORD Structural wood sheathing directly applied or 2-7-11 oc purlins, except |
| BOT CHORD 2x4 SP No.1 *Except* 11-14: 2x4 SP SS | 2-0-0 oc purlins (2-2-1 max.): 4-6. |
| WEBS 2x4 SP No.3 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEDGE Left: 2x4 SP No.3, Right: 2x4 SP No.3 | WEBS 1 Row at midpt 6-11 |

REACTIONS. (size) 2=0-3-8, 9=0-3-8
 Max Horz 2=-80(LC 17)
 Max Uplift 2=-36(LC 12)
 Max Grav 2=1590(LC 1), 9=1590(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2773/244, 3-4=-2740/272, 4-5=-5826/467, 5-6=-5826/467, 6-7=-2554/229,
 7-8=-2534/243, 8-9=-2801/266
 BOT CHORD 2-16=-162/2394, 15-16=-257/3809, 13-15=-253/3816, 12-13=-371/5437, 11-12=-374/5431,
 9-11=-166/2434
 WEBS 3-16=-136/2286, 4-16=-2697/187, 4-13=-160/2131, 5-13=-708/198, 6-13=-147/548,
 6-11=-3612/334, 7-11=-96/1910, 8-11=-320/139

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-6-0 to 2-6-0, Interior(1) 2-6-0 to 6-8-0, Exterior(2) 6-8-0 to 8-4-0, Interior(1) 8-4-0 to 28-8-0, Exterior(2) 28-8-0 to 32-10-15, Interior(1) 32-10-15 to 39-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 2.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 16, 2024

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/TPH 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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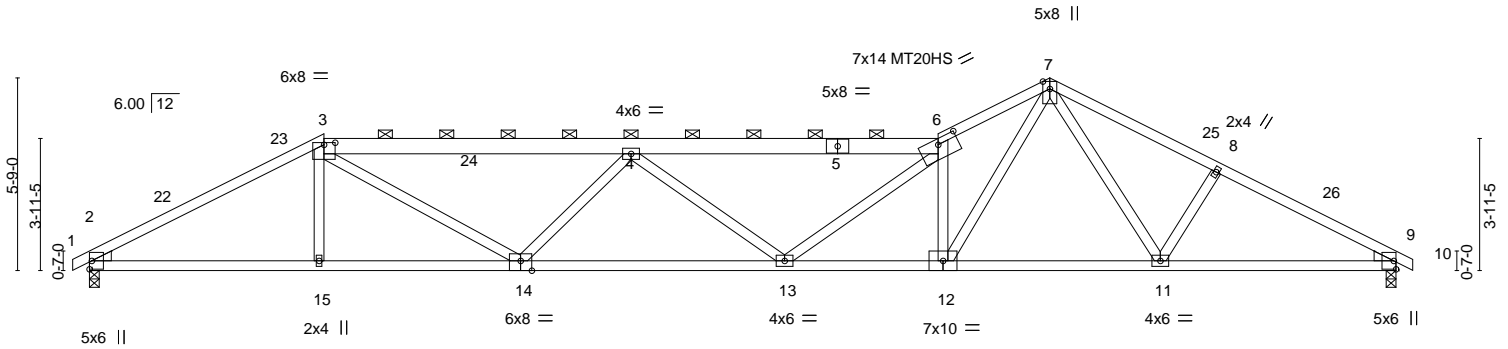
| | | | | | | |
|------------|-------|------------|-----|-----|----------------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | DR Horton; Cali; M; Master.RT120 | 163654180 |
| MASTER-120 | A02 | SPECIAL | 1 | 1 | | |

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.630 s Aug 30 2023 MiTek Industries, Inc. Thu Feb 15 10:42:28 2024 Page 1

ID:GkdJTsrwC8FsrDZ9sGJQzzyZcn-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWRCDoi7J4zJC?f

| | | | | | | | |
|--------|-------|--------|--------|--------|--------|--------|--------|
| -0-6-0 | 7-0-0 | 16-2-0 | 25-4-0 | 28-8-0 | 33-7-9 | 39-0-0 | 39-6-0 |
| 0-6-0 | 7-0-0 | 9-2-0 | 9-2-0 | 3-4-0 | 4-11-9 | 5-4-7 | 0-6-0 |

Scale = 1:68.8



| | | | | | |
|-------|---------|--------|--------|---------|--------|
| 7-0-0 | 12-10-7 | 20-9-0 | 25-4-0 | 31-11-9 | 39-0-0 |
| 7-0-0 | 5-10-7 | 7-10-9 | 4-7-0 | 6-7-9 | 7-0-7 |

Plate Offsets (X,Y)-- [3:0-4-0,0-0-12], [6:0-7-0,0-2-0], [14:0-4-0,Edge]

| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP | |
|---------------|----------------------|-------|-----------|----------|----------|--------|------|--------|--------|-------------------------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.78 | Vert(LL) | -0.33 | 13 | >999 | 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.98 | Vert(CT) | -0.70 | 13-14 | >671 | 240 | MT20HS | 187/143 |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.80 | Horz(CT) | 0.17 | 9 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-MS | Wind(LL) | 0.22 | 13 | >999 | 240 | | Weight: 206 lb FT = 20% |

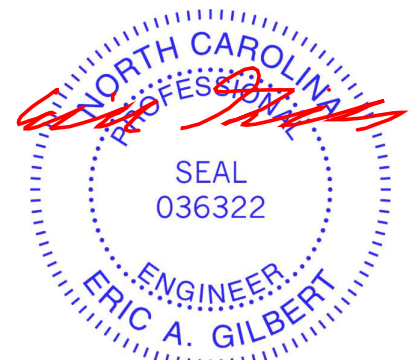
LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
3-5,5-6: 2x6 SP DSS
BOT CHORD 2x4 SP No.2 *Except*
12-14: 2x4 SP No.1
WEBS 2x4 SP No.3 *Except*
7-12: 2x4 SP No.2
WEDGE
Left: 2x4 SP No.3, Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (3-4-14 max.): 3-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 9-11.

REACTIONS. (size) 2=0-3-8, 9=0-3-8
Max Horz 2=-80(LC 17)
Max Uplift 2=-36(LC 12)
Max Grav 2=1590(LC 1), 9=1590(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2818/252, 3-4=-3701/306, 4-6=-4099/325, 6-7=-4183/404, 7-8=-2685/262, 8-9=-2825/244
BOT CHORD 2-15=-166/2442, 14-15=-169/2439, 13-14=-314/4284, 12-13=-228/3766, 11-12=-95/2177, 9-11=-163/2451
WEBS 3-14=-107/1486, 4-14=-867/192, 6-12=-2438/280, 7-12=-254/2953, 7-11=-45/385, 4-13=-313/173, 6-13=-41/506

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-6-0 to 2-6-0, Interior(1) 2-6-0 to 7-0-0, Exterior(2) 7-0-0 to 11-2-15, Interior(1) 11-2-15 to 28-8-0, Exterior(2) 28-8-0 to 32-10-15, Interior(1) 32-10-15 to 39-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 2.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 16, 2024

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/TP1 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.sbccomponents.com)

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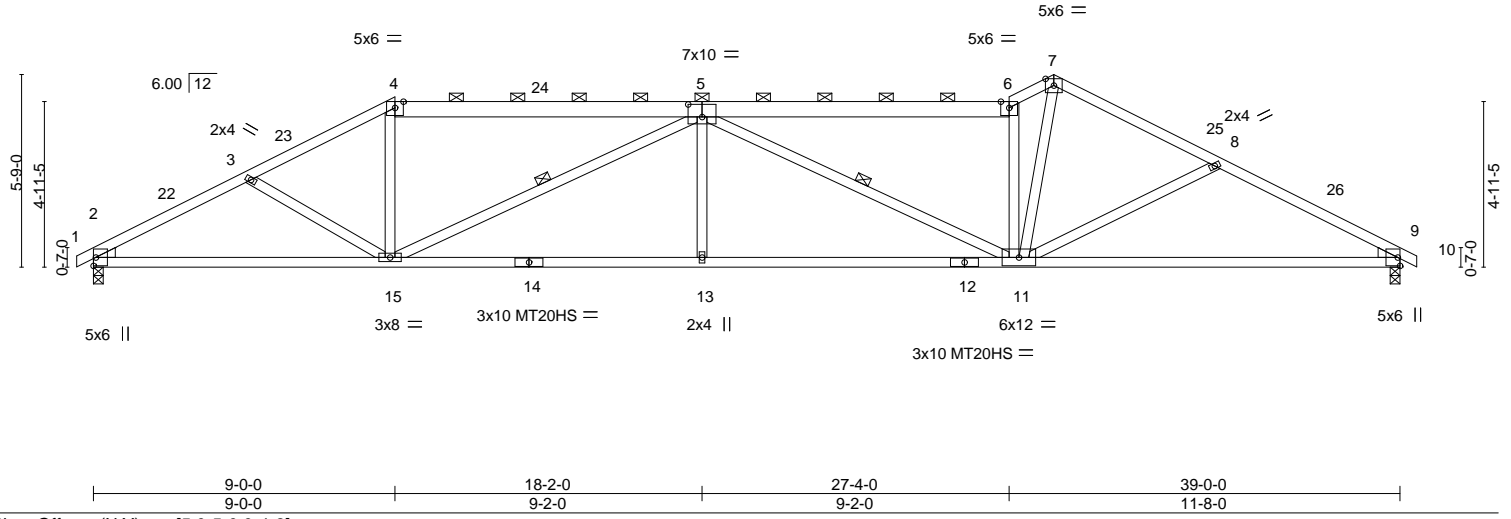
| | | | | | | |
|------------|-------|------------|-----|-----|----------------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | DR Horton; Cali; M; Master.RT120 | 163654181 |
| MASTER-120 | A03 | SPECIAL | 1 | 1 | | |

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.630 s Aug 30 2023 MiTek Industries, Inc. Thu Feb 15 10:42:29 2024 Page 1

ID:GkdJTsrwC8FsrDZ9sGJozyyZcn-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

| | | | | | | | | |
|--------|-------|-------|--------|--------|--------|--------|--------|--------|
| -0-6-0 | 4-8-7 | 9-0-0 | 18-2-0 | 27-4-0 | 28-8-0 | 33-7-9 | 39-0-0 | 39-6-0 |
| 0-6-0 | 4-8-7 | 4-3-9 | 9-2-0 | 9-2-0 | 1-4-0 | 4-11-9 | 5-4-7 | 0-6-0 |

Scale = 1:68.8



| | | | | | | | | | |
|---------------|----------------------|-------|-----------|----------|-------------|--------|-----|----------------|----------|
| 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 0.67 | Vert(LL) | -0.27 11-13 | >999 | 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.87 | Vert(CT) | -0.57 11-13 | >819 | 240 | MT20HS | 187/143 |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.97 | Horz(CT) | 0.16 9 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2015/TP12014 | | Matrix-MS | Wind(LL) | 0.18 11-13 | >999 | 240 | Weight: 213 lb | FT = 20% |

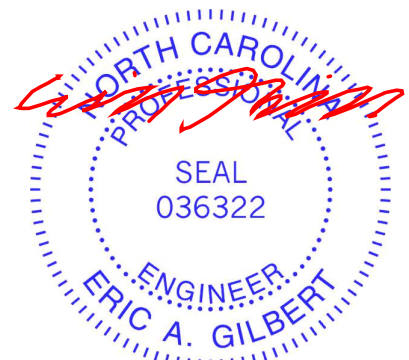
LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
4-5,5-6: 2x6 SP No.2
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-9-1 oc purlins, except 2-0-0 oc purlins (3-8-1 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-15, 5-11

