ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 20178A
243.2939 D 12x12-8CP Tray

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by 84 Components - #2383.

Pages or sheets covered by this seal: I36483557 thru I36483612

My license renewal date for the state of North Carolina is December 31, 2019.

North Carolina COA: C-0844


March 22,2019

Johnson, Andrew

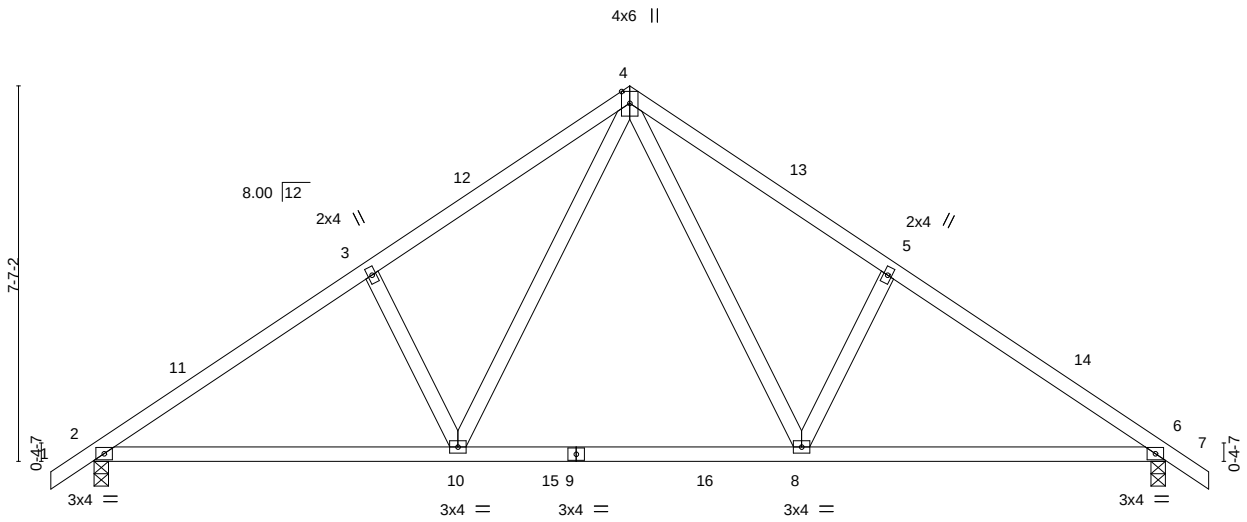
**IMPORTANT NOTE:** Truss Engineer's responsibility is solely for design of individual trusses based upon design parameters shown on referenced truss drawings. Parameters have not been verified as appropriate for any use. Any location identification specified is for file reference only and has not been used in preparing design. Suitability of truss designs for any particular building is the responsibility of the building designer, not the Truss Engineer, per ANSI/TPI-1, Chapter 2.

| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | A1 | Common | 3 | 1 | I36483557 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:24:19 2019 Page 1
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-i3ncH_ySI3l3KbO7tPS5DY7WTCT11H0p0U_TH2zYhEQ

-0-10-8 5-7-7 10-10-0 16-0-9 21-8-0 22-6-8
0-10-8 5-7-7 5-2-9 5-2-9 5-7-7 0-10-8

Scale = 1:46.6




7-4-5 14-3-11 21-8-0
7-4-5 6-11-7 7-4-5

| LOADING (psf) | | SPACING- 2-0-0 | | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.39 | Vert(LL) | -0.11 | 8-10 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.55 | Vert(CT) | -0.17 | 2-10 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.20 | Horz(CT) | 0.03 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | | Weight: 109 lb | FT = 20% |

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

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

**REACTIONS.** (lb/size) 2=916/0-3-8, 6=916/0-3-8
Max Horz 2=-193(LC 10)
Max Uplift 2=-113(LC 12), 6=-113(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1236/151, 3-4=-1094/211, 4-5=-1094/211, 5-6=-1236/151
BOT CHORD 2-10=-148/1056, 8-10=0/683, 6-8=-38/952
WEBS 4-8=-127/549, 5-8=-317/221, 4-10=-127/549, 3-10=-317/221

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-10-0, Exterior(2) 10-10-0 to 13-10-0, Interior(1) 13-10-0 to 22-6-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.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| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | AG1 | COMMON GIRDER | 1 | 2 | I36483558 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:24:20 2019 Page 1
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-AFL_VKy43MuwylzKR7zKmmgYzci8mdVyE8k0pVzYhEP

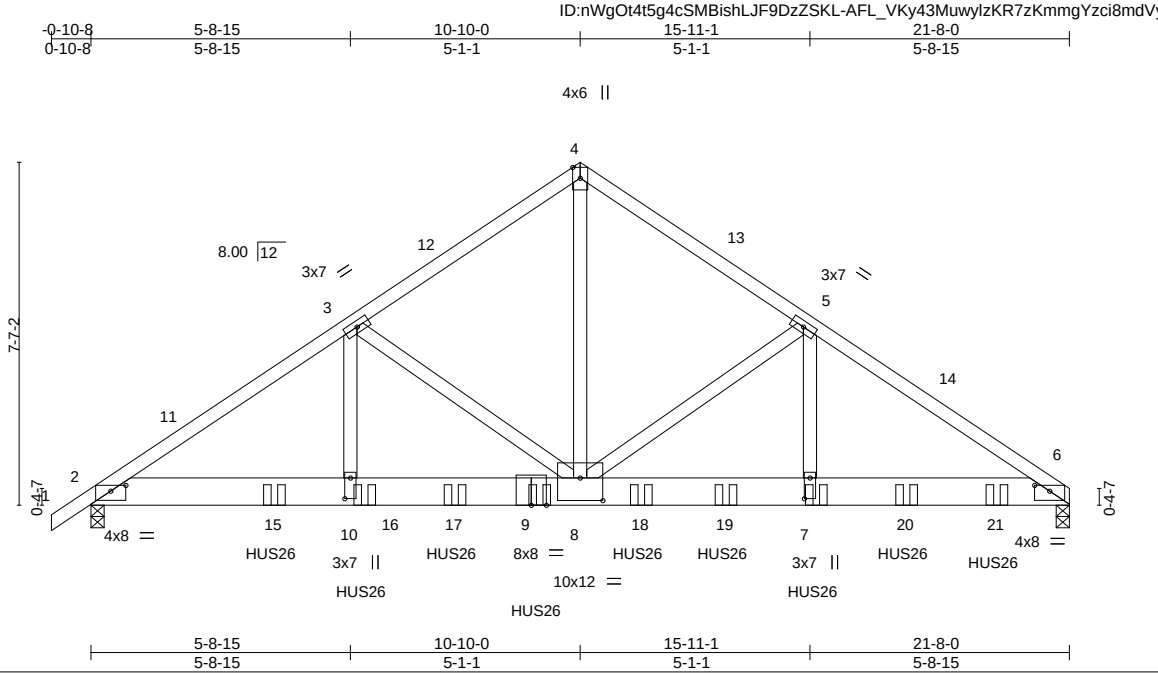


Plate Offsets (X,Y)-- [2:0-4-0,0-1-9], [6:0-4-0,0-1-9], [7:0-5-8,0-1-8], [8:0-6-0,0-6-0], [10:0-5-8,0-1-8]

| LOADING (psf) | | SPACING- | 2-1-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.98 | Vert(LL) | -0.11 | 8-10 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 1.00 | Vert(CT) | -0.22 | 8-10 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.69 | Horz(CT) | 0.06 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | | Weight: 290 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x8 SP No.2
WEBS 2x4 SP No.3 *Except*
4-8: 2x4 SP No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 3-4-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 6=5537/0-3-8, 2=4923/0-3-8
Max Horz 2=195(LC 32)
Max Uplift 6=-782(LC 13), 2=-958(LC 12)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-7974/1486, 3-4=-5459/953, 4-5=-5461/959, 5-6=-8050/1189
BOT CHORD 2-10=-1267/6562, 8-10=-1267/6562, 7-8=-910/6649, 6-7=-910/6649
WEBS 4-8=-941/5652, 5-8=-2715/457, 5-7=-237/2680, 3-8=-2607/768, 3-10=-599/2579

**NOTES-**
1) 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: 2x8 - 2 rows staggered at 0-7-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) 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.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-10-0, Exterior(2) 10-10-0 to 13-10-0, Interior(1) 13-10-0 to 21-6-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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 100 lb uplift at joint(s) except (jt=lb) 6=782, 2=958.
8) Use USP HUS26 (With 16d nails into Girder & 16d nails into Truss) or equivalent spaced at 2-3-0 oc max. starting at 4-0-12 from the left end to 20-0-12 to connect truss(es) to back face of bottom chord.
9) Fill all nail holes where hanger is in contact with lumber.

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-63, 4-6=-63, 2-6=-21


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**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 9=-915(B) 7=-915(B) 15=-1293(B) 16=-915(B) 17=-915(B) 18=-915(B) 19=-915(B) 20=-915(B) 21=-915(B)

| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | AGE | Common Girder | 1 | 1 | I36483559 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:24:22 2019 Page 1
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-7eTlv0_Kb_8eB37iYY0orBlyzQV9ETYFiRD7uNzYhEN

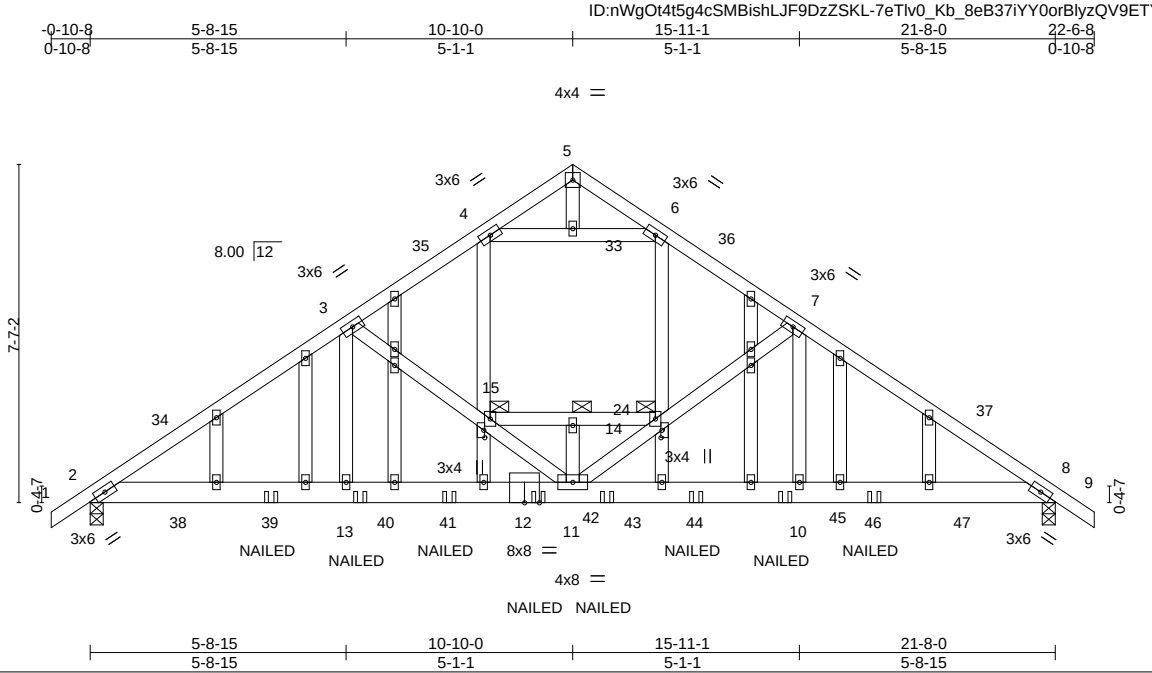


Plate Offsets (X,Y)-- [15:0-0-14,0-1-3], [15:0-2-0,0-0-4], [24:0-0-14,0-1-3], [24:0-2-0,0-0-4]

| LOADING (psf) | | SPACING- 2-0-0 | | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.76 | Vert(LL) | 0.31 | 11 | >830 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.52 | Vert(CT) | -0.67 | 11 | >383 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.91 | Horz(CT) | 0.02 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | | Weight: 177 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP DSS
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 4-5-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 14, 15, 24

**REACTIONS.** (lb/size) 2=916/0-3-8, 8=916/0-3-8
Max Horz 2=193(LC 34)
Max Uplift 2=-126(LC 12), 8=-126(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1288/149, 3-4=-673/147, 6-7=-673/147, 7-8=-1288/149
BOT CHORD 2-13=-138/976, 11-13=-138/976, 10-11=-38/947, 8-10=-38/947
WEBS 11-24=-275/146, 7-24=-423/167, 7-10=0/551, 3-15=-422/166, 11-15=-275/145, 3-13=0/551, 4-33=-830/153, 6-33=-830/153

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-10-0, Exterior(2) 10-10-0 to 13-10-0, Interior(1) 13-10-0 to 22-6-8 zone;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 studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 8. This connection is for uplift only and does not consider lateral forces.
9) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 82 lb down and 166 lb up at 2-0-0, and 82 lb down and 166 lb up at 19-7-4 on top chord, and 15 lb down at 2-0-0, and 15 lb down at 19-7-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15


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**LOAD CASE(S)** Standard
Uniform Loads (plf)
Vert: 1-5=-60, 5-9=-60, 2-8=-20

| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | BGE | GABLE | 1 | 2 | I36483560 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:24:24 2019 Page 1
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-31bVKi?b7bOMQMG5gz2GwcrPuD5tiRFY9liEyGzYhEL