REACTIONS. (size) 2=0-3-8, 9=0-3-8
Max Horz 2=-80(LC 13)
Max Uplift 2=-36(LC 12), 9=-20(LC 8)
Max Grav 2=1590(LC 1), 9=1590(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2815/268, 3-4=-2639/235, 4-5=-2327/242, 5-6=-2728/265, 6-7=-2995/298, 7-8=-2500/233, 8-9=-2794/278
BOT CHORD 2-15=-194/2440, 13-15=-195/3453, 11-13=-195/3453, 9-11=-185/2428
WEBS 4-15=0/770, 5-15=-1260/178, 5-13=0/370, 5-11=-922/118, 6-11=-1639/206, 7-11=-168/2346, 8-11=-336/142

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-6-0 to 2-6-0, Interior(1) 2-6-0 to 9-0-0, Exterior(2) 9-0-0 to 13-2-15, Interior(1) 13-2-15 to 28-8-0, Exterior(2) 28-8-0 to 32-10-15, Interior(1) 32-10-15 to 39-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) All plates are MT20 plates unless otherwise indicated.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 2 and 20 lb uplift at joint 9.
 - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 16, 2024

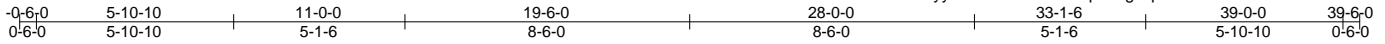
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
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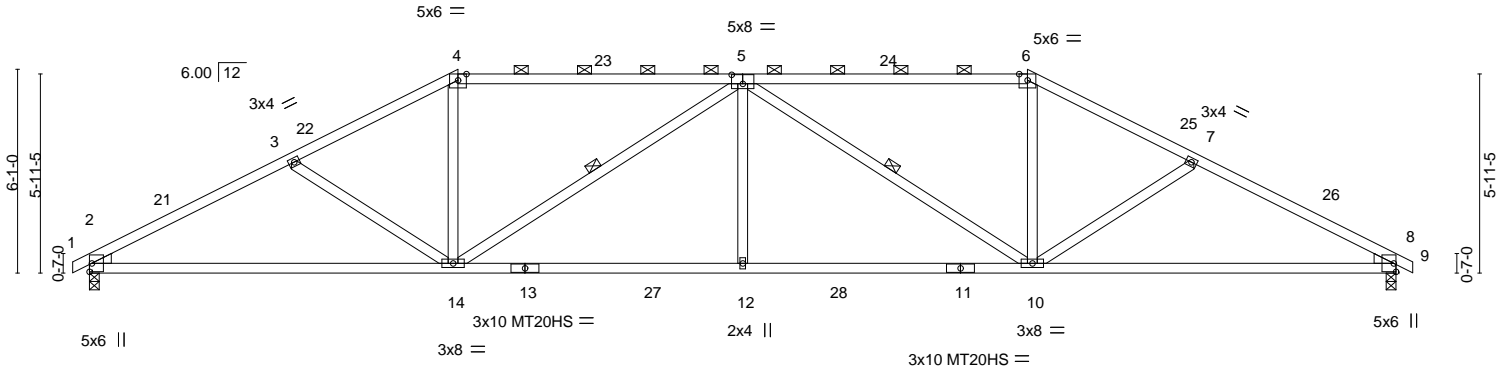
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|------------|-------|------------|-----|-----|----------------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | DR Horton; Cali; M; Master.RT120 | 163654182 |
| MASTER-120 | A04 | HIP | 1 | 1 | Job Reference (optional) | |

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.630 s Aug 30 2023 MiTek Industries, Inc. Thu Feb 15 10:42:31 2024 Page 1

ID:GkdJTsrewC8FsrzdZ9sGJozyyZcn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?#



Scale = 1:68.8



| | | | | | | | |
|-----------------------|-----------------|--------|--------|--------|--------|--------|---------|
| 5-10-10 | 11-0-0 | 13-0-0 | 19-6-0 | 26-0-0 | 28-0-0 | 33-1-6 | 39-0-0 |
| 5-10-10 | 5-1-6 | 2-0-0 | 6-6-0 | 6-6-0 | 2-0-0 | 5-1-6 | 5-10-10 |
| Plate Offsets (X,Y)-- | [5:0-4-0,0-3-4] | | | | | | |

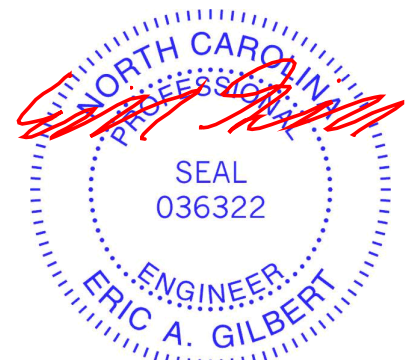
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP | |
|---------------|----------------------|-------|-----------|----------|----------|--------|------|--------|----------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.74 | Vert(LL) | -0.21 | 10-12 | >999 | 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.75 | Vert(CT) | -0.44 | 14-17 | >999 | 240 | MT20HS | 187/143 |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.47 | Horz(CT) | 0.14 | 8 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2015/TP12014 | | Matrix-MS | Wind(LL) | 0.14 | 12 | >999 | 240 | | |
| | | | | | | | | | Weight: 194 lb | FT = 20% |

| LUMBER- | BRACING- |
|--|--|
| TOP CHORD 2x4 SP No.2 *Except* 4-5,5-6: 2x4 SP SS | TOP CHORD Structural wood sheathing directly applied or 3-0-1 oc purlins, except 2-0-0 oc purlins (3-7-7 max.): 4-6. |
| BOT CHORD 2x4 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS 2x4 SP No.3 | WEBS 1 Row at midpt 5-14, 5-10 |
| WEDGE Left: 2x4 SP No.3, Right: 2x4 SP No.3 | |

| REACTIONS. | (size) |
|------------|---|
| | 2=0-3-8, 8=0-3-8 |
| | Max Horz 2=82(LC 12) |
| | Max Uplift 2=-118(LC 12), 8=-118(LC 13) |
| | Max Grav 2=1590(LC 1), 8=1590(LC 1) |

| FORCES. | (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. |
|-----------|--|
| TOP CHORD | 2-3=-2784/275, 3-4=-2518/242, 4-5=-2194/251, 5-6=-2194/251, 6-7=-2518/242, 7-8=-2784/275 |
| BOT CHORD | 2-14=-212/2414, 12-14=-133/2789, 10-12=-133/2789, 8-10=-179/2414 |
| WEBS | 3-14=-253/146, 5-14=-850/150, 5-10=-850/150, 7-10=-253/146, 5-12=0/371, 4-14=0/713, 6-10=0/713 |

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-6-0 to 2-6-0, Interior(1) 2-6-0 to 11-0-0, Exterior(2) 11-0-0 to 15-2-15, Interior(1) 15-2-15 to 28-0-0, Exterior(2) 28-0-0 to 32-2-15, Interior(1) 32-2-15 to 39-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) All plates are MT20 plates unless otherwise indicated.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 118 lb uplift at joint 2 and 118 lb uplift at joint 8.
 - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 16, 2024

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/TP1 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.sbccomponents.com)

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

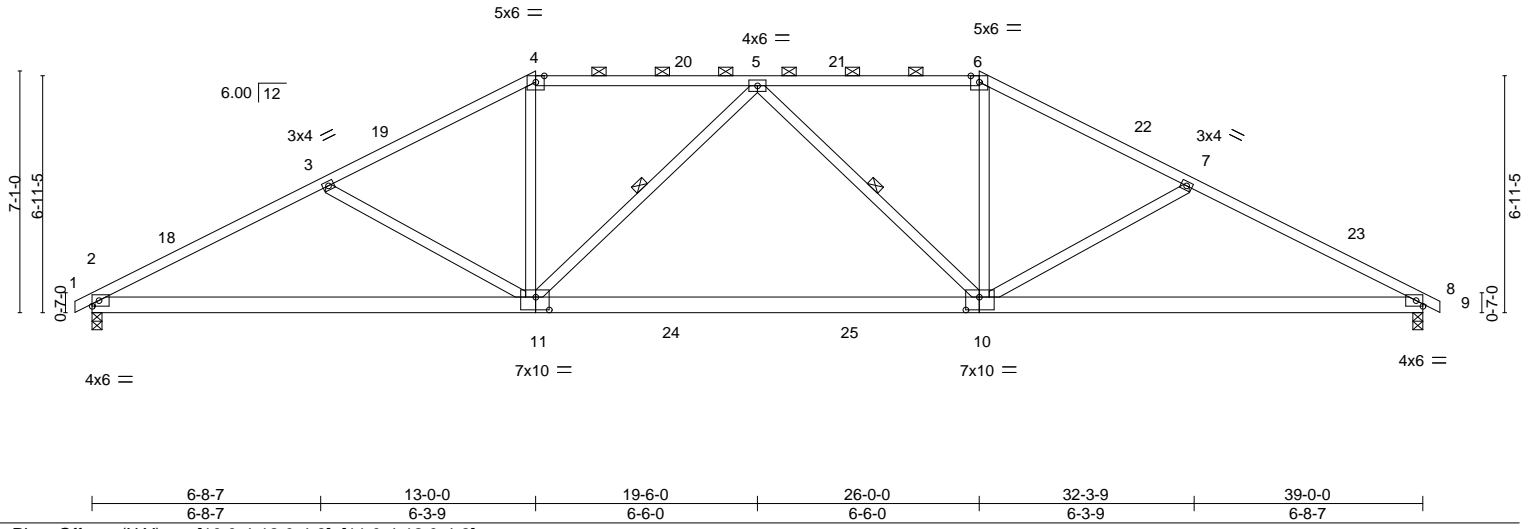
| | | | | | | |
|------------|-------|------------|-----|-----|----------------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | DR Horton; Cali; M; Master.RT120 | 163654183 |
| MASTER-120 | A05 | HIP | 1 | 1 | | |

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.630 s Aug 30 2023 MiTek Industries, Inc. Thu Feb 15 10:42:32 2024 Page 1

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| | | | | | | | |
|-------|-------|--------|--------|--------|--------|--------|--------|
| 0-6-0 | 6-8-7 | 13-0-0 | 19-6-0 | 26-0-0 | 32-3-9 | 39-0-0 | 39-6-0 |
| 0-6-0 | 6-8-7 | 6-3-9 | 6-6-0 | 6-6-0 | 6-3-9 | 6-8-7 | 0-6-0 |

Scale = 1:67.5



| | |
|-----------------------|--------------------------------------|
| Plate Offsets (X,Y)-- | [10:0-4-12,0-4-8], [11:0-4-12,0-4-8] |
|-----------------------|--------------------------------------|

| 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 0.62 | Vert(LL) | -0.37 10-11 | >999 | 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.90 | Vert(CT) | -0.58 10-11 | >808 | 240 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.39 | Horz(CT) | 0.09 8 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-MS | Wind(LL) | 0.11 10-11 | >999 | 240 | Weight: 221 lb | FT = 20% |

| LUMBER- | BRACING- |
|-----------------------|--|
| TOP CHORD 2x4 SP No.2 | TOP CHORD Structural wood sheathing directly applied or 3-0-5 oc purlins, except 2-0-0 oc purlins (3-4-5 max.): 4-6. |
| BOT CHORD 2x6 SP No.2 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS 2x4 SP No.3 | WEBS 1 Row at midpt 5-11, 5-10 |