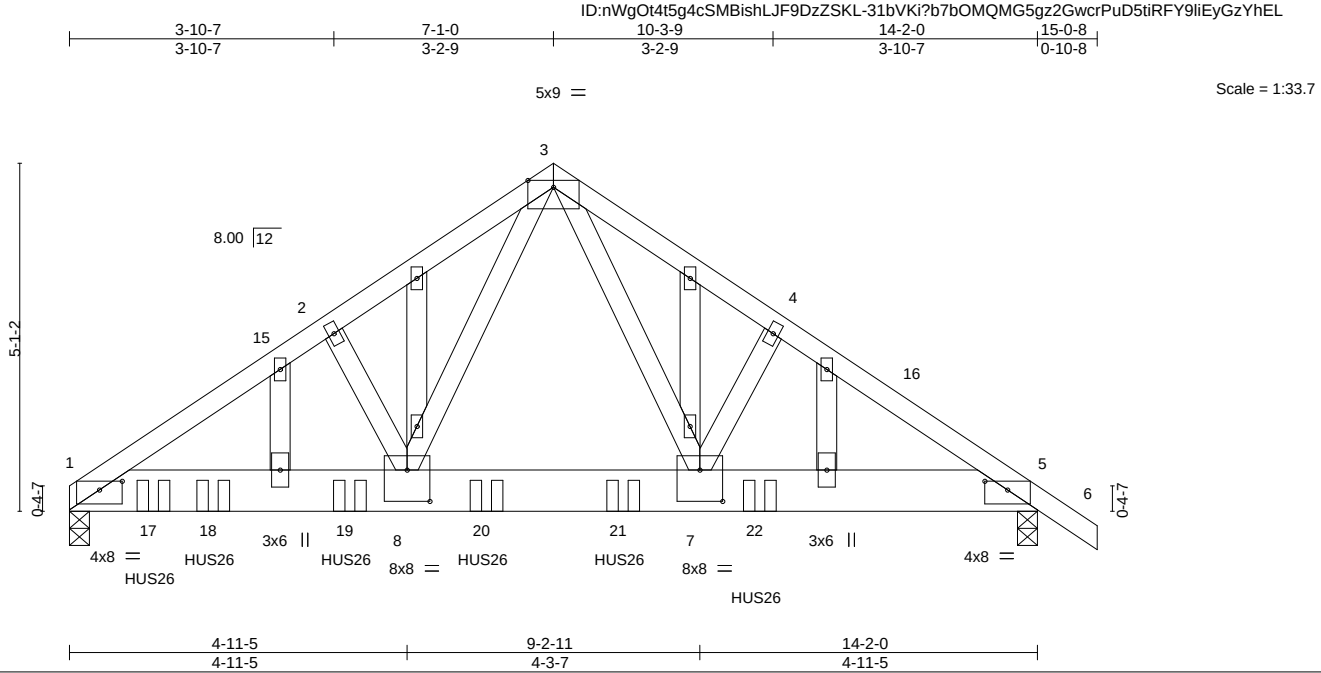


Plate Offsets (X,Y)-- [1:0-4-0,0-1-9], [5:0-4-0,0-1-9], [7:0-4-0,0-5-8], [8:0-4-0,0-5-8]

| 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 | 0.29 | Vert(LL) | -0.05 | 7-8 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.89 | Vert(CT) | -0.10 | 7-8 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.64 | Horz(CT) | 0.02 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | | Weight: 208 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x8 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-4-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 1=4131/0-3-8, 5=2932/0-3-8
Max Horz 1=-125(LC 8)
Max Uplift 1=-580(LC 12), 5=-594(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-5025/794, 2-3=-4944/833, 3-4=-4573/971, 4-5=-4682/933
BOT CHORD 1-8=-646/4154, 7-8=-423/2763, 5-7=-712/3844
WEBS 3-7=-673/2408, 3-8=-385/3114

**NOTES-**
1) 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: 2x8 - 2 rows staggered at 0-6-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) 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.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 7-1-0, Exterior(2) 7-1-0 to 10-4-6, Interior(1) 10-4-6 to 15-0-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) 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.
6) All plates are 2x4 MT20 unless otherwise indicated.
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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 5. This connection is for uplift only and does not consider lateral forces.
11) Use USP HUS26 (With 16d nails into Girder & 16d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-2-12 from the left end to 10-1-4 to connect truss(es) to back face of bottom chord.
12) Fill all nail holes where hanger is in contact with lumber.


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**LOAD CASE(S)** Standard

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**LOAD CASE(S)** Standard

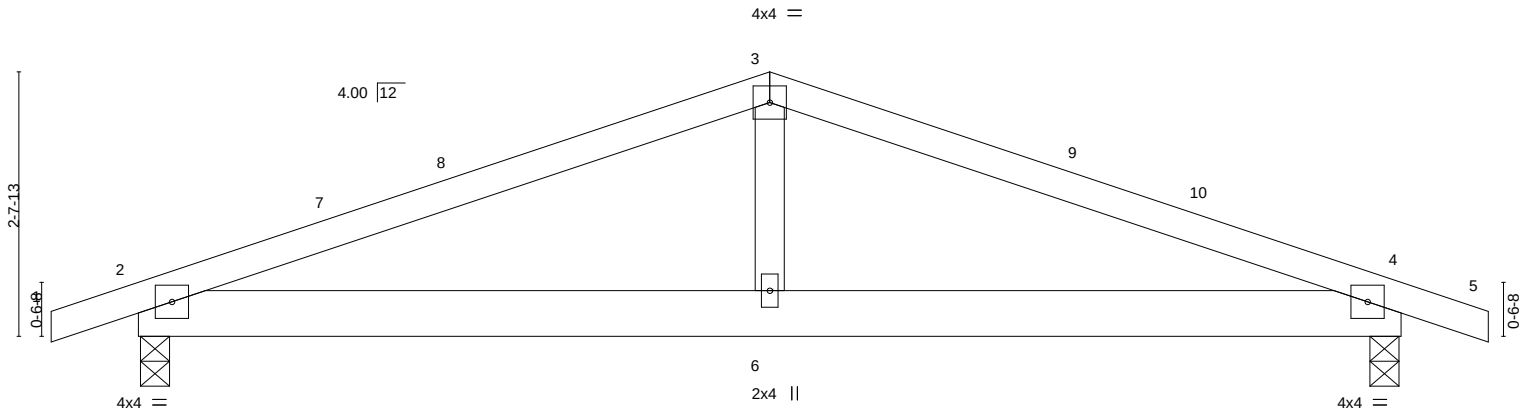
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-60, 3-6=-60, 1-5=-20
   Concentrated Loads (lb)
   Vert: 17=-920(B) 18=-920(B) 19=-920(B) 20=-920(B) 21=-917(B) 22=-1293(B)

| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | CP1 | COMMON | 3 | 1 | I36483561 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:24:25 2019 Page 1
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-XD8tY20DuvWD2WrHEgZVTpNW5dVJR1kiOPRnUizYhEK

-0-10-8 0-10-8 | 6-4-0 6-4-0 | 12-8-0 6-4-0 | 13-6-8 0-10-8

Scale = 1:23.1




0-0-4 0-0-4 | 6-4-0 6-3-12 | 12-7-12 6-3-12 | 12-8-0 0-0-4

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.45 | Vert(LL) | 0.04 | 2-6 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.62 | Vert(CT) | -0.05 | 2-6 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.12 | Horz(CT) | 0.01 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 55 lb | FT = 20% |

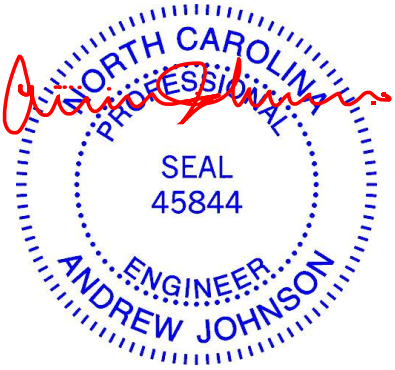
**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-7-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-3-13 oc bracing.

**REACTIONS.** (lb/size) 2=556/0-3-8, 4=556/0-3-8
Max Horz 2=40(LC 16)
Max Uplift 2=-225(LC 8), 4=-225(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-875/690, 3-4=-875/690
BOT CHORD 2-6=-581/758, 4-6=-581/758
WEBS 3-6=-306/309

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-4-0, Exterior(2) 6-4-0 to 9-4-0, Interior(1) 9-4-0 to 13-6-8 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.




March 22,2019



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818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | CP2 | JACK-OPEN | 3 | 1 | I36483562 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:24:25 2019 Page 1
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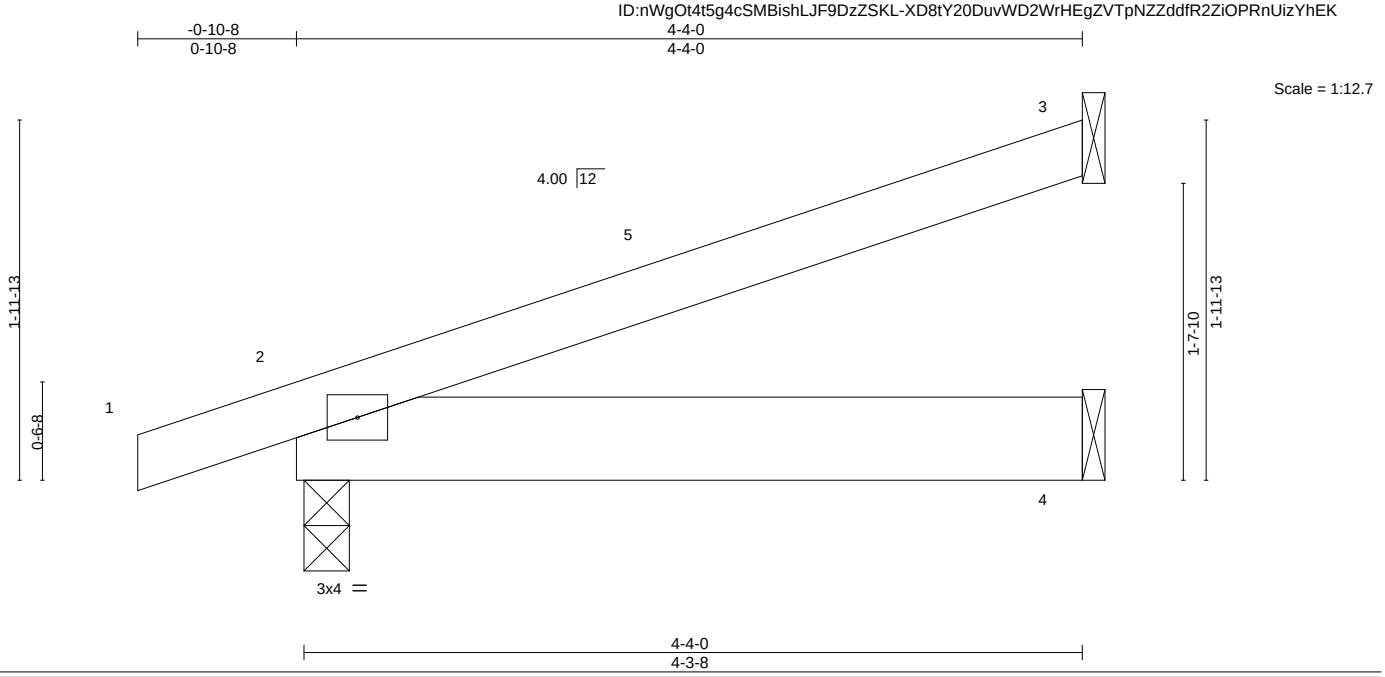


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.29 | Vert(LL) | 0.01 | 2-4 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.09 | Vert(CT) | -0.01 | 2-4 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-P | | | | | | | Weight: 18 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2

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

**REACTIONS.** (lb/size) 3=117/Mechanical, 2=233/0-3-0, 4=41/Mechanical
Max Horz 2=68(LC 8)
Max Uplift 3=-64(LC 12), 2=-101(LC 8), 4=-13(LC 8)
Max Grav 3=117(LC 1), 2=233(LC 1), 4=83(LC 3)

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

**NOTES-**
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-3-4 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4.
6) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.


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| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | CP3 | JACK-OPEN GIRDER | 2 | 1 | I36483563 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:24:26 2019 Page 1
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-?PiGlO1rfCe4ggQTnN4k?1wkX1zc9Vprd3BL18zYhEJ

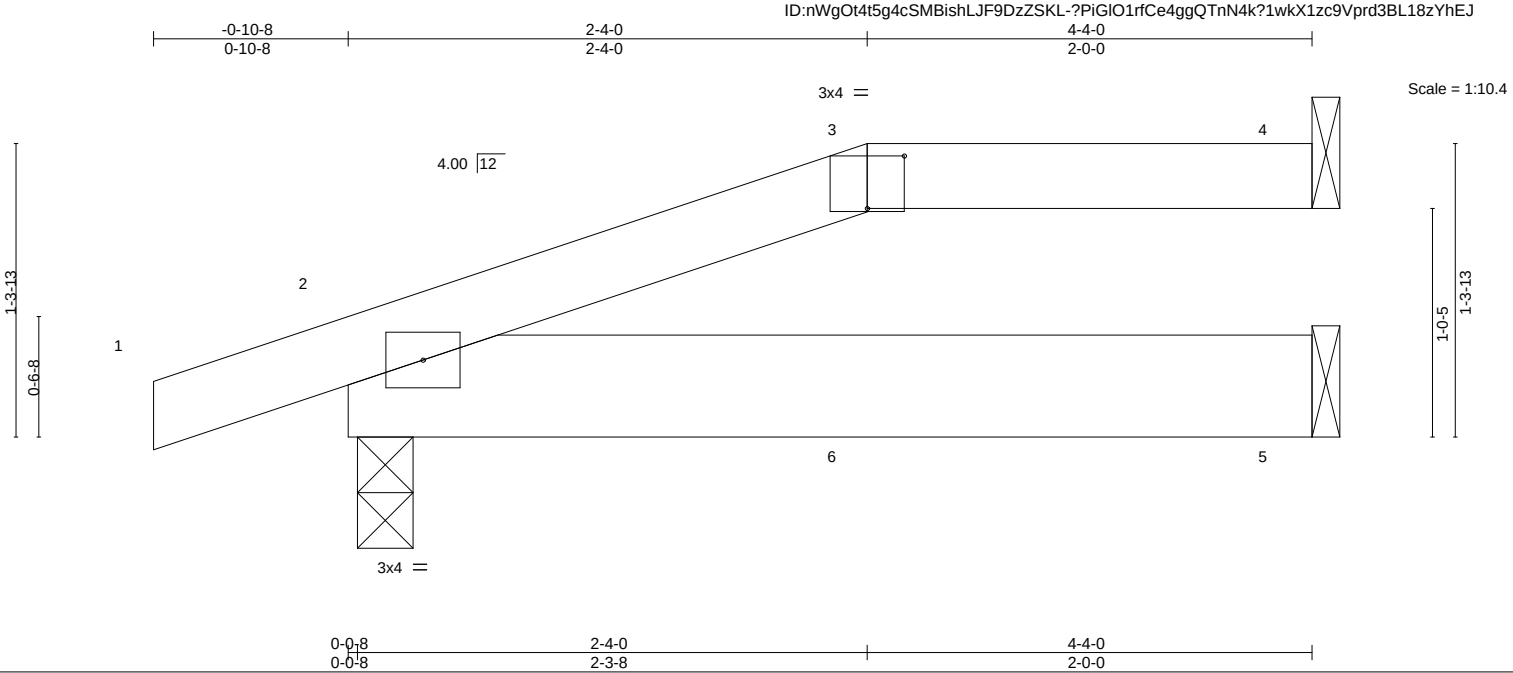


Plate Offsets (X,Y)-- [3:0-2-0,0-2-13]

| 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 | 0.28 | Vert(LL) | 0.01 | 2-5 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.10 | Vert(CT) | -0.01 | 2-5 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.00 | Horz(CT) | 0.01 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-P | | | | | | | Weight: 18 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 4-4-0 oc purlins, except 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 4=100/Mechanical, 2=234/0-3-0, 5=59/Mechanical
Max Horz 2=43(LC 8)
Max Uplift 4=-47(LC 8), 2=-110(LC 8), 5=-23(LC 9)
Max Grav 4=100(LC 1), 2=234(LC 1), 5=87(LC 3)