REACTIONS. (size) 2=0-3-8, 8=0-3-8
 Max Horz 2=-96(LC 13)
 Max Uplift 2=-116(LC 12), 8=-116(LC 13)
 Max Grav 2=1590(LC 1), 8=1590(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2818/283, 3-4=-2423/225, 4-5=-2098/239, 5-6=-2098/239, 6-7=-2423/225, 7-8=-2818/283
 BOT CHORD 2-11=-232/2446, 10-11=-99/2329, 8-10=-184/2446
 WEBS 3-11=-410/206, 4-11=0/714, 5-11=-459/157, 5-10=-459/157, 6-10=0/714, 7-10=-410/206

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-6-0 to 2-6-0, Interior(1) 2-6-0 to 13-0-0, Exterior(2) 13-0-0 to 17-2-15, Interior(1) 17-2-15 to 26-0-0, Exterior(2) 26-0-0 to 30-2-15, Interior(1) 30-2-15 to 39-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 116 lb uplift at joint 2 and 116 lb uplift at joint 8.
 - 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

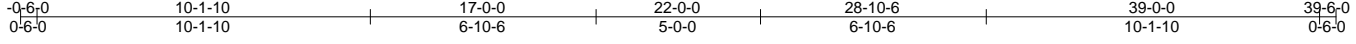


February 16, 2024

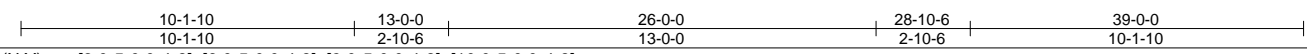
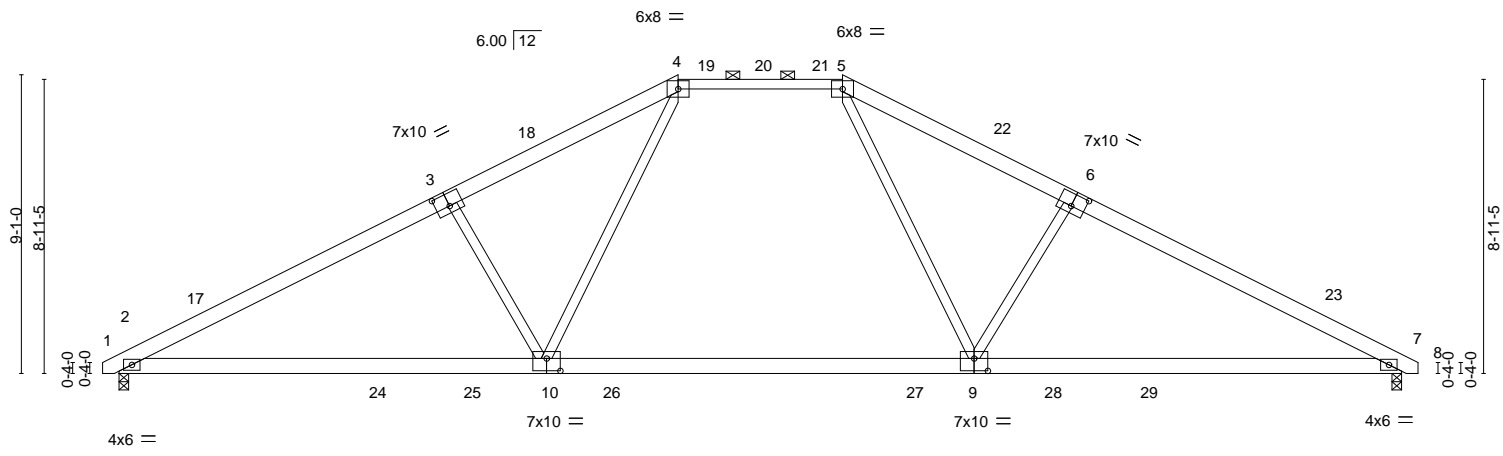
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|------------|-------|------------|-----|-----|----------------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | DR Horton; Cali; M; Master.RT120 | 163654185 |
| MASTER-120 | A07 | HIP | 1 | 1 | Job Reference (optional) | |

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.630 s Aug 30 2023 MiTek Industries, Inc. Thu Feb 15 10:42:34 2024 Page 1

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Scale = 1:70.1



| | |
|------------------------|---|
| Plate Offsets (X, Y)-- | [3:0-5-0,0-4-8], [6:0-5-0,0-4-8], [9:0-5-0,0-4-8], [10:0-5-0,0-4-8] |
|------------------------|---|

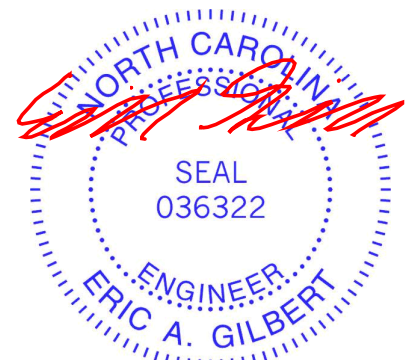
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|-----------|----------|----------|--------|------|----------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.54 | Vert(LL) | -0.39 | 10-13 | >999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.43 | Vert(CT) | -0.54 | 9-16 | >864 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.40 | Horz(CT) | 0.06 | 7 | n/a | | |
| BCDL 10.0 | Code IRC2015/TP12014 | | Matrix-MS | Wind(LL) | 0.25 | 10-13 | >999 | | |
| | | | | | | | | Weight: 234 lb | FT = 20% |

| LUMBER- | BRACING- |
|--|--|
| TOP CHORD 2x6 SP No.2 *Except* 4-5: 2x4 SP SS | TOP CHORD Structural wood sheathing directly applied or 3-9-1 oc purlins, except 2-0-0 oc purlins (4-9-4 max.): 4-5. |
| BOT CHORD 2x6 SP DSS | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS 2x4 SP No.3 | |

REACTIONS. (size) 2=0-3-8, 7=0-3-8
 Max Horz 2=125(LC 12)
 Max Uplift 2=-107(LC 12), 7=-107(LC 13)
 Max Grav 2=1606(LC 2), 7=1606(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2871/236, 3-4=-2633/261, 4-5=-1868/261, 5-6=-2633/261, 6-7=-2872/236
 BOT CHORD 2-10=-178/2488, 9-10=-15/1868, 7-9=-111/2489
 WEBS 3-10=-578/278, 4-10=-62/956, 5-9=-62/958, 6-9=-578/278

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-3-14 to 2-8-2, Interior(1) 2-8-2 to 17-0-0, Exterior(2) 17-0-0 to 21-2-15, Interior(1) 21-2-15 to 22-0-0, Exterior(2) 22-0-0 to 26-2-15, Interior(1) 26-2-15 to 39-3-14 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 107 lb uplift at joint 2 and 107 lb uplift at joint 7.
 - 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



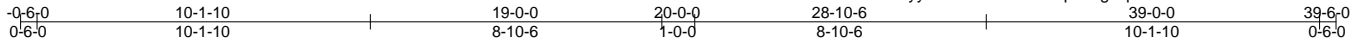
February 16, 2024

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|--|---|
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|--|---|

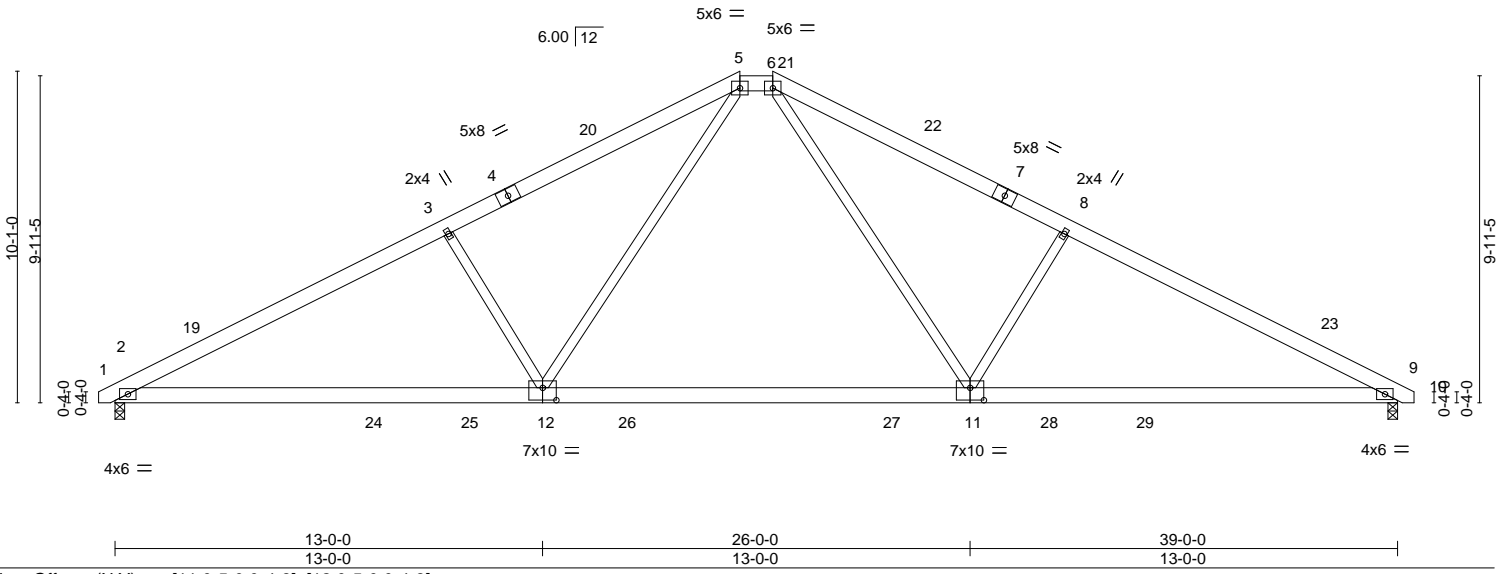
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|------------|-------|------------|-----|-----|----------------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | DR Horton; Cali; M; Master.RT120 | 163654186 |
| MASTER-120 | A08 | HIP | 1 | 1 | | |

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Scale = 1:70.1

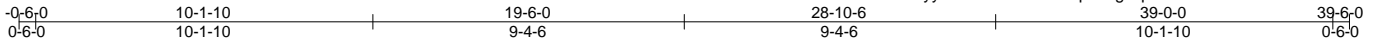


| | | | | | | |
|-------------------|--------------|-------------------|----------|----------|----------------------------------|-----------|
| Job MASTER-120 | Truss A09 | Truss Type FAN | Qty 6 | Ply 1 | DR Horton; Cali; M; Master.RT120 | 163654187 |
|-------------------|--------------|-------------------|----------|----------|----------------------------------|-----------|

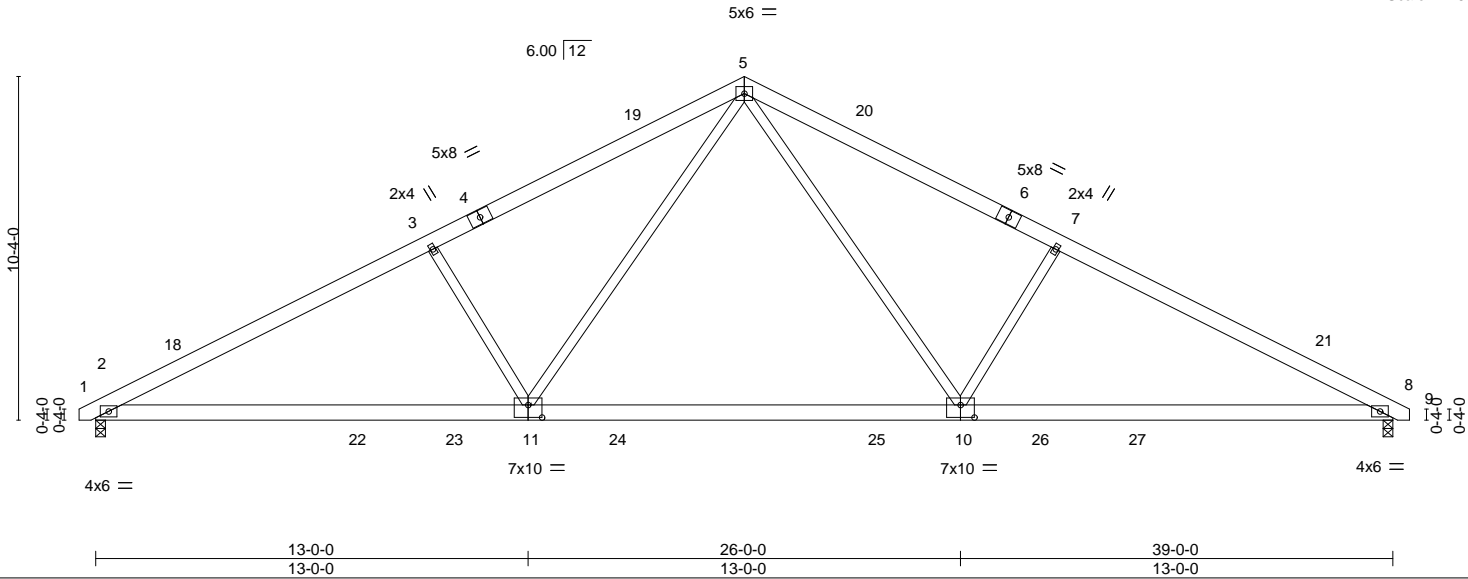
Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.630 s Aug 30 2023 MiTek Industries, Inc. Thu Feb 15 10:42:37 2024 Page 1

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Scale = 1:69.3



| | | | | | |
|-----------------------|------------------------------------|-------------|----------------------------------|----------------|-------------|
| Plate Offsets (X,Y)-- | [10:0-5-0,0-4-8], [11:0-5-0,0-4-8] | | | | |
| 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 0.57 | Vert(LL) -0.32 10-11 >999 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.95 | Vert(CT) -0.49 10-11 >952 240 | | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.45 | Horz(CT) 0.08 8 n/a n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | Matrix-MS | Wind(LL) 0.12 11-14 >999 240 | Weight: 247 lb | FT = 20% |

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

REACTIONS. (size) 2=0-3-8, 8=0-3-8
 Max Horz 2=144(LC 12)
 Max Uplift 2=-103(LC 12), 8=-103(LC 13)
 Max Grav 2=1585(LC 2), 8=1585(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2813/196, 3-5=-2596/229, 5-7=-2596/229, 7-8=-2813/197
 BOT CHORD 2-11=-208/2461, 10-11=-3/1623, 8-10=-64/2461
 WEBS 5-10=-114/1093, 7-10=-601/281, 5-11=-113/1093, 3-11=-601/281

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-3-14 to 2-8-2, Interior(1) 2-8-2 to 19-6-0, Exterior(2) 19-6-0 to 22-6-0, Interior(1) 22-6-0 to 39-3-14 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) 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, with BCDL = 10.0psf.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 103 lb uplift at joint 2 and 103 lb uplift at joint 8.



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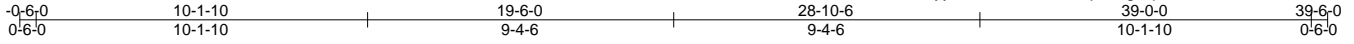
| | |
|--|---|
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|--|---|

| | | | | | | |
|-------------------|---------------|-------------------------|----------|----------|----------------------------------|-----------|
| Job MASTER-120 | Truss A09C | Truss Type CATHEDRAL | Qty 4 | Ply 1 | DR Horton; Cali; M; Master.RT120 | 163654188 |
|-------------------|---------------|-------------------------|----------|----------|----------------------------------|-----------|

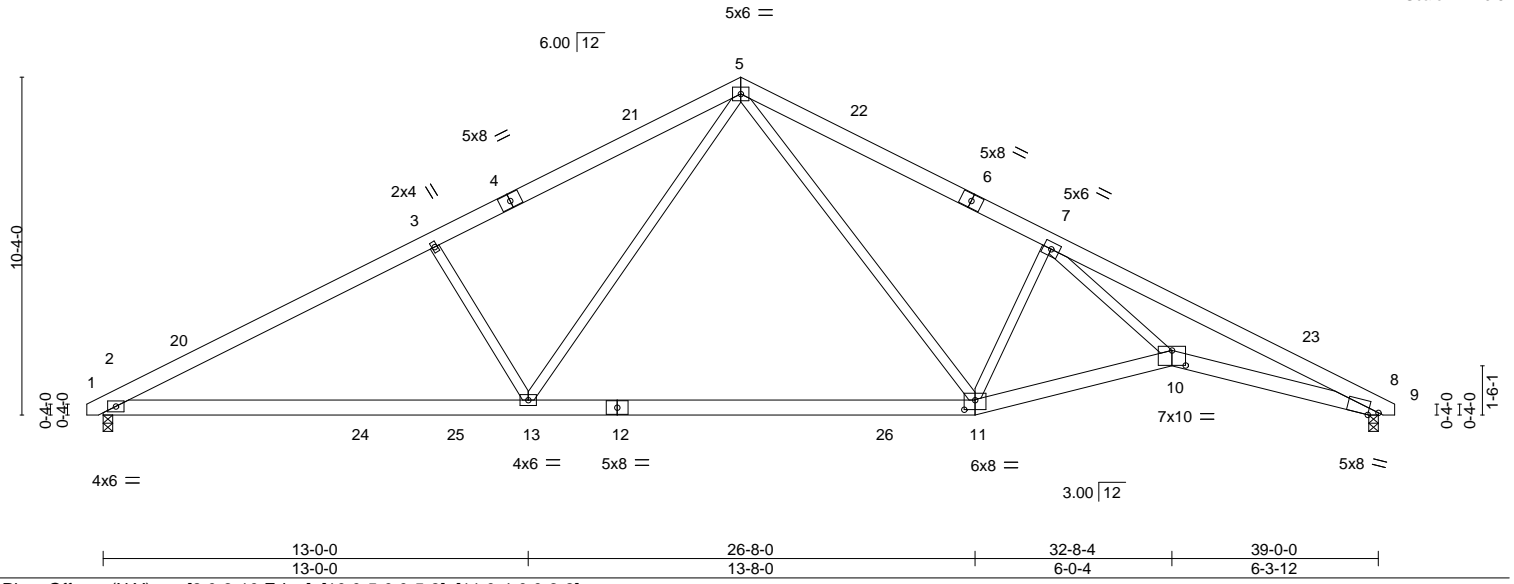
Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.630 s Aug 30 2023 MiTek Industries, Inc. Thu Feb 15 10:42:38 2024 Page 1

ID:GkdJTsrewC8FsrDZ9sGJOzzyZcn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKwrcDoi7J4zJC?f



Scale = 1:70.5



| | |
|-----------------------|---|
| Plate Offsets (X,Y)-- | [8:0-3-10,Edge], [10:0-5-0,0-5-8], [11:0-4-0,0-3-8] |
|-----------------------|---|

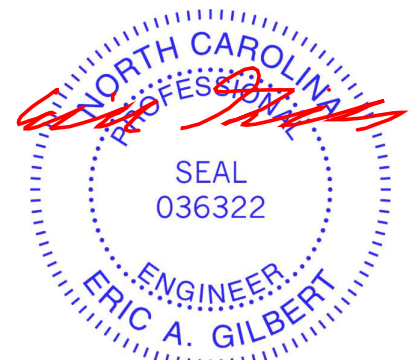
| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
|---------------|----------------------|-----------|-------------------------------|----------------|----------|
| TCLL 20.0 | 2-0-0 | TC 0.56 | in (loc) l/defl L/d | MT20 | 244/190 |
| TCDL 10.0 | Plate Grip DOL 1.15 | BC 0.94 | Vert(LL) -0.47 11-13 >999 360 | | |
| BCLL 0.0 * | Lumber DOL 1.15 | WB 0.77 | Vert(CT) -0.83 11-13 >562 240 | | |
| BCDL 10.0 | Rep Stress Incr YES | Matrix-MS | Horz(CT) 0.19 8 n/a n/a | | |
| | Code IRC2015/TPI2014 | | Wind(LL) 0.14 10-11 >999 240 | Weight: 255 lb | FT = 20% |

| LUMBER- | BRACING- |
|--|---|
| TOP CHORD 2x6 SP No.2 | TOP CHORD Structural wood sheathing directly applied or 2-8-14 oc purlins. |
| BOT CHORD 2x6 SP No.2 *Except* 2-12: 2x6 SP DSS | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 8-10. |
| WEBS 2x4 SP No.3 *Except* 7-10: 2x4 SP No.2 | |

REACTIONS. (size) 2=0-3-8, 8=0-3-8
 Max Horz 2=144(LC 12)
 Max Uplift 2=-103(LC 12), 8=-103(LC 13)
 Max Grav 2=1579(LC 1), 8=1579(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2823/188, 3-5=-2586/220, 5-7=-2509/264, 7-8=-5136/227
 BOT CHORD 2-13=-200/2446, 11-13=-7/1578, 10-11=-86/2718, 8-10=-108/4638
 WEBS 3-13=-588/283, 5-13=-91/1161, 5-11=-153/981, 7-11=-1308/288, 7-10=-27/2594

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-3-14 to 2-8-2, Interior(1) 2-8-2 to 19-6-0, Exterior(2) 19-6-0 to 22-6-0, Interior(1) 22-6-0 to 39-3-14 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Bearing at joint(s) 8 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 103 lb uplift at joint 2 and 103 lb uplift at joint 8.