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

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-4-0, Interior(1) 2-4-0 to 4-3-4 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 39 lb down and 135 lb up at 2-4-0 on top chord, and 22 lb down and 46 lb up at 2-4-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-60, 2-5=-20
Concentrated Loads (lb)
Vert: 6=-2(F)


March 22,2019




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| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | CP4 | DIAGONAL HIP GIRDER | 2 | 1 | I36483564 |
| | | | | | Job Reference (optional) |

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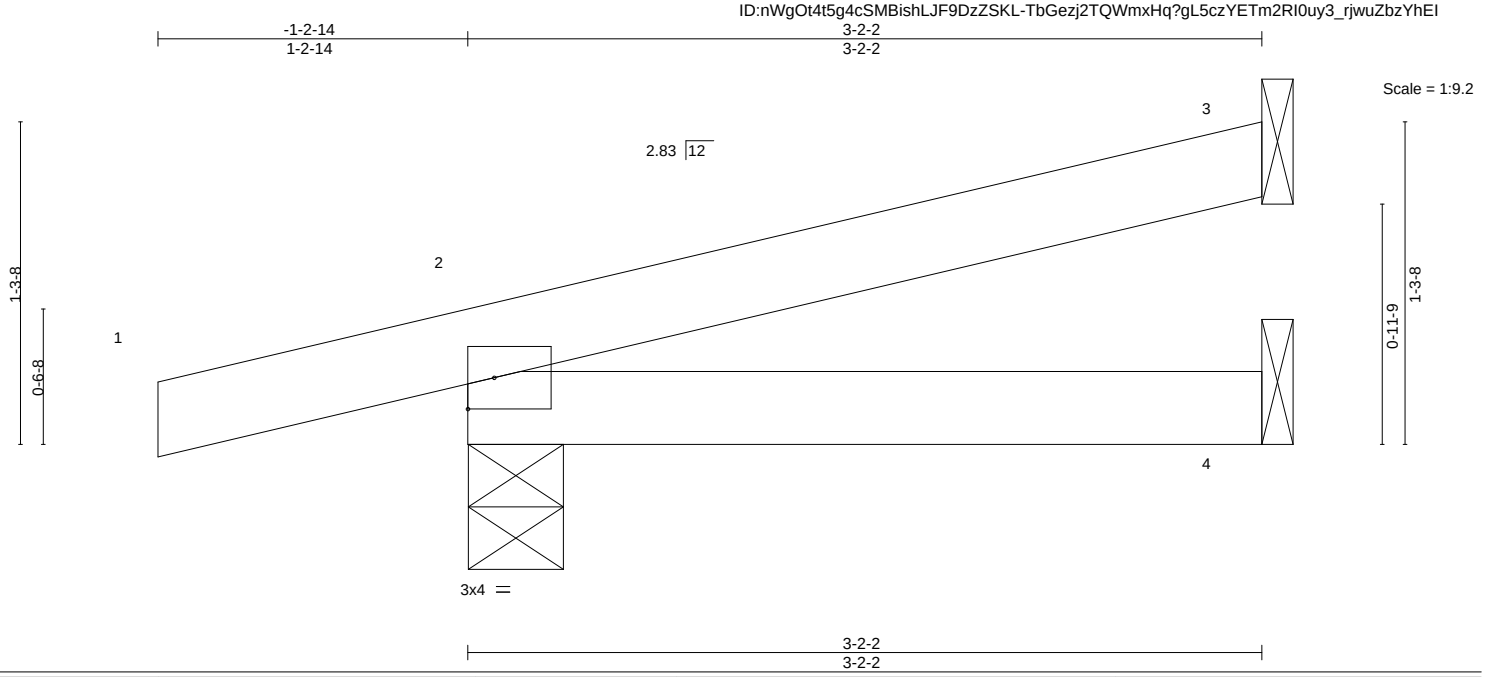
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-TbGezj2TQWmxHq?gL5czYETm2RI0uy3_rjwuZbzYhEI




| 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 | 0.87 | Vert(LL) | 0.01 | 2-4 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.16 | Vert(CT) | -0.01 | 2-4 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.00 | Horz(CT) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-P | | | | | | | Weight: 12 lb | FT = 20% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 3-2-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 3=67/Mechanical, 2=224/0-4-9, 4=29/Mechanical
Max Horz 2=40(LC 8)
Max Uplift 3=-38(LC 12), 2=-112(LC 8), 4=-9(LC 8)
Max Grav 3=67(LC 1), 2=224(LC 1), 4=58(LC 3)

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

**NOTES-**
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 2=112.


March 22,2019



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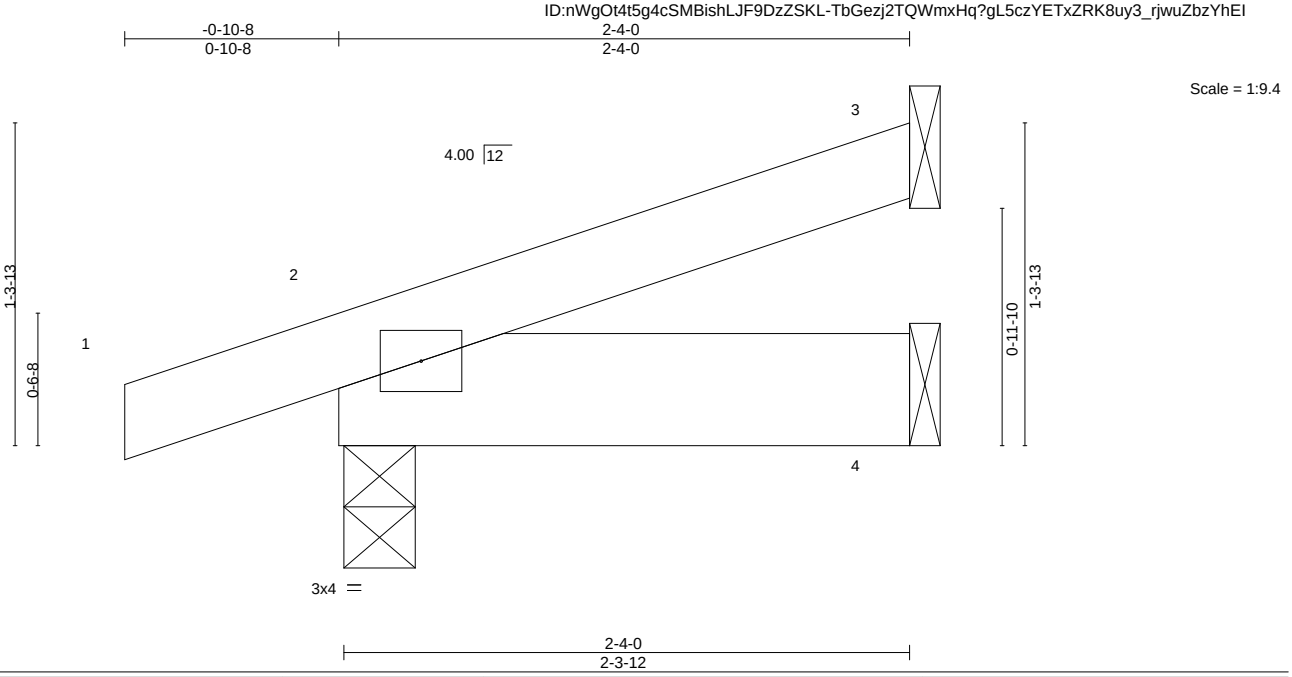
| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | CP5 | JACK-OPEN | 2 | 1 | I36483565 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:24:27 2019 Page 1
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-TbGezj2TQWmxHq?gL5czYETxZRK8uy3_rjwuZbzYhEI




| 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) | -0.00 | 2 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.02 | Vert(CT) | -0.00 | 2 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-P | | | | | | | Weight: 11 lb | FT = 20% |

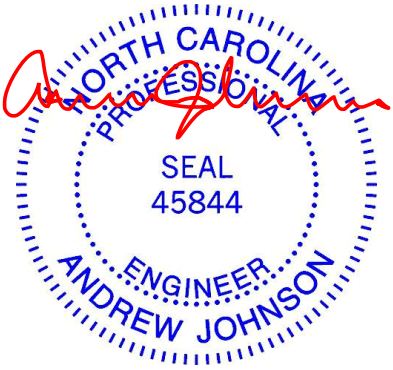
**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 2-4-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 3=49/Mechanical, 2=161/0-3-8, 4=21/Mechanical
Max Horz 2=42(LC 8)
Max Uplift 3=-31(LC 12), 2=-78(LC 8), 4=-7(LC 8)
Max Grav 3=49(LC 1), 2=161(LC 1), 4=43(LC 3)

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

**NOTES-**
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4.
6) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.

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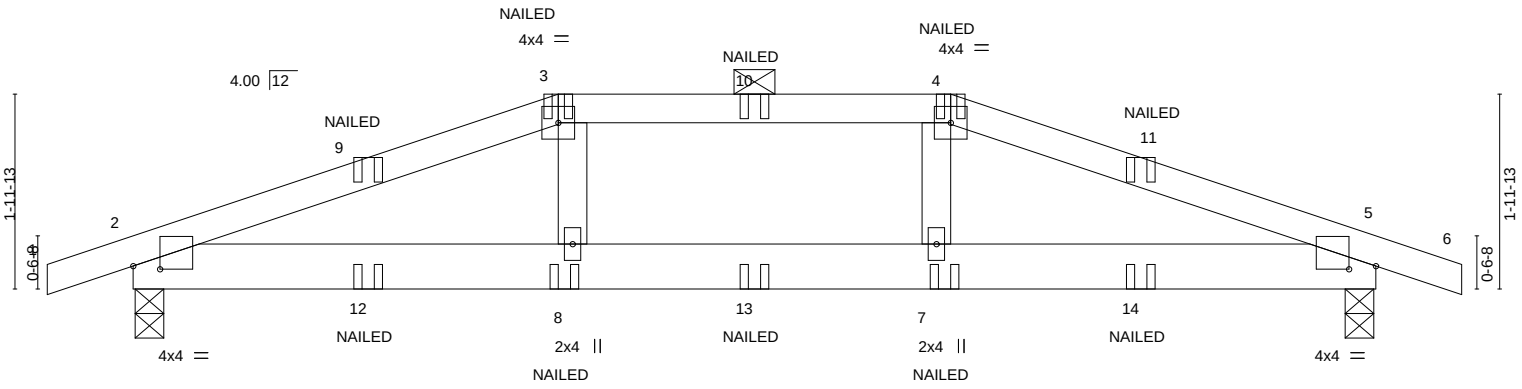
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | CPG | HIP GIRDER | 1 | 1 | I36483566<br>Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:24:29 2019 Page 1
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-P_OONP3jy70eX792TWeRdfYDYEtnMr0HJ1P?eTzYhEG

-0-10-8 4-4-0 8-4-0 12-8-0 13-6-8
0-10-8 4-4-0 4-0-0 4-4-0 0-10-8

Scale = 1:23.5




0-0-4 4-4-0 8-4-0 12-7-12 12-8-0
0-0-4 4-3-12 4-0-0 4-3-12 0-0-4

Plate Offsets (X,Y)-- [2:0-3-5,0-0-6], [5:0-3-5,0-0-6]

| 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 | 0.42 | Vert(LL) | 0.05 | 7-8 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.59 | Vert(CT) | -0.07 | 7-8 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.10 | Horz(CT) | 0.02 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | | Weight: 56 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 4-6-3 oc purlins, except 2-0-0 oc purlins (4-7-14 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 8-1-7 oc bracing.