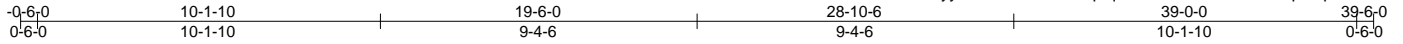
February 16, 2024

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|---|---|

| | | | | | | |
|------------|-------|------------|-----|-----|----------------------------------|----------|
| Job | Truss | Truss Type | Qty | Ply | DR Horton; Cali; M; Master.RT120 | 63654189 |
| MASTER-120 | A10 | FAN | 5 | 1 | Job Reference (optional) | |

Builders FirstSource, Apex, NC 27523

8.630 s Mar 9 2023 MiTek Industries, Inc. Thu Feb 15 15:30:24 2024 Page 1
 ID:GkdJTsrwC8FsrDZ9sGJOzzyZcn-8RZFARXZfZpqGhhIHbBkCkAu3C9mO1pKYpGrhSzrsD



Scale = 1:68.1

| | | | | | |
|----------------------|----------------------|-------------|-------------------------------|----------------|-------------|
| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
| TCLL 20.0 | 2-0-0 | TC 0.64 | in (loc) l/defl L/d | MT20 | 244/190 |
| TCDL 10.0 | Plate Grip DOL 1.15 | BC 0.47 | Vert(LL) -0.39 11-12 >999 360 | | |
| BCLL 0.0 * | Lumber DOL 1.15 | WB 0.64 | Vert(CT) -0.53 11-12 >889 240 | | |
| BCDL 10.0 | Rep Stress Incr NO | Matrix-MS | Horz(CT) 0.06 8 n/a n/a | | |
| | Code IRC2015/TPI2014 | | Wind(LL) 0.10 13-20 >999 240 | | |
| | | | | Weight: 266 lb | FT = 20% |

| | |
|---|---|
| LUMBER- | BRACING- |
| TOP CHORD 2x6 SP No.2 | TOP CHORD Structural wood sheathing directly applied or 3-10-14 oc purlins. |
| BOT CHORD 2x6 SP DSS | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS 2x4 SP No.3 *Except* 14-15: 2x4 SP No.2 | WEBS 1 Row at midpt 14-15 |

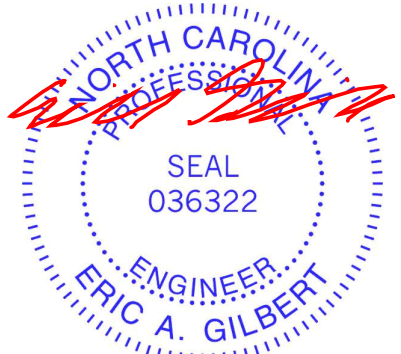
REACTIONS. (lb/size) 2=1579/0-3-8 (min. 0-1-14), 8=1579/0-3-8 (min. 0-1-14)
 Max Horz 2=144(LC 12)
 Max Uplift 2=-103(LC 12), 8=-103(LC 13)
 Max Grav 2=1593(LC 2), 8=1593(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-24=-2828/152, 3-24=-2765/197, 3-4=-2611/184, 4-25=-2493/208, 5-25=-2466/230,
 5-26=-2466/230, 6-26=-2493/208, 6-7=-2611/184, 7-27=-2765/197, 8-27=-2828/152
 BOT CHORD 2-28=-208/2473, 28-29=-208/2473, 13-29=-208/2473, 12-13=-4/1787, 11-12=-4/1787,
 10-11=-4/1787, 10-30=-64/2473, 30-31=-64/2473, 8-31=-64/2473
 WEBS 5-15=-114/1105, 10-15=-115/1024, 7-10=-594/280, 13-14=-115/1024, 5-14=-114/1105,
 3-13=-594/280

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TC DL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-3-14 to 2-8-2, Interior(1) 2-8-2 to 19-6-0, Exterior(2) 19-6-0 to 22-6-0, Interior(1) 22-6-0 to 39-3-14 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - All plates are 2x4 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 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 103 lb uplift at joint 2 and 103 lb uplift at joint 8.
 - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - N/A
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S)

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-5=-60, 5-9=-60, 18-21=-20



February 16, 2024

Continued on page 2

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 | DR Horton; Cali; M; Master.RT120 | 163654189 |
| MASTER-120 | A10 | FAN | 5 | 1 | Job Reference (optional) | |

Builders FirstSource, Apex, NC 27523

8.630 s Mar 9 2023 MiTek Industries, Inc. Thu Feb 15 15:30:24 2024 Page 2
 ID:GkdJTsrewC8FsrDZ9sGJozzyZcn-8RZFARXZfzpqGhhIHbBkCkAu3C9mO1pKYpGrhSzrsD

LOAD CASE(S)

- 2) Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-5=-50, 5-9=-50, 18-28=-20, 28-29=-50, 29-30=-20, 30-31=-50, 21-31=-20, 32-33=-30(F)
- 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
 Uniform Loads (plf)
 Vert: 1-5=-20, 5-9=-20, 18-21=-40, 32-33=-40(F)
- 4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=47, 2-24=25, 5-24=14, 5-26=25, 8-26=14, 8-9=9, 18-21=-12
 Horz: 1-2=-59, 2-24=-37, 5-24=-26, 5-26=37, 8-26=26, 8-9=21
- 5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=9, 2-25=14, 5-25=25, 5-27=14, 8-27=25, 8-9=47, 18-21=-12
 Horz: 1-2=-21, 2-25=-26, 5-25=-37, 5-27=26, 8-27=37, 8-9=59
- 6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-12, 2-5=-33, 5-8=-33, 8-9=-28, 18-21=-20
 Horz: 1-2=-8, 2-5=13, 5-8=-13, 8-9=-8
- 7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-28, 2-5=-33, 5-8=-33, 8-9=-12, 18-21=-20
 Horz: 1-2=8, 2-5=13, 5-8=-13, 8-9=8
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=9, 2-5=-2, 5-8=9, 8-9=4, 18-21=-12
 Horz: 1-2=-21, 2-5=-10, 5-8=21, 8-9=16
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=4, 2-5=9, 5-8=-2, 8-9=9, 18-21=-12
 Horz: 1-2=-16, 2-5=-21, 5-8=10, 8-9=21
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-15, 2-5=-20, 5-8=-9, 8-9=-4, 18-21=-20
 Horz: 1-2=-5, 2-5=0, 5-8=11, 8-9=16
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-4, 2-5=9, 5-8=-20, 8-9=-15, 18-21=-20
 Horz: 1-2=-16, 2-5=11, 5-8=0, 8-9=5
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=17, 2-5=22, 5-8=7, 8-9=2, 18-21=-12
 Horz: 1-2=-29, 2-5=-34, 5-8=19, 8-9=14
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=2, 2-5=7, 5-8=22, 8-9=17, 18-21=-12
 Horz: 1-2=-14, 2-5=-19, 5-8=34, 8-9=29
- 14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=7, 2-5=11, 5-8=3, 8-9=-2, 18-21=-12
 Horz: 1-2=-19, 2-5=-23, 5-8=15, 8-9=10
- 15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-2, 2-5=3, 5-8=11, 8-9=7, 18-21=-12
 Horz: 1-2=-10, 2-5=-15, 5-8=23, 8-9=19
- 16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=9, 2-5=4, 5-8=-11, 8-9=-6, 18-21=-20
 Horz: 1-2=-29, 2-5=-24, 5-8=9, 8-9=14
- 17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-6, 2-5=-11, 5-8=4, 8-9=9, 18-21=-20
 Horz: 1-2=-14, 2-5=-9, 5-8=24, 8-9=29
- 18) Dead + Uninhabitable Attic Storage: Lumber Increase=1.25, Plate Increase=1.25
 Uniform Loads (plf)
 Vert: 1-5=-20, 5-9=-20, 18-28=-20, 28-29=-60, 29-30=-20, 30-31=-60, 21-31=-20, 32-33=-40(F)
- 19) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-46, 2-5=-50, 5-8=-42, 8-9=-38, 18-28=-20, 28-29=-50, 29-30=-20, 30-31=-50, 21-31=-20, 32-33=-30(F)
 Horz: 1-2=-4, 2-5=0, 5-8=8, 8-9=12
- 20) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-38, 2-5=-42, 5-8=-50, 8-9=-46, 18-28=-20, 28-29=-50, 29-30=-20, 30-31=-50, 21-31=-20, 32-33=-30(F)
 Horz: 1-2=-12, 2-5=-8, 5-8=0, 8-9=4

Continued on page 3

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818 Soundside Road
 Edenton, NC 27932

| | | | | | | |
|------------|-------|------------|-----|-----|----------------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | DR Horton; Cali; M; Master.RT120 | 163654189 |
| MASTER-120 | A10 | FAN | 5 | 1 | Job Reference (optional) | |

Builders FirstSource, Apex, NC 27523

8.630 s Mar 9 2023 MiTek Industries, Inc. Thu Feb 15 15:30:24 2024 Page 3
ID:GkdJTsrwC8FsrDZ9sGJOzyyZcn-8RZFARXZfZpqGhhIHbBkCkAu3C9mO1pKYpGrhSzkrD

LOAD CASE(S)

- 21) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-28, 2-5=-32, 5-8=-43, 8-9=-39, 18-28=-20, 28-29=-50, 29-30=-20, 30-31=-50, 21-31=-20, 32-33=-30(F)
Horz: 1-2=-22, 2-5=-18, 5-8=7, 8-9=11
- 22) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-39, 2-5=-43, 5-8=-32, 8-9=-28, 18-28=-20, 28-29=-50, 29-30=-20, 30-31=-50, 21-31=-20, 32-33=-30(F)
Horz: 1-2=-11, 2-5=-7, 5-8=18, 8-9=22
- 23) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-60, 5-9=-20, 18-21=-20
- 24) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-20, 5-9=-60, 18-21=-20
- 25) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-50, 5-9=-20, 18-28=-20, 28-29=-50, 29-30=-20, 30-31=-50, 21-31=-20, 32-33=-30(F)
- 26) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-20, 5-9=-50, 18-28=-20, 28-29=-50, 29-30=-20, 30-31=-50, 21-31=-20, 32-33=-30(F)

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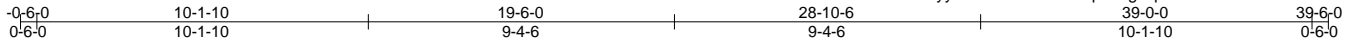
818 Soundside Road
Edenton, NC 27932

| | | | | | | |
|------------|-------|------------|-----|-----|----------------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | DR Horton; Cali; M; Master.RT120 | 163654190 |
| MASTER-120 | A15C | CATHEDRAL | 4 | 1 | | |

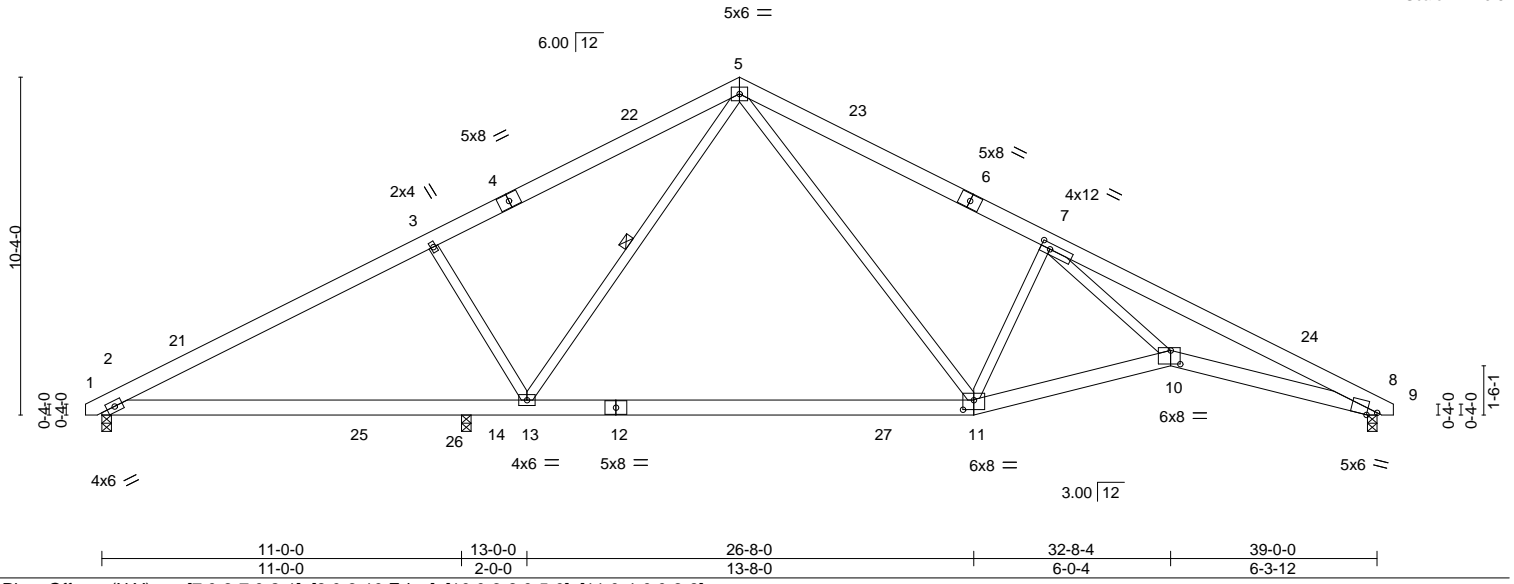
Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.630 s Aug 30 2023 MiTek Industries, Inc. Thu Feb 15 10:42:40 2024 Page 1