**REACTIONS.** (lb/size) 2=754/0-3-8, 5=754/0-3-8
Max Horz 2=-29(LC 17)
Max Uplift 2=-346(LC 8), 5=-346(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1424/909, 3-4=-1292/885, 4-5=-1424/909
BOT CHORD 2-8=-800/1279, 7-8=-812/1292, 5-7=-799/1279
WEBS 3-8=-147/261, 4-7=-147/261

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-4-0, Exterior(2) 4-4-0 to 12-6-4, Interior(1) 12-6-4 to 13-6-8 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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.
6) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 5. This connection is for uplift only and does not consider lateral forces.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
8) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-60, 4-6=-60, 2-5=-20
Concentrated Loads (lb)
Vert: 3=-57(F) 4=-57(F) 8=-21(F) 7=-21(F) 9=-40(F) 10=-57(F) 11=-40(F) 12=-39(F) 13=-21(F) 14=-39(F)


March 22,2019



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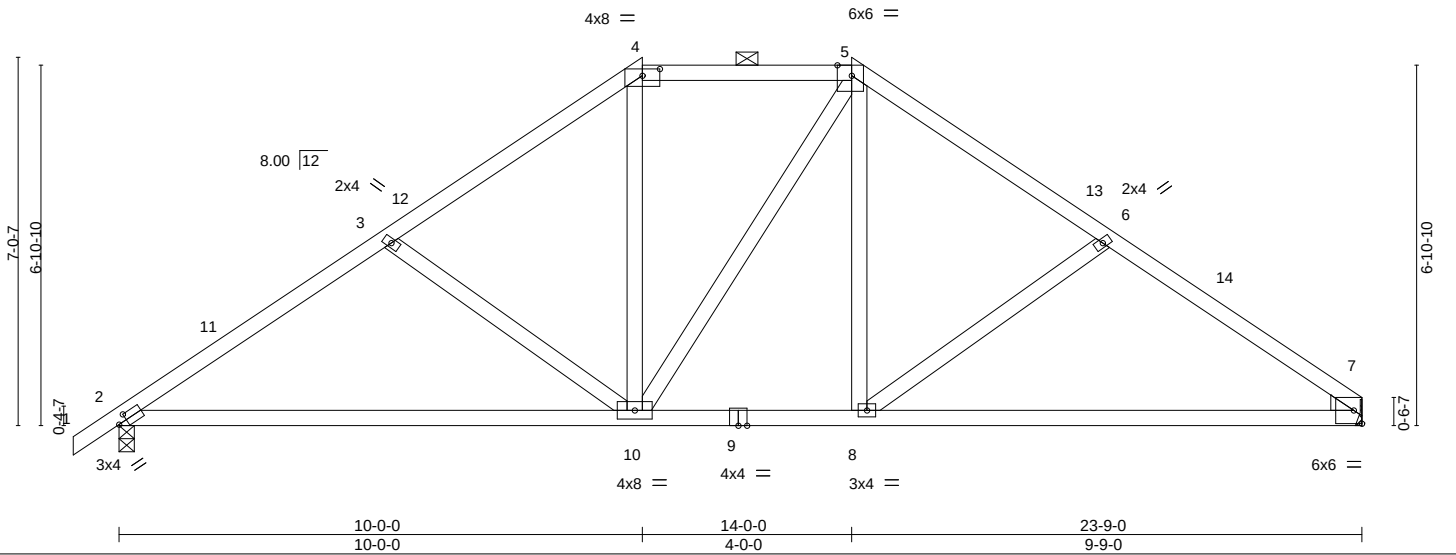
| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | H1 | Hip | 1 | 1 | I36483567 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:24:30 2019 Page 1
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-uAymbl4LjR8V9HkF0D9gAt4P7e8y5FdRYh9YAwzYhEF

| -0-10-8 | 5-2-7 | 10-0-0 | 14-0-0 | 18-9-9 | 23-9-0 |
|---|---|---|---|---|---|
| 0-10-8 | 5-2-7 | 4-9-9 | 4-0-0 | 4-9-9 | 4-11-7 |

Scale = 1:44.0




| 10-0-0 | 14-0-0 | 23-9-0 |
|---|---|---|
| 10-0-0 | 4-0-0 | 9-9-0 |

Plate Offsets (X,Y)-- [2:0-2-0,0-1-8], [4:0-4-0,0-1-9], [5:0-3-5,Edge], [7:0-0-15,0-0-10], [7:0-5-6,0-1-4], [7:Edge,0-3-1]

| 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 | 0.37 | Vert(LL) | -0.26 | 2-10 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.91 | Vert(CT) | -0.55 | 2-10 | >517 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.20 | Horz(CT) | 0.04 | 7 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | | Weight: 126 lb | FT = 20% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 4-7-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 2=1004/0-3-8, 7=940/Mechanical
Max Horz 2=173(LC 9)
Max Uplift 2=-112(LC 12), 7=-88(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1347/230, 3-4=-1099/207, 4-5=-835/214, 5-6=-1094/211, 6-7=-1330/230
BOT CHORD 2-10=-171/1067, 8-10=0/831, 7-8=-121/1044
WEBS 3-10=-315/207, 4-10=-17/353, 5-8=-38/343, 6-8=-294/209

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-0-0, Exterior(2) 10-0-0 to 18-2-15, Interior(1) 18-2-15 to 23-8-4 zone;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.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7.
8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.


March 22,2019



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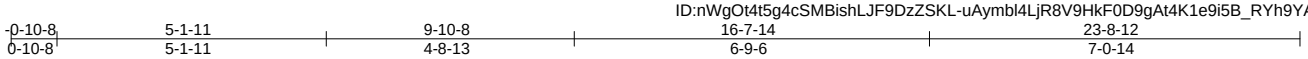
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | H1A | Half Hip | 1 | 1 | I36483568 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:24:30 2019 Page 1
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-uAymbl4LjR8V9HkF0D9gAt4K1e9i5B_RYh9YAwzYhEF

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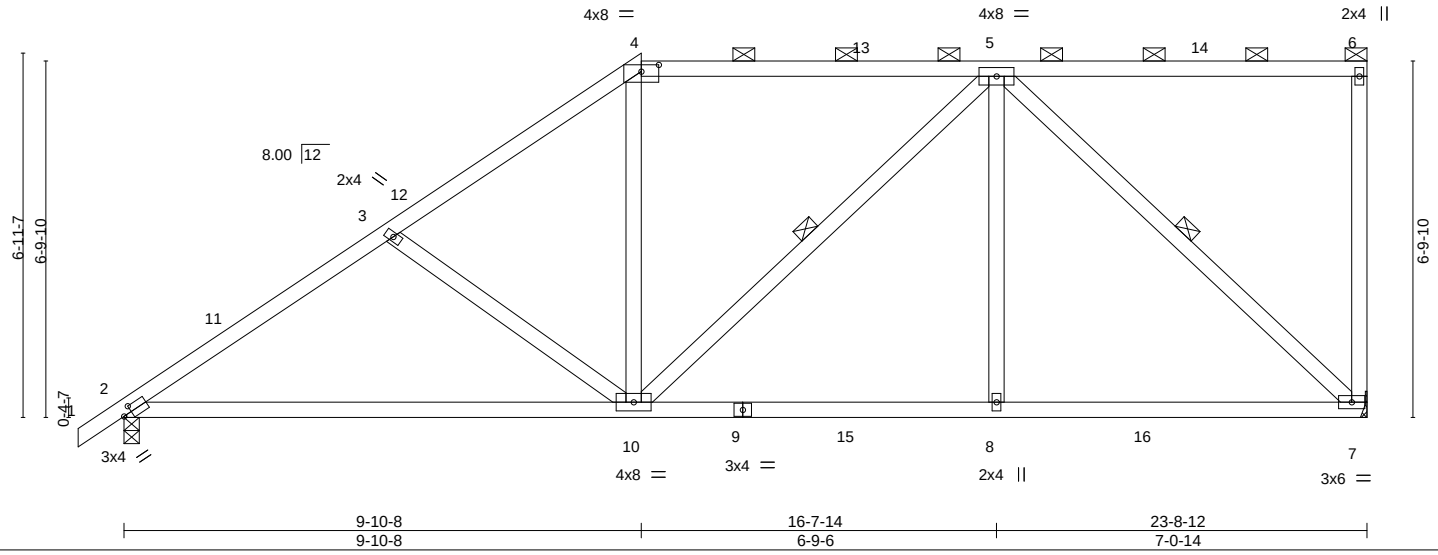


Plate Offsets (X,Y)-- [2:0-2-0,0-1-8], [4:0-4-0,0-1-9]

| 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 | 0.69 | Vert(LL) | -0.23 | 2-10 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.86 | Vert(CT) | -0.48 | 2-10 | >586 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.50 | Horz(CT) | 0.03 | 7 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | | Weight: 138 lb | FT = 20% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 4-7-2 oc purlins, except end verticals, and 2-0-0 oc purlins (5-6-4 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-10, 5-7

**REACTIONS.** (lb/size) 7=936/Mechanical, 2=1000/0-3-8
Max Horz 2=270(LC 12)
Max Uplift 7=-157(LC 9), 2=-92(LC 12)
Max Grav 7=939(LC 2), 2=1000(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1344/167, 3-4=-1103/144, 4-5=-847/162
BOT CHORD 2-10=-288/1063, 8-10=-131/783, 7-8=-131/783
WEBS 3-10=-308/206, 4-10=0/344, 5-8=0/339, 5-7=-1054/177

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 9-10-8, Exterior(2) 9-10-8 to 14-1-7, Interior(1) 14-1-7 to 23-7-0 zone;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) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=157.
8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.


March 22,2019



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| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | H2 | Hip | 1 | 1 | I36483569 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:24:31 2019 Page 1
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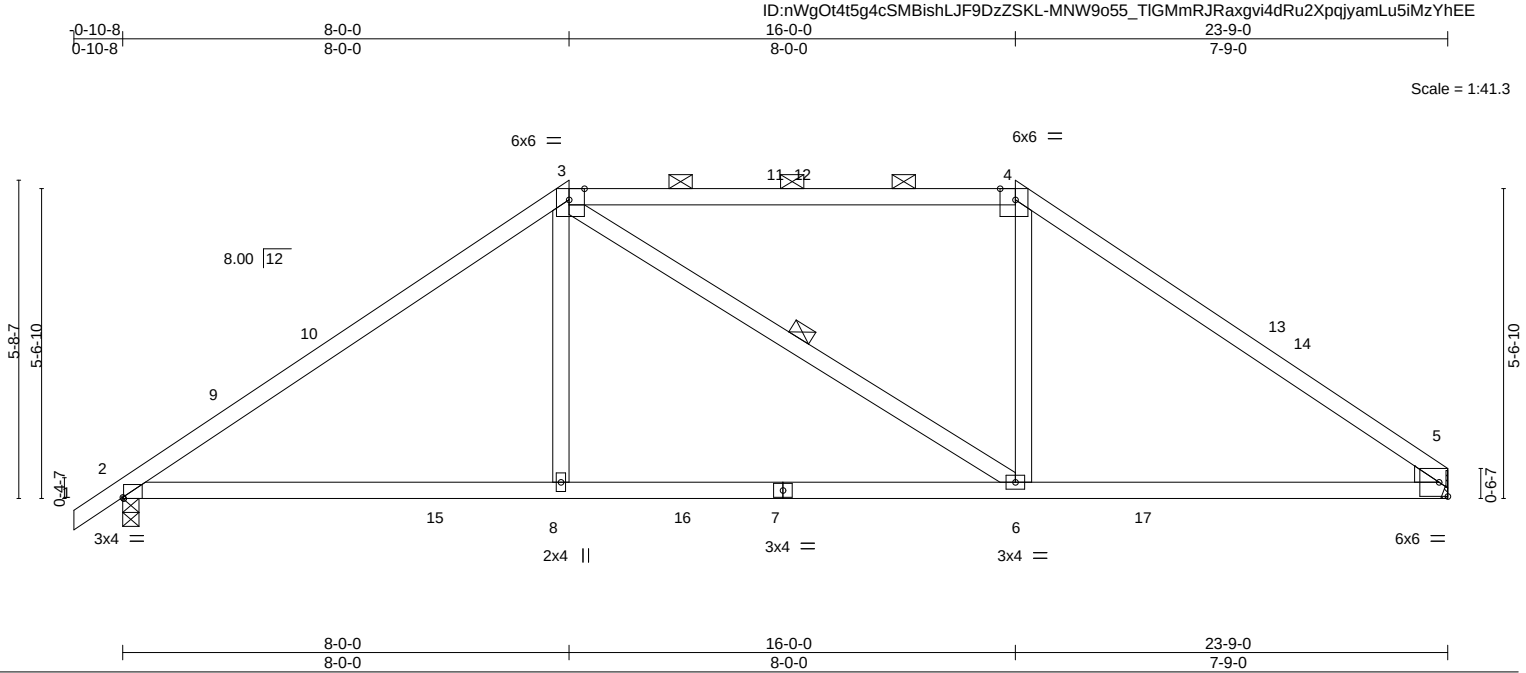



Plate Offsets (X,Y)-- [2:0-0-3,Edge], [3:0-3-5,Edge], [4:0-3-5,Edge], [5:0-0-15,0-0-10], [5:0-5-6,0-1-4], [5:Edge,0-3-1]

| 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 | 0.94 | Vert(LL) | 0.11 | 2-8 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.68 | Vert(CT) | -0.22 | 2-8 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.13 | Horz(CT) | 0.04 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | | Weight: 107 lb | FT = 20% |

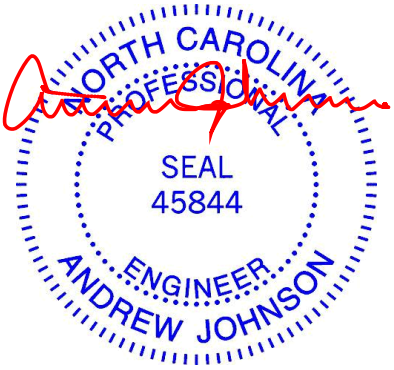
**LUMBER-**
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
WEDGE
Right: 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-6-12 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-6

**REACTIONS.** (lb/size) 2=1004/0-3-8, 5=940/Mechanical
Max Horz 2=140(LC 11)
Max Uplift 2=-97(LC 12), 5=-73(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1340/186, 3-4=-978/225, 4-5=-1316/188
BOT CHORD 2-8=-84/1023, 6-8=-86/1014, 5-6=-44/986
WEBS 3-8=0/350, 4-6=0/352

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-0-0, Exterior(2) 8-0-0 to 12-2-15, Interior(1) 12-2-15 to 16-0-0, Exterior(2) 16-0-0 to 20-2-15, Interior(1) 20-2-15 to 23-8-4 zone;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) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5.
8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.




March 22,2019



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818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | H2A | Half Hip | 1 | 1 | I36483570 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:24:32 2019 Page 1
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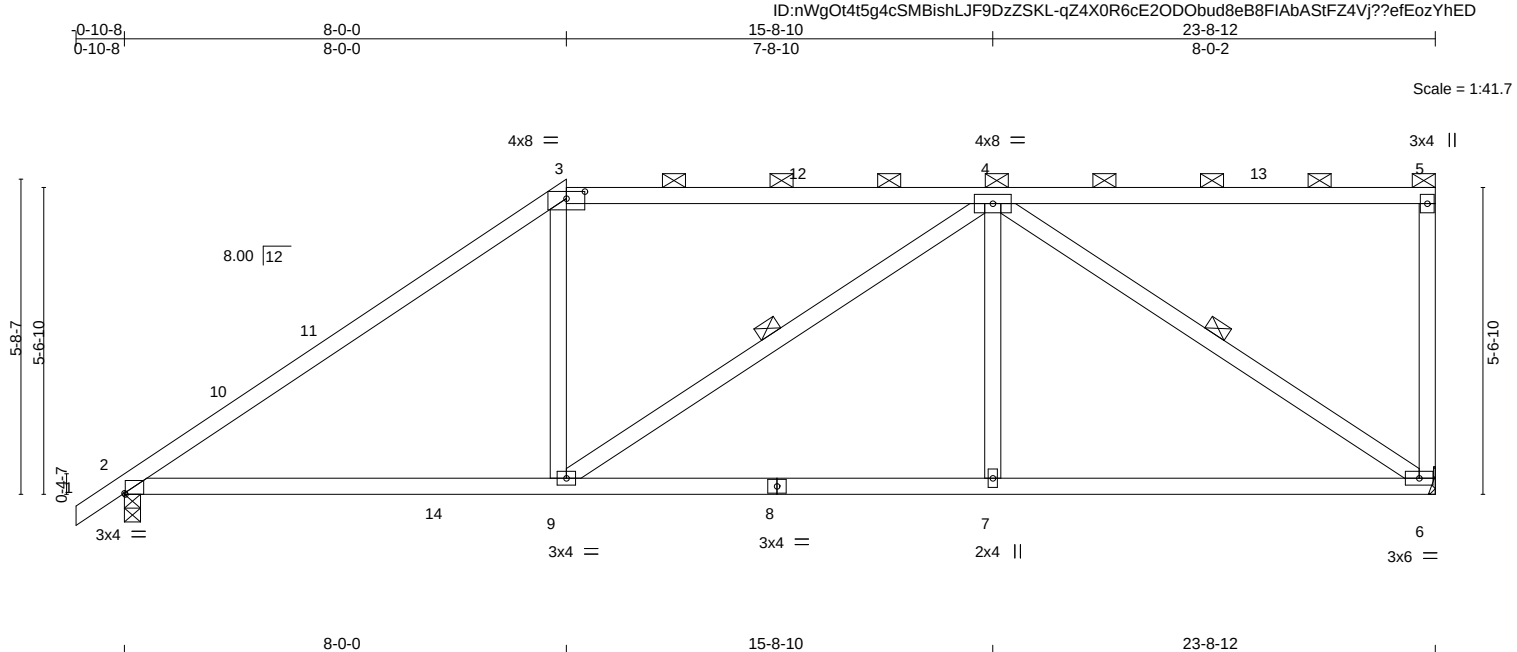


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.97 | Vert(LL) | -0.11 | 6-7 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.66 | Vert(CT) | -0.23 | 2-9 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.56 | Horz(CT) | 0.04 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | | Weight: 124 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.1 *Except* 3-5: 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

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

**REACTIONS.** (lb/size) 6=936/Mechanical, 2=1000/0-3-8
Max Horz 2=222(LC 12)
Max Uplift 6=-162(LC 9), 2=-84(LC 12)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1313/145, 3-4=-977/188
BOT CHORD 2-9=-184/981, 7-9=-175/1019, 6-7=-175/1019
WEBS 3-9=0/355, 4-7=0/333, 4-6=-1192/205

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-0-0, Exterior(2) 8-0-0 to 12-2-15, Interior(1) 12-2-15 to 23-7-0 zone;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) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=162.
8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.


March 22,2019




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Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | H3 | Half Hip | 1 | 1 | I36483571 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:24:33 2019 Page 1
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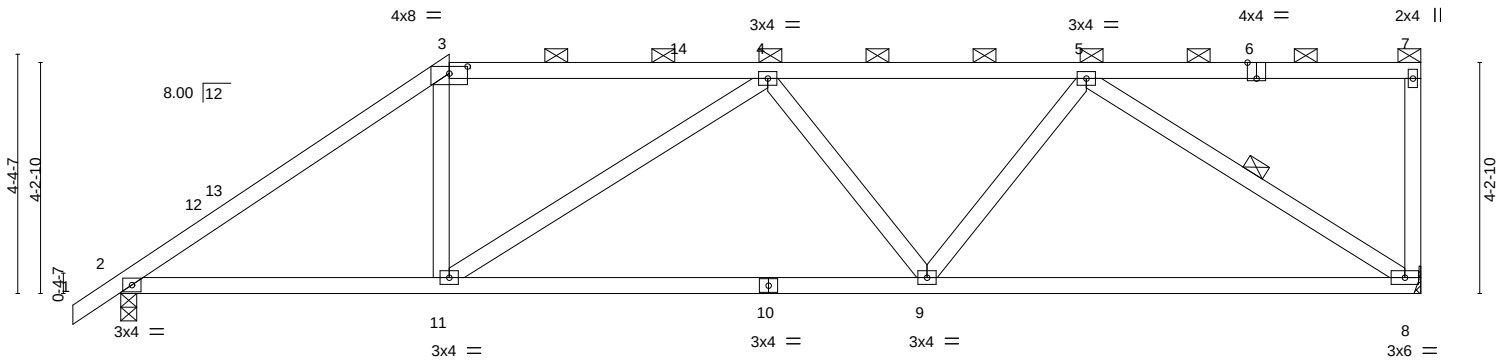
| 0-10-8 | 6-0-0 | 11-9-13 | 17-7-11 | 23-9-0 |
|---|---|---|---|---|
| 0-10-8 | 6-0-0 | 5-9-13 | 5-9-13 | 6-1-5 |

Scale = 1:42.1




| 6-0-0 | 14-8-12 | 23-9-0 |
|---|---|---|
| 6-0-0 | 8-8-12 | 9-0-4 |

Plate Offsets (X,Y)-- [3:0-4-0,0-1-9], [6:0-2-0,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 | 0.59 | Vert(LL) | -0.15 | 8-9 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.84 | Vert(CT) | -0.32 | 8-9 | >875 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.50 | Horz(CT) | 0.05 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | | Weight: 119 lb | FT = 20% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 3-11-0 oc purlins, except end verticals, and 2-0-0 oc purlins (4-9-3 max.): 3-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-8

**REACTIONS.** (lb/size) 8=937/Mechanical, 2=1001/0-3-8
Max Horz 2=170(LC 12)
Max Uplift 8=-166(LC 9), 2=-84(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1410/164, 3-4=-1072/186, 4-5=-1333/196
BOT CHORD 2-11=-183/1085, 9-11=-265/1429, 8-9=-216/1094
WEBS 3-11=-4/462, 4-11=-499/189, 5-9=0/462, 5-8=-1273/259

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-0-0, Exterior(2) 6-0-0 to 10-2-15, Interior(1) 10-2-15 to 23-7-4 zone;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.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=166.
8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.


March 22,2019

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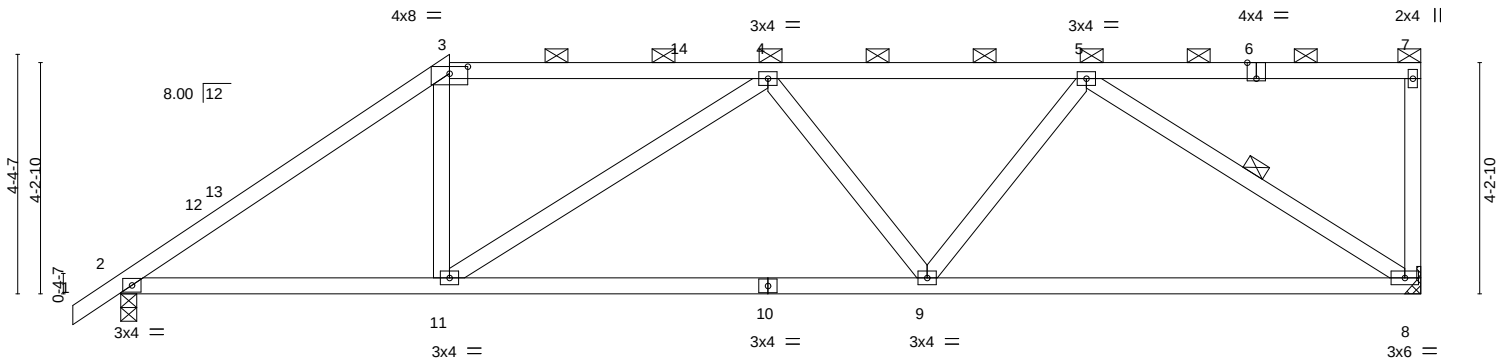
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | H3A | Half Hip | 1 | 1 | I36483572 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:24:34 2019 Page 1
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-myBHR77smgexdv10F3EcKjF1dFWz1?30SJ7mJhzYhEB

| 0-10-8 | 6-0-0 | 11-9-12 | 17-7-8 | 23-8-12 |
|---|---|---|---|---|
| 0-10-8 | 6-0-0 | 5-9-12 | 5-9-12 | 6-1-4 |

Scale = 1:42.1




| 6-0-0 | 14-8-10 | 23-8-12 |
|---|---|---|
| 6-0-0 | 8-8-10 | 9-0-2 |

Plate Offsets (X,Y)-- [3:0-4-0,0-1-9], [6:0-2-0,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 | 0.59 | Vert(LL) | -0.15 | 8-9 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.84 | Vert(CT) | -0.32 | 8-9 | >878 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.50 | Horz(CT) | 0.05 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | | Weight: 119 lb | FT = 20% |

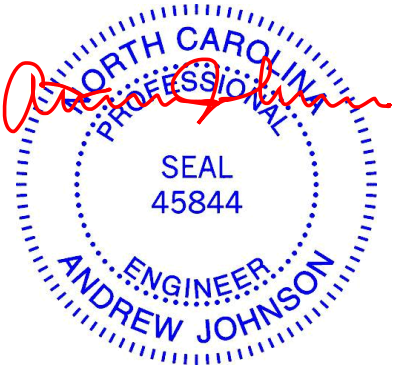
**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 3-11-2 oc purlins, except end verticals, and 2-0-0 oc purlins (4-9-4 max.): 3-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-8

**REACTIONS.** (lb/size) 8=936/Mechanical, 2=1000/0-3-8
Max Horz 2=170(LC 12)
Max Uplift 8=-166(LC 9), 2=-84(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1409/164, 3-4=-1070/186, 4-5=-1330/196
BOT CHORD 2-11=-183/1083, 9-11=-265/1426, 8-9=-216/1092
WEBS 3-11=-4/461, 4-11=-497/189, 5-9=0/462, 5-8=-1271/259

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-0-0, Exterior(2) 6-0-0 to 10-2-15, Interior(1) 10-2-15 to 23-7-0 zone;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.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=166.
8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.




March 22,2019



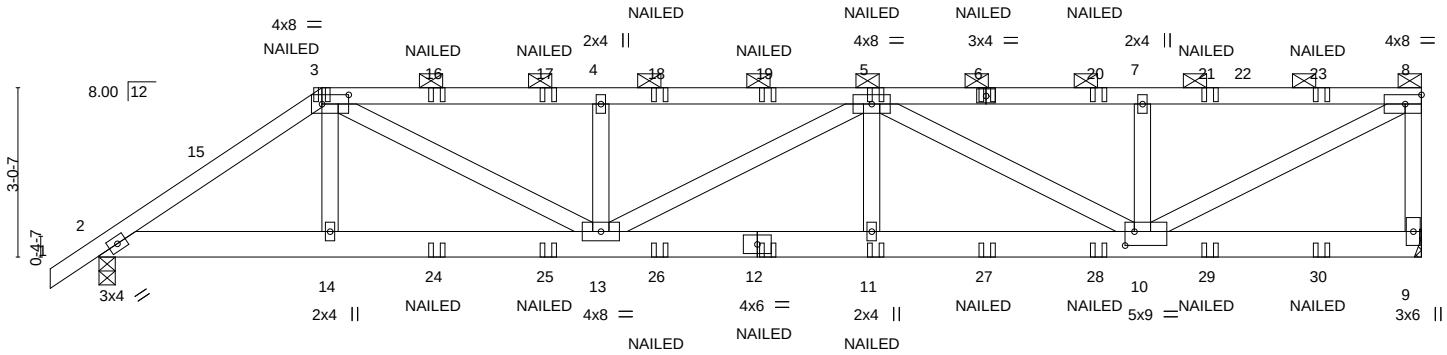
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | HG4 | HALF HIP GIRDER | 1 | 1 | I36483573 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:24:36 2019 Page 1
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-iKJ1ro96IHvftCBONUG4P8KL23FZVoyJwdcsNZzYhE9

| 0-10-8 | 4-0-0 | 9-0-1 | 13-10-6 | 18-8-11 | 23-8-12 |
|---|---|---|---|---|---|
| 0-10-8 | 4-0-0 | 5-0-1 | 4-10-5 | 4-10-5 | 5-0-1 |

Scale = 1:41.3




| 4-0-0 | 9-0-1 | 13-10-6 | 18-8-11 | 23-8-12 |
|---|---|---|---|---|
| 4-0-0 | 5-0-1 | 4-10-5 | 4-10-5 | 5-0-1 |

Plate Offsets (X,Y)-- [3:0-5-12,0-2-0], [10:0-2-0,0-3-0]

| 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 | 0.72 | Vert(LL) | 0.16 | 11-13 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.64 | Vert(CT) | -0.25 | 11-13 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.92 | Horz(CT) | 0.05 | 9 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | | Weight: 141 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 3-9-11 oc purlins, except end verticals, and 2-0-0 oc purlins (2-9-12 max.): 3-8.
BOT CHORD Rigid ceiling directly applied or 7-5-0 oc bracing.