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Scale = 1:70.5



| | |
|-----------------------|--|
| Plate Offsets (X,Y)-- | [7:0-3-7,0-2-1], [8:0-3-10,Edge], [10:0-3-8,0-5-0], [11:0-4-0,0-3-8] |
|-----------------------|--|

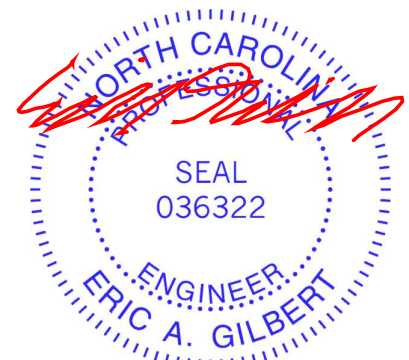
| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
|---------------|----------------------|-----------|-------------------------------|----------------|----------|
| TCLL 20.0 | 2-0-0 | TC 0.50 | in (loc) l/defl L/d | MT20 | 244/190 |
| TCDL 10.0 | Plate Grip DOL 1.15 | BC 0.77 | Vert(LL) -0.46 11-13 >727 360 | | |
| BCLL 0.0 * | Lumber DOL 1.15 | WB 0.87 | Vert(CT) -0.85 11-13 >394 240 | | |
| BCDL 10.0 | Rep Stress Incr YES | Matrix-MS | Horz(CT) 0.14 8 n/a n/a | | |
| | Code IRC2015/TPI2014 | | Wind(LL) 0.15 11-13 >999 240 | Weight: 255 lb | FT = 20% |

| LUMBER- | BRACING- |
|--|---|
| TOP CHORD 2x6 SP No.2 | TOP CHORD Structural wood sheathing directly applied or 3-2-3 oc purlins. |
| BOT CHORD 2x6 SP No.2 *Except* 2-12,11-12: 2x6 SP DSS | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS 2x4 SP No.3 | WEBS 1 Row at midpt 5-13 |

REACTIONS. (size) 2=0-3-8, 8=0-3-8, 14=0-3-8
 Max Horz 2=144(LC 12)
 Max Uplift 2=-69(LC 12), 8=-103(LC 13), 14=-48(LC 13)
 Max Grav 2=1004(LC 2), 8=1332(LC 1), 14=866(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1730/129, 3-5=-1494/168, 5-7=-2030/264, 7-8=-4157/227
 BOT CHORD 2-14=-143/1480, 13-14=-143/1480, 11-13=0/1106, 10-11=-86/2212, 8-10=-108/3747
 WEBS 3-13=-566/281, 5-13=-165/406, 5-11=-152/1038, 7-11=-1170/288, 7-10=-27/2111


- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-3-14 to 2-8-2, Interior(1) 2-8-2 to 19-6-0, Exterior(2) 19-6-0 to 22-6-0, Interior(1) 22-6-0 to 39-3-14 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) 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, with BCDL = 10.0psf.
 - 5) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 69 lb uplift at joint 2, 103 lb uplift at joint 8 and 48 lb uplift at joint 14.



February 16, 2024

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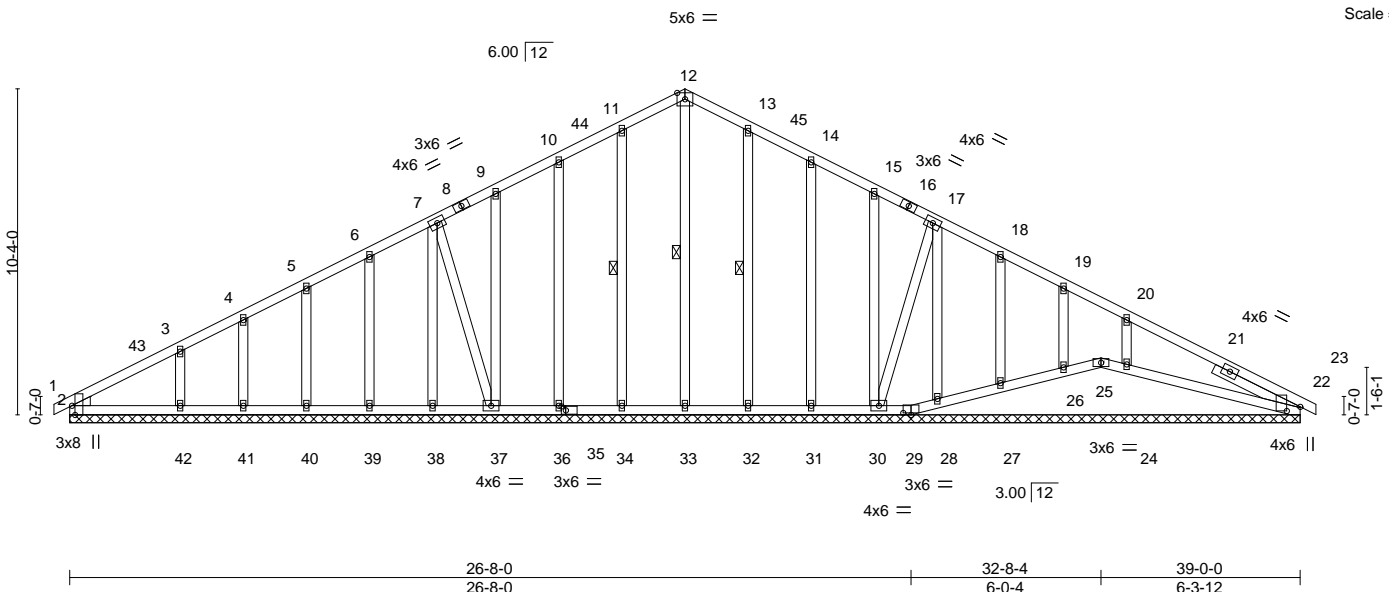


818 Soundside Road
Edenton, NC 27932

| | | | | | | |
|-------------------|----------------|---------------------|----------|----------|--|-----------|
| Job MASTER-120 | Truss A16CG | Truss Type GABLE | Qty 1 | Ply 1 | DR Horton; Cali; M; Master.RT120 Job Reference (optional) | 163654191 |
|-------------------|----------------|---------------------|----------|----------|--|-----------|

Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.630 s Aug 30 2023 MiTek Industries, Inc. Thu Feb 15 10:42:42 2024 Page 1
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| | |
|------------------------|--|
| Plate Offsets (X, Y)-- | [2:0-3-8,Edge], [22:0-1-9,0-5-2], [29:0-3-0,0-0-12], [35:0-1-11,0-1-8] |
|------------------------|--|

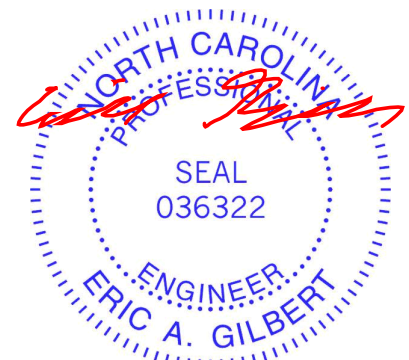
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|----------|----------|----------|--------|-----|----------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.36 | Vert(LL) | 0.01 | 23 | n/r | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.24 | Vert(CT) | 0.01 | 23 | n/r | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.15 | Horz(CT) | 0.01 | 22 | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | |
| | | | | | | | | Weight: 282 lb | FT = 20% |

| LUMBER- | BRACING- |
|--------------------------------|---|
| TOP CHORD 2x4 SP No.2 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. |
| BOT CHORD 2x4 SP No.2 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: |
| WEBS 2x4 SP No.3 | 6-0-0 oc bracing: 24-25. |
| OTHERS 2x4 SP No.3 | WEBS 1 Row at midpt 12-33, 11-34, 13-32 |
| WEDGE | |
| Left: 2x4 SP No.3 | |
| SLIDER Right 2x4 SP No.3 3-0-1 | |

REACTIONS. All bearings 39-0-0.
 (lb) - Max Horz 2=145(LC 16)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 29, 22, 34, 36, 37, 39, 40, 41, 42, 32, 31, 27, 24 except 25=121(LC 3), 30=136(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 2, 29, 25, 22, 33, 34, 36, 37, 38, 39, 40, 41, 32, 31, 28, 27, 26 except 42=279(LC 23), 30=257(LC 24), 24=481(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 20-24=-307/160

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-6-0 to 2-6-0, Interior(1) 2-6-0 to 19-6-0, Exterior(2) 19-6-0 to 22-6-0, Interior(1) 22-6-0 to 39-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 4) All plates are 2x4 MT20 unless otherwise indicated.
 - 5) Gable requires continuous bottom chord bearing.
 - 6) Gable studs spaced at 2-0-0 oc.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 29, 22, 34, 36, 37, 39, 40, 41, 42, 32, 31, 27, 24 except (jt=lb) 25=121, 30=136.
 - 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 25, 28, 27, 26, 24.