**REACTIONS.** (lb/size) 9=1313/Mechanical, 2=1431/0-3-8
Max Horz 2=123(LC 31)
Max Uplift 9=-433(LC 9), 2=-390(LC 12)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2237/699, 3-4=-2889/973, 4-5=-2889/973, 5-7=-1991/666, 7-8=-1991/666, 8-9=-1233/454
BOT CHORD 2-14=-610/1791, 13-14=-611/1809, 11-13=-991/2946, 10-11=-991/2946
WEBS 3-14=-15/373, 3-13=-456/1222, 4-13=-425/293, 5-11=0/288, 5-10=-1088/370, 7-10=-426/286, 8-10=-738/2219

**NOTES-**
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-0-0, Exterior(2) 4-0-0 to 8-2-15, Interior(1) 8-2-15 to 23-7-0 zone;C-C for members and forces & MWFRS for reactions shown; 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=433.
7) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 192 lb down and 85 lb up at 4-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-8=-60, 2-9=-20

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**LOAD CASE(S)** Standard

Concentrated Loads (lb)

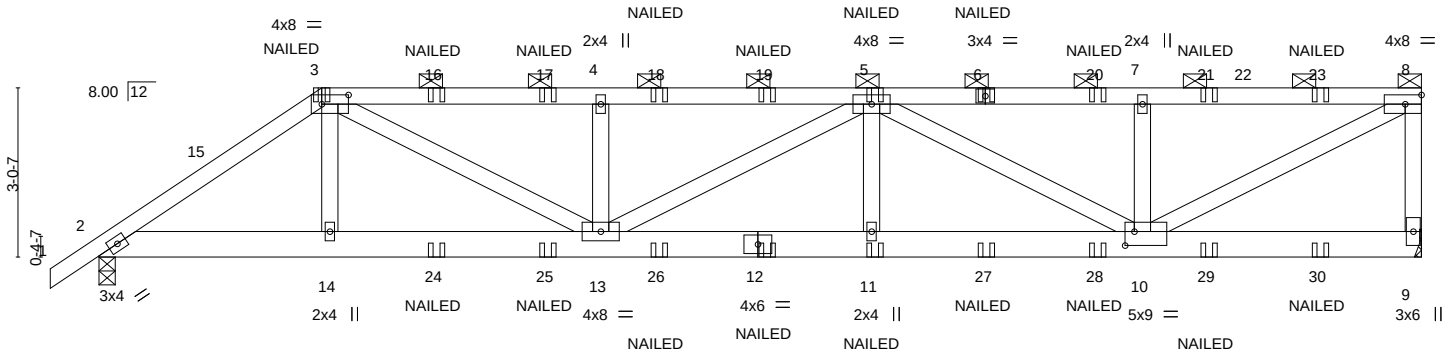
Vert: 3=-46(B) 6=-46(B) 12=-18(B) 14=-192(B) 11=-18(B) 5=-46(B) 16=-46(B) 17=-46(B) 18=-46(B) 19=-46(B) 20=-46(B) 21=-46(B) 23=-46(B) 24=-18(B) 25=-18(B) 26=-18(B) 27=-18(B) 28=-18(B) 29=-18(B) 30=-18(B)

| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | HG5 | HALF HIP GIRDER | 1 | 1 | I36483574 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:24:37 2019 Page 1
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-AXtQ38Ak3b1WUMmbxBnJyLtWlTanEF9T9HLQw0zYhE8

| 0-10-8 | 4-0-0 | 9-0-2 | 13-10-8 | 18-8-14 | 23-9-0 |
|---|---|---|---|---|---|
| 0-10-8 | 4-0-0 | 5-0-2 | 4-10-6 | 4-10-6 | 5-0-2 |

Scale = 1:41.4




| 4-0-0 | 9-0-2 | 13-10-8 | 18-8-14 | 23-9-0 |
|---|---|---|---|---|
| 4-0-0 | 5-0-2 | 4-10-6 | 4-10-6 | 5-0-2 |

Plate Offsets (X,Y)-- [3:0-5-12,0-2-0], [10:0-2-0,0-3-0]

| 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 | 0.72 | Vert(LL) | 0.16 | 11-13 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.64 | Vert(CT) | -0.25 | 11-13 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.92 | Horz(CT) | 0.05 | 9 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 141 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 3-9-11 oc purlins, except end verticals, and 2-0-0 oc purlins (2-9-10 max.): 3-8.
BOT CHORD Rigid ceiling directly applied or 7-4-15 oc bracing.

**REACTIONS.** (lb/size) 9=1314/Mechanical, 2=1432/0-3-8
Max Horz 2=123(LC 12)
Max Uplift 9=-433(LC 9), 2=-390(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2239/700, 3-4=-2894/974, 4-5=-2893/975, 5-7=-1995/668, 7-8=-1995/668, 8-9=-1234/453
BOT CHORD 2-14=-611/1793, 13-14=-612/1811, 11-13=-993/2951, 10-11=-993/2951
WEBS 3-14=-15/374, 3-13=-457/1225, 4-13=-425/293, 5-11=0/288, 5-10=-1090/371, 7-10=-427/286, 8-10=-739/2223

**NOTES-**
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-0-0, Exterior(2) 4-0-0 to 8-2-15, Interior(1) 8-2-15 to 23-7-4 zone;C-C for members and forces & MWFRS for reactions shown; 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=433.
7) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 192 lb down and 85 lb up at 4-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-8=-60, 2-9=-20

NORTH CAROLINA PROFESSIONAL SEAL 45844 ENGINEER ANDREW JOHNSON

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**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 3=-46(F) 6=-46(F) 12=-18(F) 14=-192(F) 11=-18(F) 5=-46(F) 16=-46(F) 17=-46(F) 18=-46(F) 19=-46(F) 20=-46(F) 21=-46(F) 23=-46(F) 24=-18(F) 25=-18(F) 26=-18(F) 27=-18(F) 28=-18(F) 29=-18(F) 30=-18(F)

| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | J1 | Jack-Open | 9 | 1 | I36483575 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:24:38 2019 Page 1
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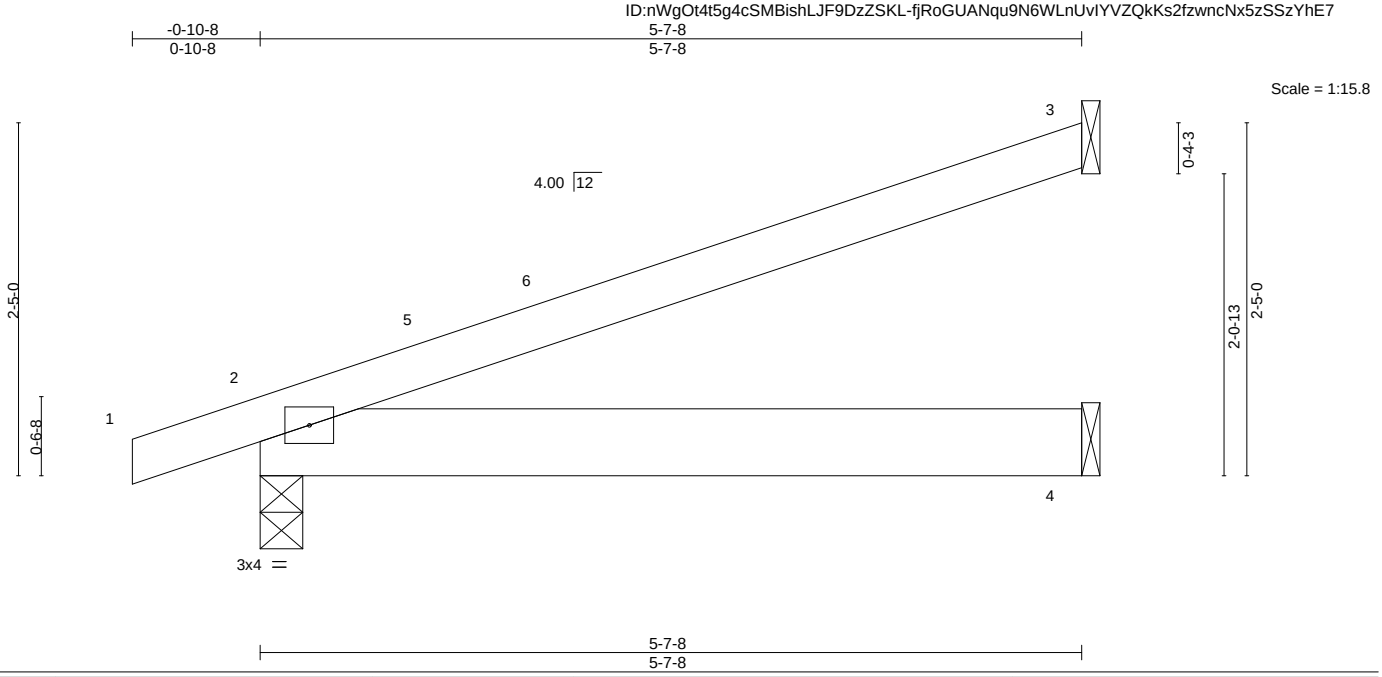



| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.54 | Vert(LL) | -0.01 | 2-4 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.15 | Vert(CT) | -0.03 | 2-4 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-P | | | | | | | Weight: 23 lb | FT = 20% |

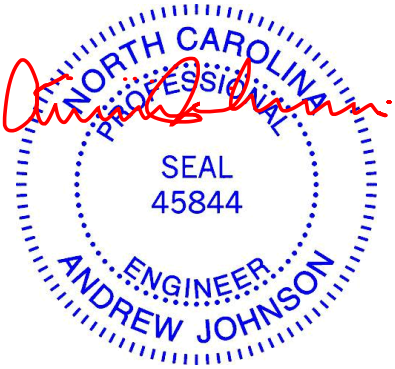
**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-7-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 3=157/Mechanical, 2=284/0-3-8, 4=54/Mechanical
Max Horz 2=85(LC 8)
Max Uplift 3=-85(LC 12), 2=-69(LC 8)
Max Grav 3=157(LC 1), 2=284(LC 1), 4=108(LC 3)

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

**NOTES-**
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-6-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
6) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.

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| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | J1A | Jack-Open | 4 | 1 | I36483576 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:24:39 2019 Page 1
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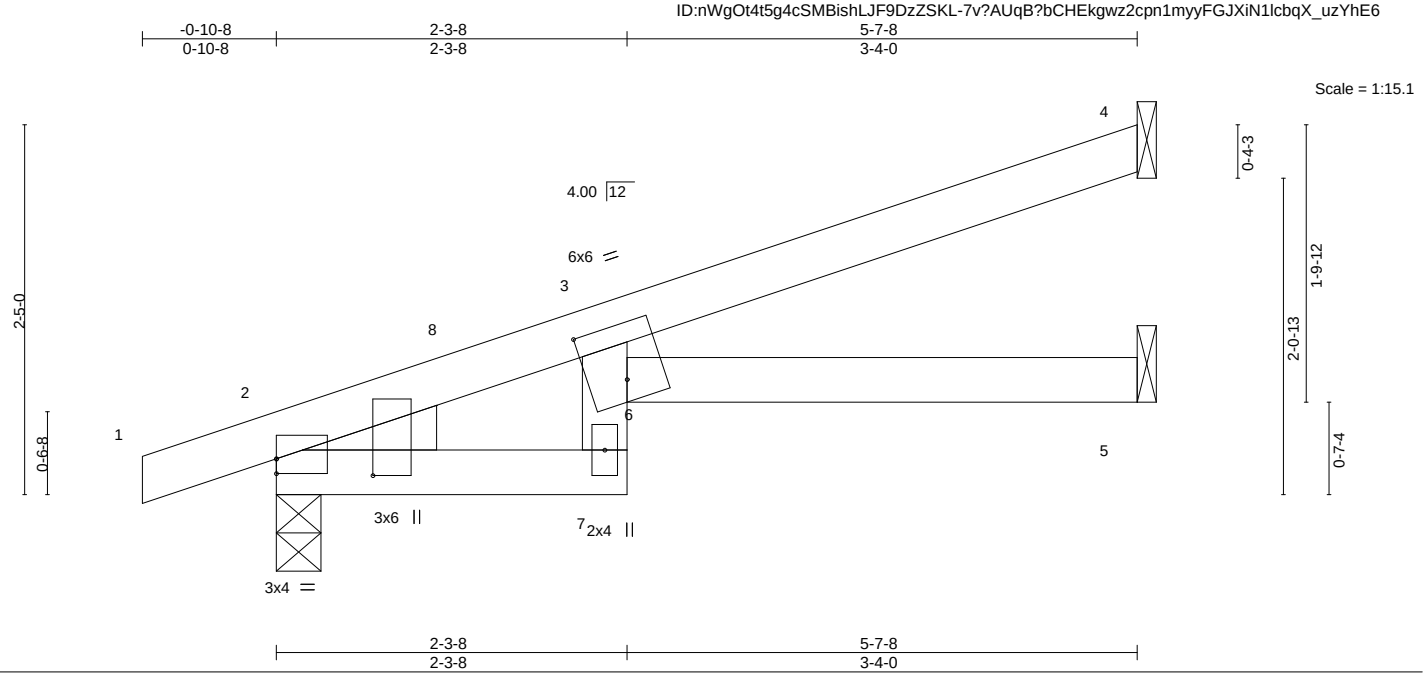



Plate Offsets (X,Y)-- [2:0-0-0,0-1-2], [2:0-1-5,0-7-9], [3:0-1-14,0-0-0], [3:0-3-0,0-4-5]

| 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) | 0.05 | 5-6 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.50 | Vert(CT) | -0.08 | 5-6 | >782 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.02 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-R | | | | | | | Weight: 21 lb | FT = 20% |

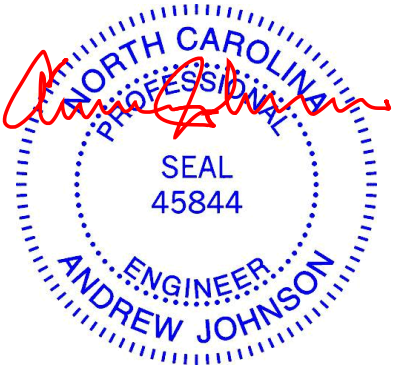
**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
3-7: 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-7-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 4=129/Mechanical, 2=284/0-3-8, 5=82/Mechanical
Max Horz 2=84(LC 8)
Max Uplift 4=-54(LC 12), 2=-68(LC 8)
Max Grav 4=129(LC 1), 2=284(LC 1), 5=96(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-330/79
BOT CHORD 2-7=-151/261

**NOTES-**
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-12, Interior(1) 2-1-12 to 5-6-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4.
6) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.