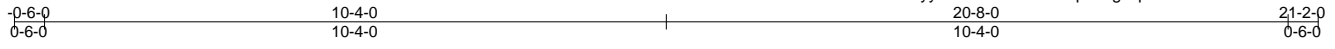


February 16, 2024

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|--|---|
| <p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 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.sbccomponents.com)</p> | <p>ENGINEERING BY</p> <p>TRENCO</p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p> |
|--|---|

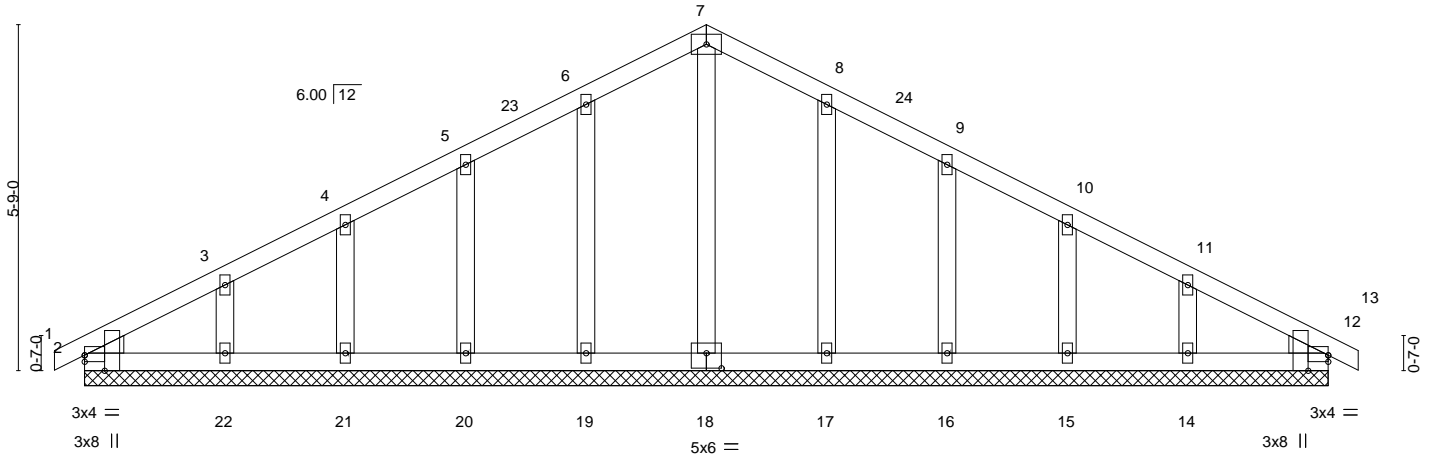
| | | | | | |
|-------------------|---------------|---------------------|----------|----------|---|
| Job MASTER-120 | Truss B01G | Truss Type GABLE | Qty 1 | Ply 1 | DR Horton; Cali; M; Master.RT120 163654192 |
|-------------------|---------------|---------------------|----------|----------|---|

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.630 s Aug 30 2023 MiTek Industries, Inc. Thu Feb 15 10:42:44 2024 Page 1
 ID:GkdJTsrewC8FsrDZ9sGJozyyZcn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



4x6 =

Scale = 1:38.3



| | |
|-----------------------|--|
| Plate Offsets (X,Y)-- | [2:0-0-0,0-1-5], [2:0-3-1,Edge], [12:0-3-1,Edge], [12:0-0-0,0-1-5], [18:0-3-0,0-3-0] |
|-----------------------|--|

| 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 0.07 | Vert(LL) | 0.00 | 12 | n/r | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.05 | Vert(CT) | 0.00 | 13 | n/r | | |
| BCLL 0.0 * | Rep Stress Incr | NO | WB 0.06 | Horz(CT) | 0.00 | 12 | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | |
| | | | | | | | | Weight: 109 lb | FT = 20% |

| | |
|--|---|
| LUMBER- | BRACING- |
| TOP CHORD 2x4 SP No.2 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. |
| BOT CHORD 2x4 SP No.2 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| OTHERS 2x4 SP No.3 | |
| WEDGE | |
| Left: 2x4 SP No.3 , Right: 2x4 SP No.3 | |


REACTIONS. All bearings 20-8-0.
 (lb) - Max Horz 2=78(LC 12)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 19, 20, 21, 22, 17, 16, 15, 14
 Max Grav All reactions 250 lb or less at joint(s) 2, 18, 19, 20, 21, 22, 17, 16, 15, 12, 14

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-6-0 to 2-4-0, Exterior(2) 2-4-0 to 10-4-0, Corner(3) 10-4-0 to 13-4-0, Exterior(2) 13-4-0 to 21-2-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 19, 20, 21, 22, 17, 16, 15, 14.



February 16, 2024

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|---|---|
| <p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 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)</p> |  <p>818 Soundside Road Edenton, NC 27932</p> |
|---|---|

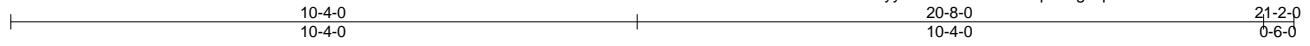
| | | | | | |
|-------------------|--------------|----------------------|----------|----------|---|
| Job MASTER-120 | Truss B02 | Truss Type COMMON | Qty 2 | Ply 1 | DR Horton; Cali; M; Master.RT120 163654193 |
|-------------------|--------------|----------------------|----------|----------|---|

Builders FirstSource (Apex, NC),

Apex, NC - 27523,

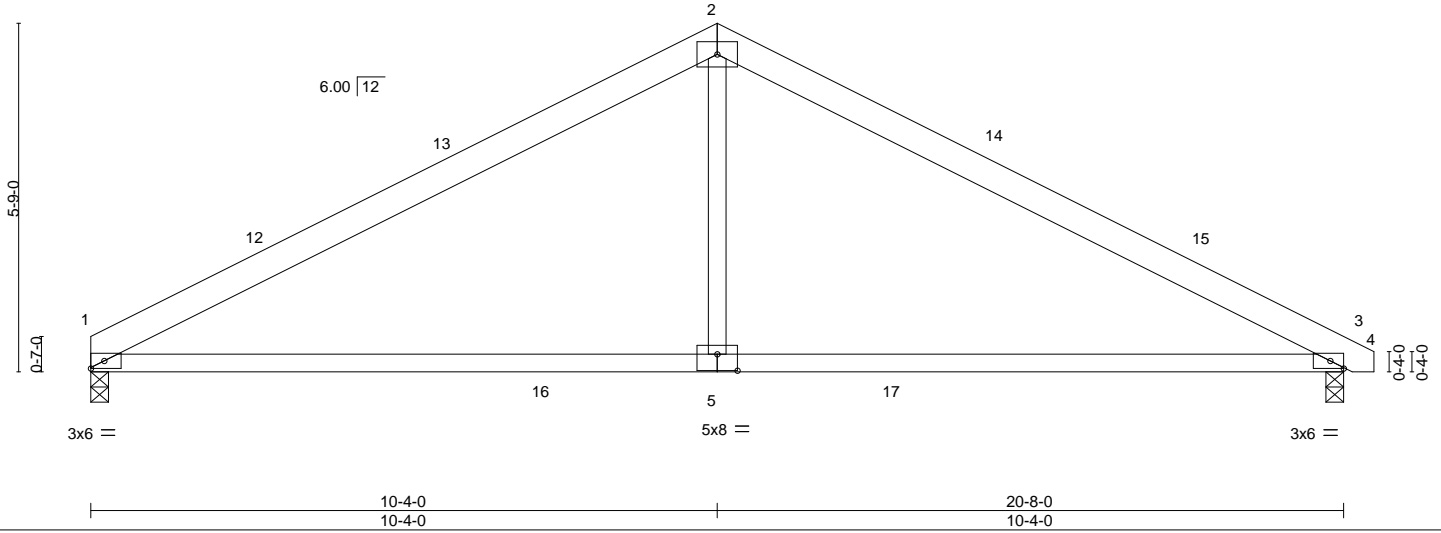
8.630 s Aug 30 2023 MiTek Industries, Inc. Thu Feb 15 10:42:45 2024 Page 1

ID:GkdJTsrewC8FsrDZ9sGJOzzyZcn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



5x8 =

Scale = 1:38.0



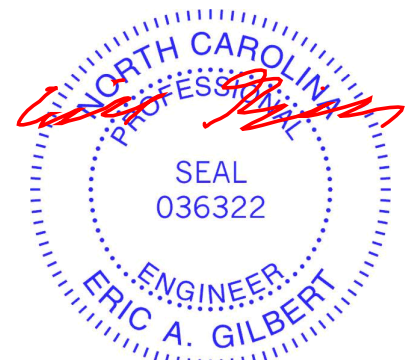
| | | | | | | | |
|-----------------------|----------------------|-------|-------------|--------------|----------|--------|---------------|
| Plate Offsets (X,Y)-- | [5:0-4-0,0-3-4] | | | | | | |
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d |
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.79 | Vert(LL) | -0.15 | 5-8 | >999 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.96 | Vert(CT) | -0.35 | 5-8 | >706 |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.17 | Horz(CT) | 0.02 | 1 | n/a |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-MS | Wind(LL) | 0.12 | 5-8 | >999 |
| | | | | | | | 240 |
| | | | | | | | Weight: 94 lb |
| | | | | | | | FT = 20% |

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

REACTIONS. (size) 1=0-3-8, 3=0-3-8
 Max Horz 1=-80(LC 17)
 Max Uplift 1=-16(LC 12), 3=-21(LC 13)
 Max Grav 1=827(LC 1), 3=846(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-1157/125, 2-3=-1157/123
 BOT CHORD 1-5=0/969, 3-5=0/969
 WEBS 2-5=0/438

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 10-4-0, Exterior(2) 10-4-0 to 14-6-15, Interior(1) 14-6-15 to 20-11-14 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



February 16, 2024

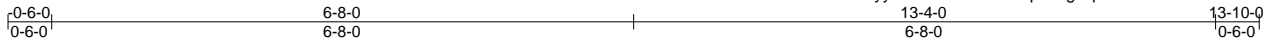
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|--|---|
| <p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and 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/TPH 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)</p> | 818 Soundside Road Edenton, NC 27932 |
|--|---|

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|-------------------|---------------|---------------------|----------|----------|--|-----------|
| Job MASTER-120 | Truss C01G | Truss Type GABLE | Qty 1 | Ply 1 | DR Horton; Cali; M; Master.RT120 Job Reference (optional) | 163654194 |
|-------------------|---------------|---------------------|----------|----------|--|-----------|

Builders FirstSource (Apex, NC), Apex, NC - 27523,

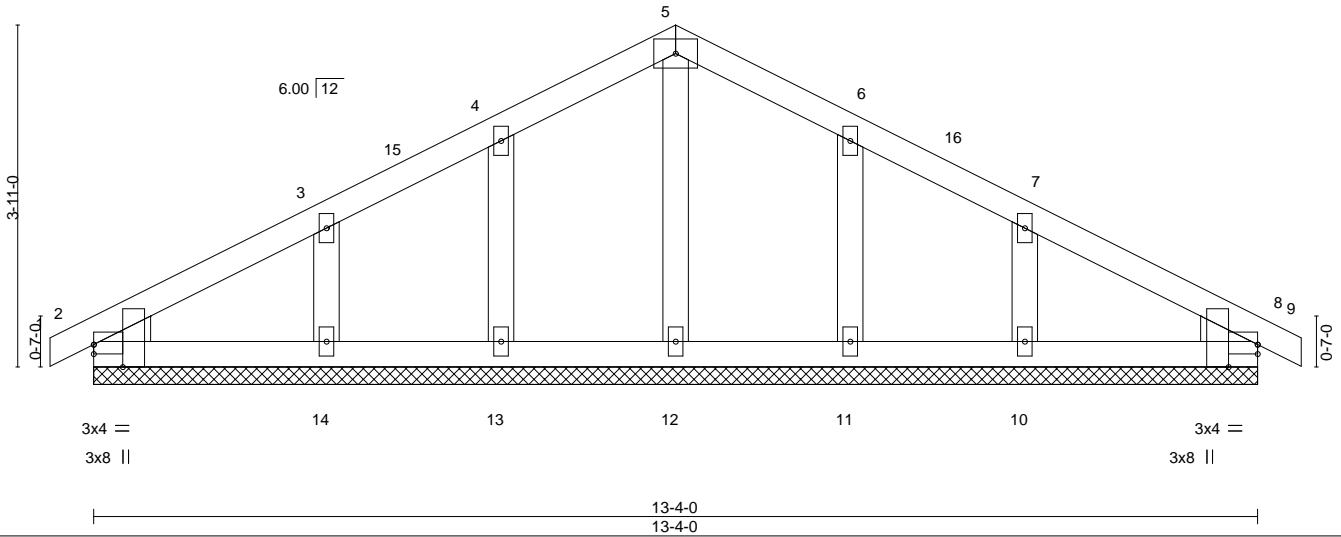
8.630 s Aug 30 2023 MiTek Industries, Inc. Thu Feb 15 10:42:47 2024 Page 1

ID:GkdJTsrewC8FsrdsZ9sGJOzzyZcn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



4x6 =

Scale = 1:26.4



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

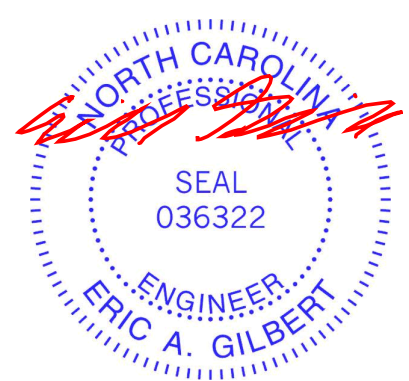
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|----------|----------|----------|--------|-----|---------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.08 | Vert(LL) | 0.00 | 8 | n/r | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.06 | Vert(CT) | 0.00 | 9 | n/r | | |
| BCLL 0.0 * | Rep Stress Incr | NO | WB 0.04 | Horz(CT) | 0.00 | 8 | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | |
| | | | | | | | | Weight: 62 lb | FT = 20% |

| | |
|--|---|
| LUMBER- | BRACING- |
| TOP CHORD 2x4 SP No.2 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. |
| BOT CHORD 2x4 SP No.2 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| OTHERS 2x4 SP No.3 | |
| WEDGE | |
| Left: 2x4 SP No.3 , Right: 2x4 SP No.3 | |

REACTIONS. All bearings 13-4-0.
 (lb) - Max Horz 2=52(LC 13)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 14, 11, 10
 Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-6-0 to 2-8-0, Exterior(2) 2-8-0 to 6-8-0, Corner(3) 6-8-0 to 9-8-0, Exterior(2) 9-8-0 to 13-10-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8, 13, 14, 11, 10.