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| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | J2 | Jack-Open | 4 | 1 | I36483577 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:24:40 2019 Page 1
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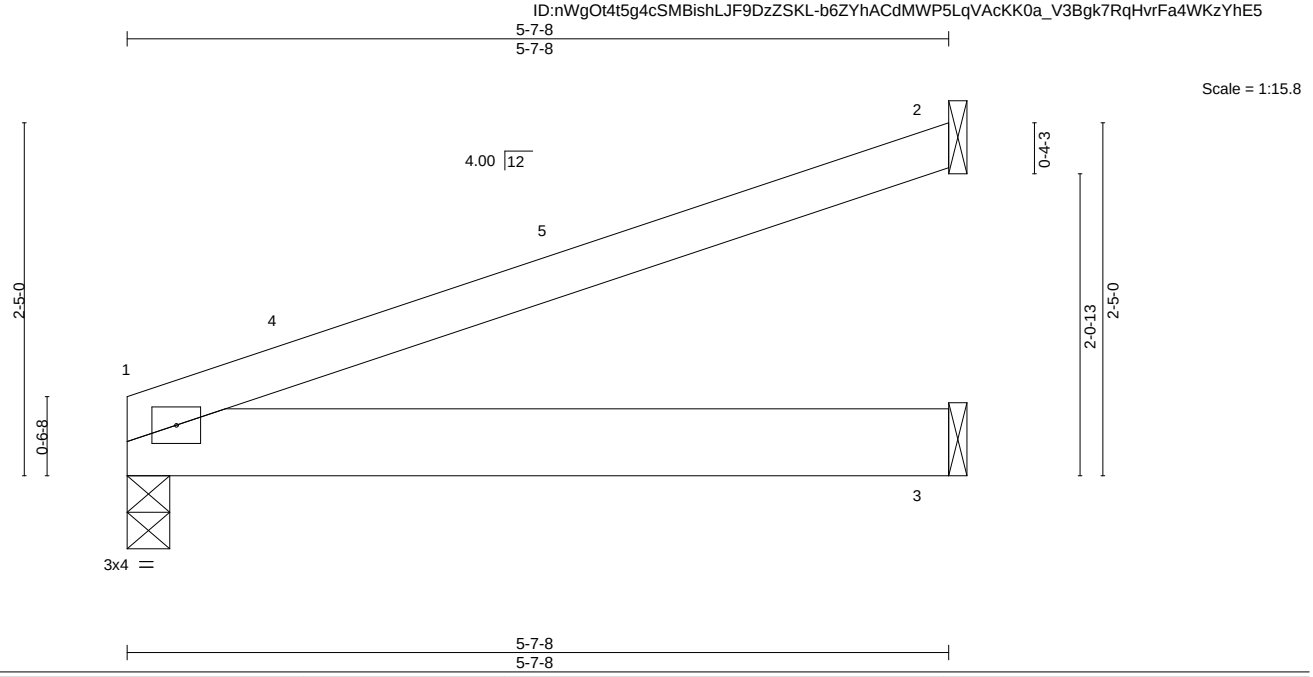



| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.58 | Vert(LL) | -0.01 | 1-3 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.15 | Vert(CT) | -0.03 | 1-3 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.00 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-P | | | | | | | Weight: 22 lb | FT = 20% |

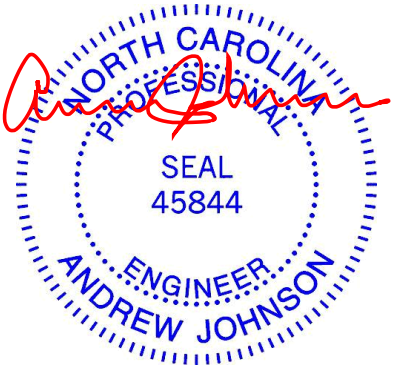
**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-7-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 1=217/0-3-8, 2=162/Mechanical, 3=54/Mechanical
Max Horz 1=78(LC 8)
Max Uplift 1=-25(LC 8), 2=-87(LC 8)
Max Grav 1=217(LC 1), 2=162(LC 1), 3=108(LC 3)

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

**NOTES-**
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 5-6-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2.
6) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1. This connection is for uplift only and does not consider lateral forces.

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| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | J3 | Jack-Open Girder | 1 | 1 | I36483578 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:24:42 2019 Page 1
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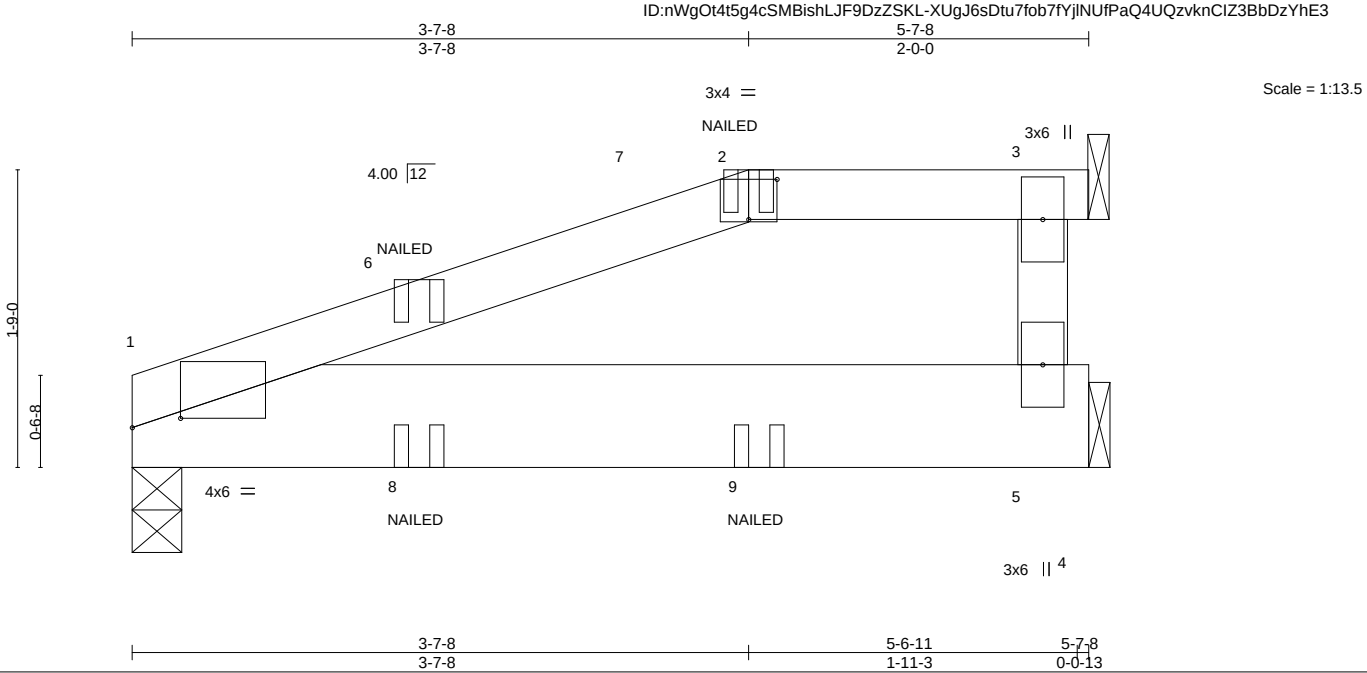


Plate Offsets (X,Y)-- [1:0-3-7,0-0-11], [2:0-2-0,0-2-13]

| 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 | 0.49 | Vert(LL) | -0.01 | 1-5 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.13 | Vert(CT) | -0.01 | 1-5 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.00 | Horz(CT) | 0.01 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-R | | | | | | | Weight: 27 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x8 SP No.2
WEBS 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-7-8 oc purlins, except end verticals, and 2-0-0 oc purlins: 2-3.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 1=257/0-3-8, 3=139/Mechanical, 5=120/Mechanical
Max Horz 1=50(LC 8)
Max Uplift 1=-38(LC 8), 3=-73(LC 8)
Max Grav 1=257(LC 1), 3=139(LC 1), 5=162(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-254/81

**NOTES-**
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 5-4-4 zone;C-C for members and forces & MWFRS for reactions shown; 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
7) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1. This connection is for uplift only and does not consider lateral forces.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
10) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-60, 2-3=-60, 1-4=-20
Concentrated Loads (lb)
Vert: 2=-33(B) 6=-22(B) 8=-25(B) 9=-14(B)


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| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | J3A | Jack-Open Girder | 1 | 1 | I36483579 |
| | | | | | Job Reference (optional) |

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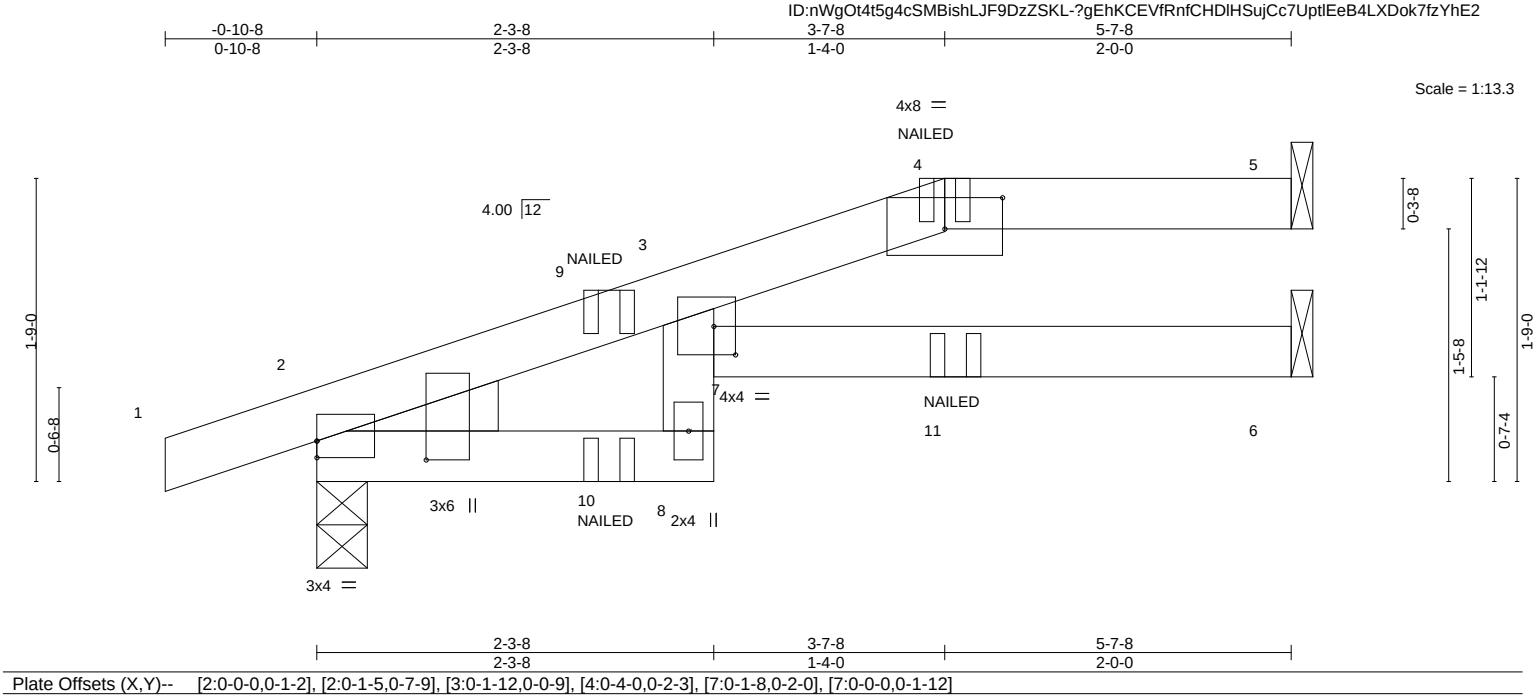


Plate Offsets (X,Y)-- [2:0-0-0,0-1-2], [2:0-1-5,0-7-9], [3:0-1-12,0-0-9], [4:0-4-0,0-2-3], [7:0-1-8,0-2-0], [7:0-0-0,0-1-12]

| 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 | 0.94 | Vert(LL) | 0.14 | 8 | >457 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.19 | Vert(CT) | -0.26 | 8 | >252 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.06 | Horz(CT) | 0.13 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | | Weight: 21 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 5-7-8 oc purlins, except 2-0-0 oc purlins: 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 5=204/Mechanical, 2=334/0-3-8, 6=51/Mechanical
Max Horz 2=59(LC 8)
Max Uplift 5=-68(LC 8), 2=-82(LC 8)
Max Grav 5=204(LC 1), 2=334(LC 1), 6=77(LC 3)

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

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-12, Interior(1) 2-1-12 to 5-6-12 zone;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.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5.
8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-60, 4-5=-60, 2-8=-20, 6-7=-20
Concentrated Loads (lb)
Vert: 4=-10(F) 9=-22(F) 10=-25(F) 11=-38(F)


March 22,2019




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| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | J4 | Jack-Open | 2 | 1 | I36483580 |
| | | | | | Job Reference (optional) |