February 16, 2024

| | | | | | | |
|-------------------|--------------|----------------------|----------|----------|--|-----------|
| Job MASTER-120 | Truss C02 | Truss Type COMMON | Qty 2 | Ply 1 | DR Horton; Cali; M; Master.RT120 Job Reference (optional) | 163654195 |
|-------------------|--------------|----------------------|----------|----------|--|-----------|

Builders FirstSource (Apex, NC),

Apex, NC - 27523,

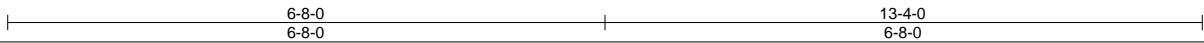
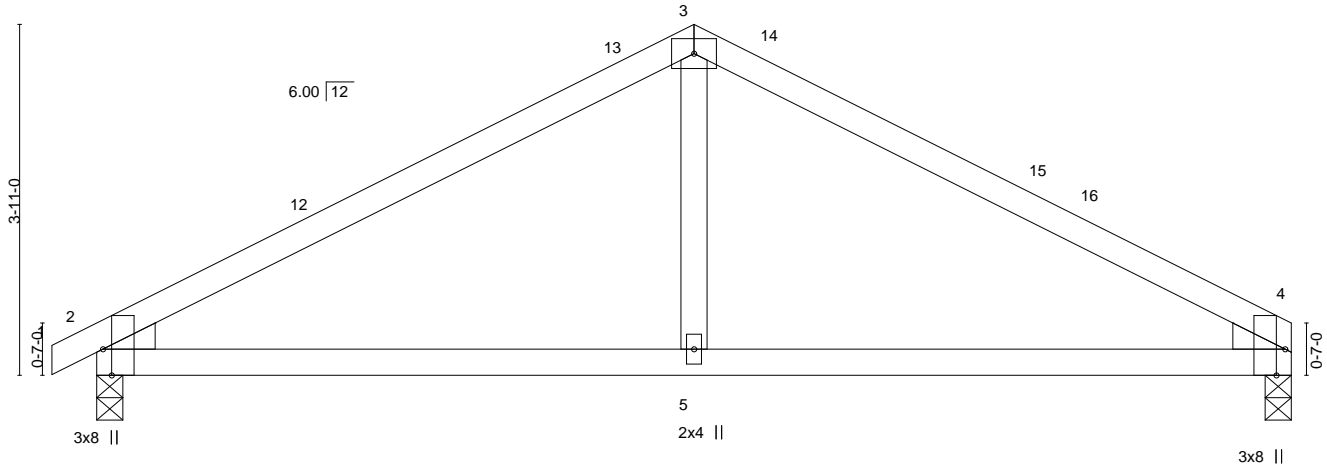
8.630 s Aug 30 2023 MiTek Industries, Inc. Thu Feb 15 10:42:48 2024 Page 1

ID:GkdJTsrewC8FsrDZ9sGJOzzyZcn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



4x6 =

Scale = 1:25.7



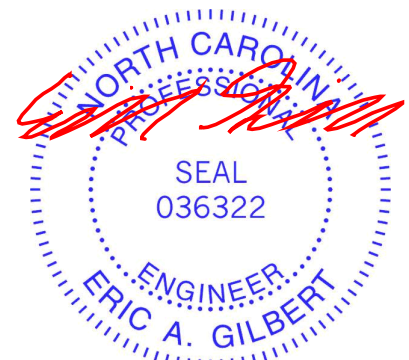
| | | | | | |
|------------------------|--------------------------------|-------------|----------------------------------|---------------|-------------|
| Plate Offsets (X, Y)-- | [2:0-3-8,Edge], [4:0-3-8,Edge] | | | | |
| LOADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. in (loc) l/defl L/d | PLATES | GRIP |
| TCLL 20.0 | Plate Grip DOL 1.15 | TC 0.53 | Vert(LL) -0.06 5-11 >999 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.45 | Vert(CT) -0.11 5-11 >999 240 | | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.11 | Horz(CT) 0.02 2 n/a n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | Matrix-MS | Wind(LL) 0.06 5-11 >999 240 | Weight: 50 lb | FT = 20% |

| | |
|--|---|
| LUMBER- | BRACING- |
| TOP CHORD 2x4 SP No.2 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. |
| BOT CHORD 2x4 SP No.2 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS 2x4 SP No.3 | |
| WEDGE | |
| Left: 2x4 SP No.3 , Right: 2x4 SP No.3 | |

REACTIONS. (size) 2=0-3-8, 4=0-3-8
 Max Horz 2=66(LC 16)
 Max Uplift 2=-29(LC 12), 4=-21(LC 13)
 Max Grav 2=564(LC 1), 4=533(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-714/119, 3-4=-714/122
 BOT CHORD 2-5=-29/568, 4-5=-29/568
 WEBS 3-5=0/294

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-6-0 to 2-6-0, Interior(1) 2-6-0 to 6-8-0, Exterior(2) 6-8-0 to 10-10-15, Interior(1) 10-10-15 to 13-4-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



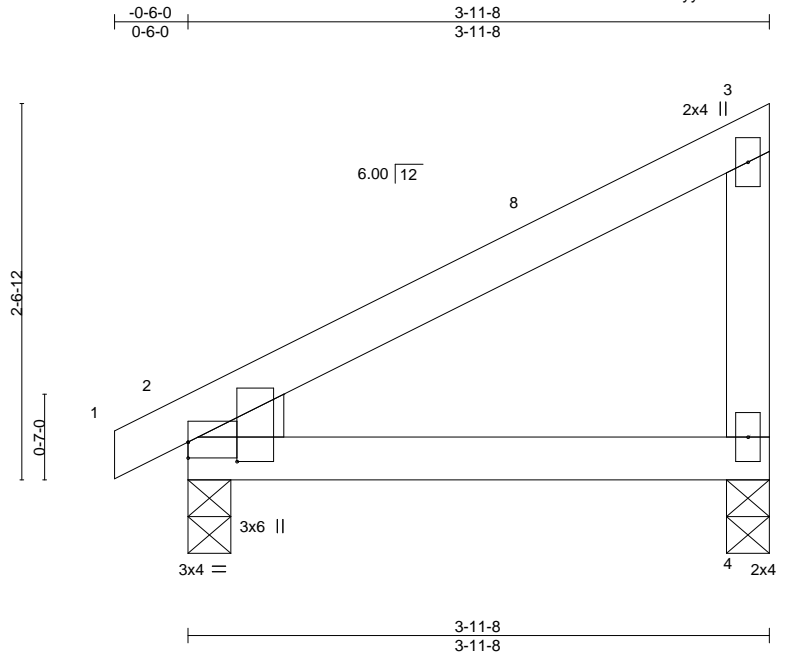
February 16, 2024

| | | | | | | |
|-------------------|--------------|--------------------------|----------|----------|--|-----------|
| Job MASTER-120 | Truss P01 | Truss Type MONO TRUSS | Qty 3 | Ply 1 | DR Horton; Cali; M; Master.RT120 Job Reference (optional) | 163654196 |
|-------------------|--------------|--------------------------|----------|----------|--|-----------|

Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.630 s Aug 30 2023 MiTek Industries, Inc. Thu Feb 15 10:42:49 2024 Page 1

ID:GkdJTsrewC8FsrdsZ9sGJOzzyZcn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f
3-11-8 3-11-8



Scale = 1:15.7

| | | | | | |
|-----------------------|----------------------------------|-------------|----------------------------------|---------------|-------------|
| Plate Offsets (X,Y)-- | [2:0-0-0,0-1-5], [2:0-1-9,0-4-0] | | | | |
| 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) -0.01 4-7 >999 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.17 | Vert(CT) -0.02 4-7 >999 240 | | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.00 | Horz(CT) 0.01 2 n/a n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | Matrix-MP | Wind(LL) 0.01 4-7 >999 240 | Weight: 17 lb | FT = 20% |

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 4=0-3-8
Max Horz 2=76(LC 11)
Max Uplift 2=-16(LC 12), 4=-28(LC 12)
Max Grav 2=184(LC 1), 4=151(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-6-0 to 2-6-0, Interior(1) 2-6-0 to 3-9-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



February 16, 2024

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

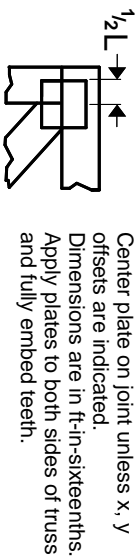
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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/TP1 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)

ENGINEERING BY
TRENCO
A MiTek Affiliate

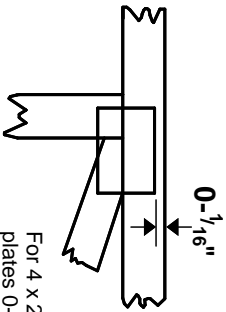
818 Soundside Road
Edenton, NC 27932

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 software or upon request.

PLATE SIZE

4 X 4

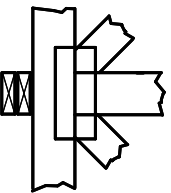
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

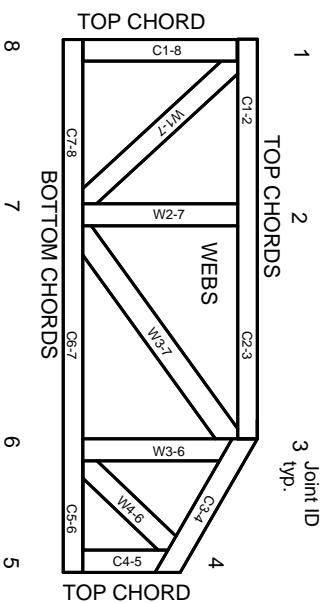


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: 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 section 6.3. These truss designs rely on Lumber values established by others.

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

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.