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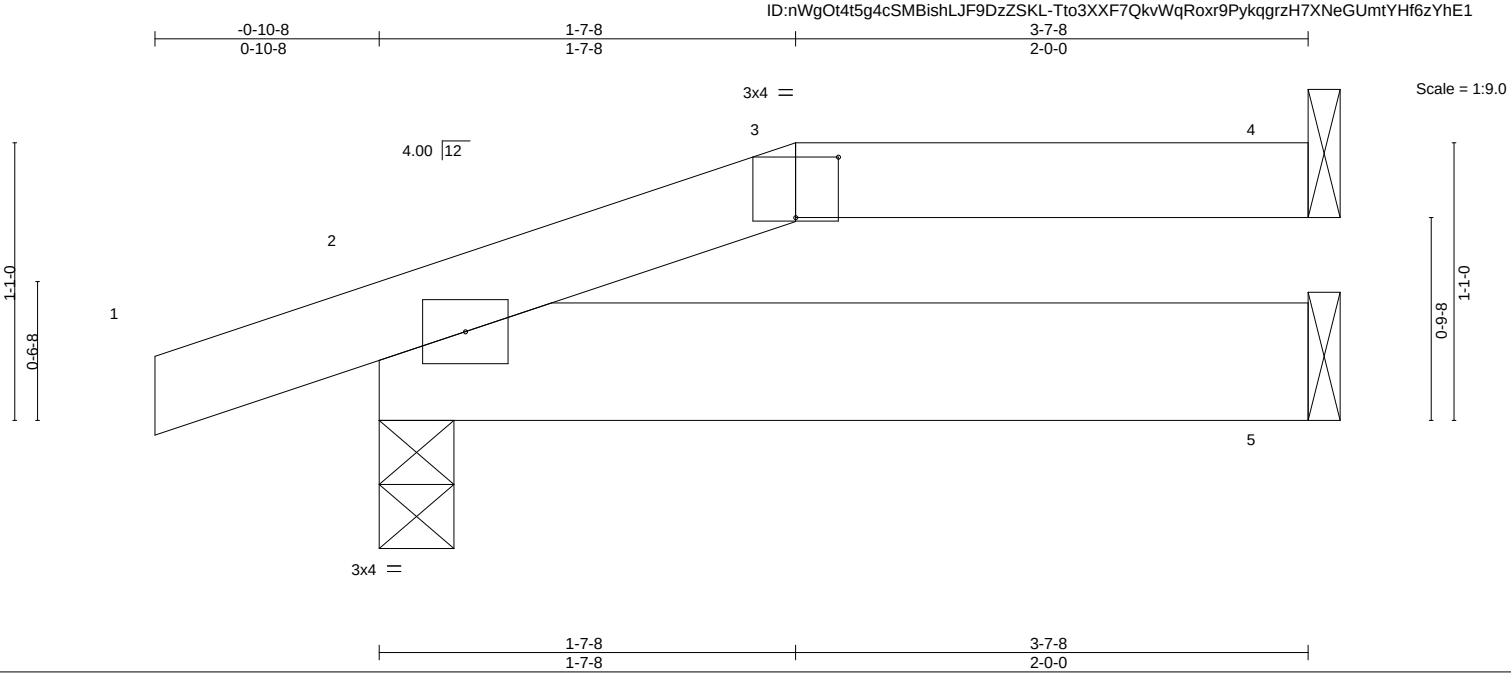


Plate Offsets (X,Y)-- [3:0-2-0,0-2-13]

| 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 | 0.15 | Vert(LL) | -0.00 | 2-5 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.06 | Vert(CT) | -0.00 | 2-5 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.01 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-P | | | | | | | Weight: 16 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 3-7-8 oc purlins, except 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 4=82/Mechanical, 2=207/0-3-8, 5=45/Mechanical
Max Horz 2=34(LC 8)
Max Uplift 4=-36(LC 8), 2=-69(LC 8)
Max Grav 4=82(LC 1), 2=207(LC 1), 5=69(LC 3)

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

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 1-7-8, Interior(1) 1-7-8 to 3-6-12 zone;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.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4.
8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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 | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | J5 | Jack-Open | 1 | 1 | I36483581 |
| | | | | | Job Reference (optional) |

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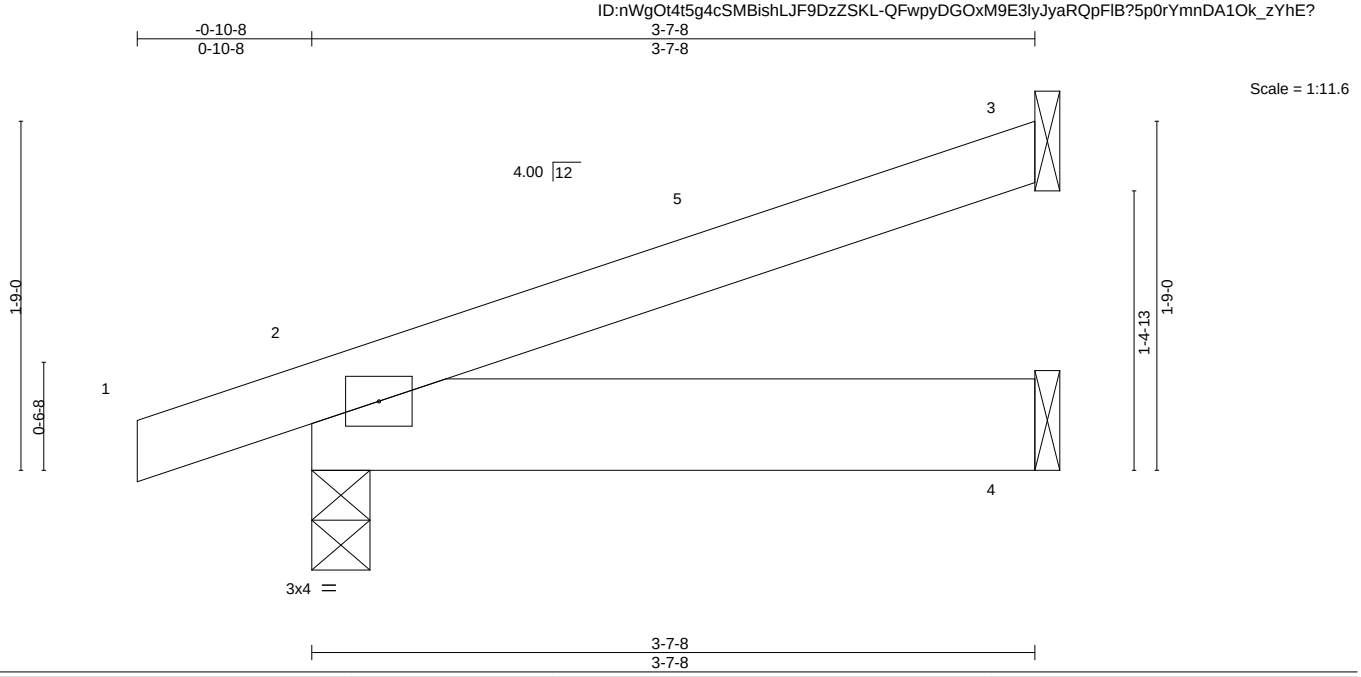


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.18 | Vert(LL) | -0.00 | 2-4 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.06 | Vert(CT) | -0.00 | 2-4 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-P | | | | | | | Weight: 16 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 3-7-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 3=93/Mechanical, 2=207/0-3-8, 4=34/Mechanical
Max Horz 2=59(LC 8)
Max Uplift 3=-52(LC 12), 2=-61(LC 8)
Max Grav 3=93(LC 1), 2=207(LC 1), 4=68(LC 3)

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

**NOTES-**
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-6-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
6) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.


March 22,2019



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| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | J5A | Jack-Open | 1 | 1 | I36483582 |
| | | | | | Job Reference (optional) |

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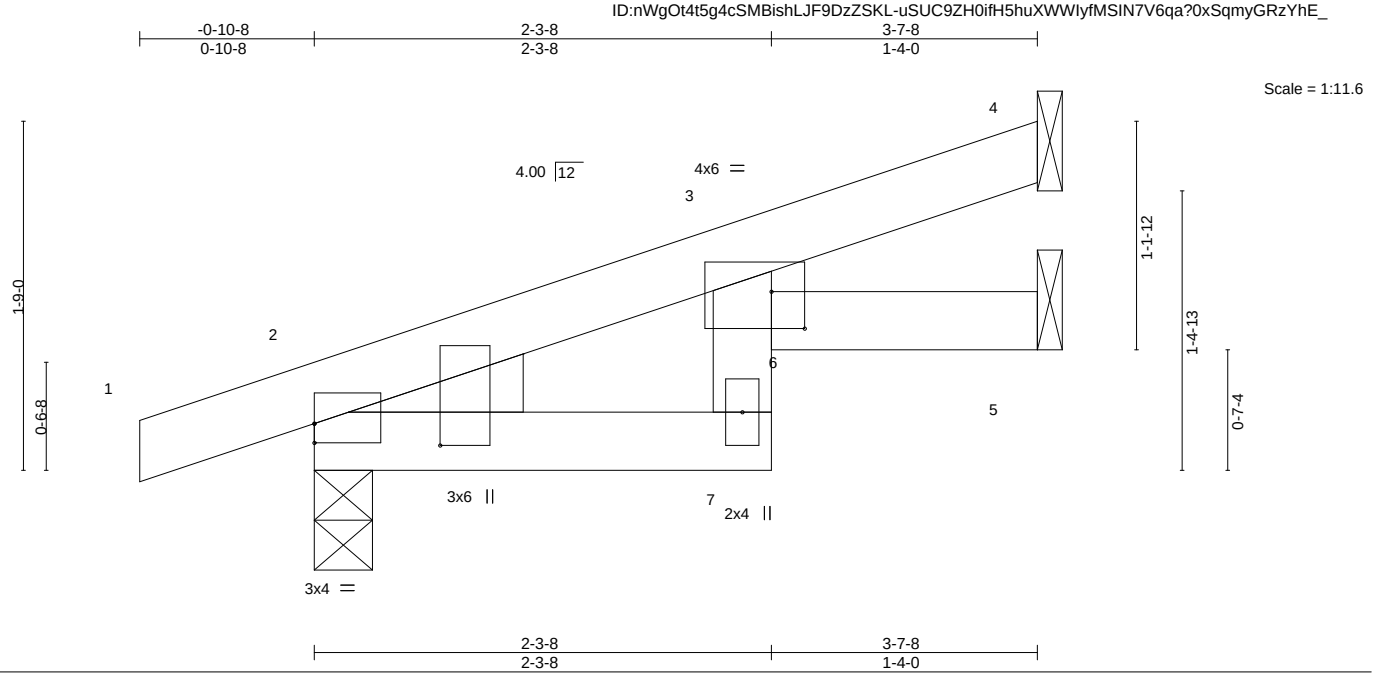



Plate Offsets (X,Y)-- [2:0-0-0,0-1-2], [2:0-1-5,0-7-9], [3:0-1-12,0-0-9], [3:0-2-0,0-2-4], [6:0-0-0,0-1-12]

| 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 | 0.09 | Vert(LL) | -0.00 | 6 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.21 | Vert(CT) | -0.01 | 6 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-R | | | | | | | Weight: 15 lb | FT = 20% |

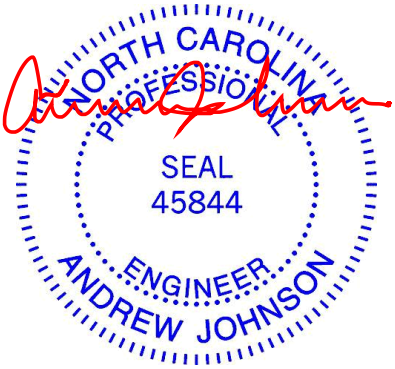
**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
3-7: 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 3-7-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 4=70/Mechanical, 2=207/0-3-8, 5=58/Mechanical
Max Horz 2=58(LC 8)
Max Uplift 4=-27(LC 12), 2=-60(LC 8), 5=-7(LC 12)
Max Grav 4=70(LC 1), 2=207(LC 1), 5=59(LC 3)

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

**NOTES-**
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-12, Interior(1) 2-1-12 to 3-6-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
6) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.

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| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | J20 | Jack-Open | 20 | 1 | I36483583 |
| | | | | | Job Reference (optional) |

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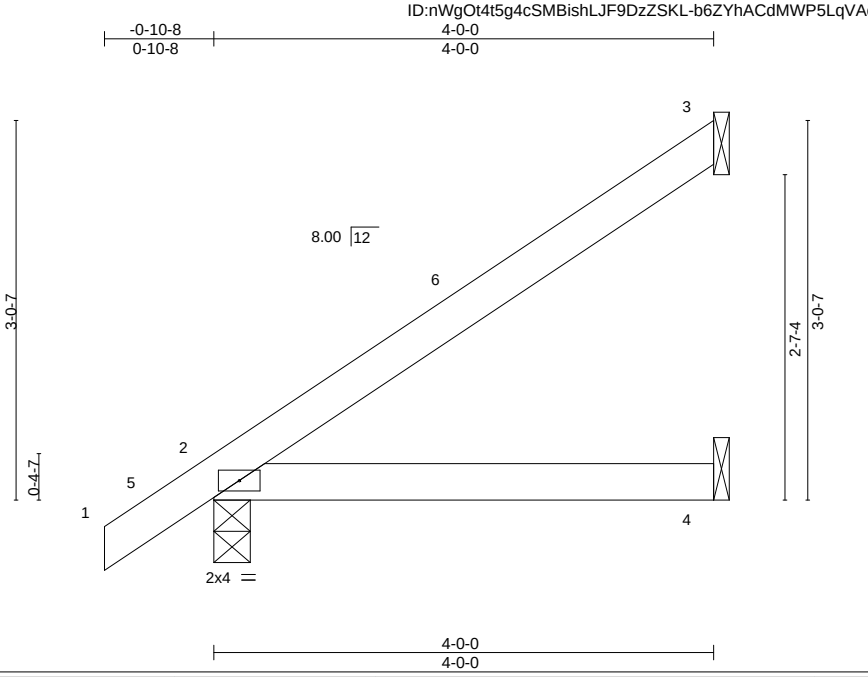


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.25 | Vert(LL) | -0.01 | 2-4 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.17 | Vert(CT) | -0.02 | 2-4 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-P | | | | | | | Weight: 15 lb | FT = 20% |

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

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

**REACTIONS.** (lb/size) 3=106/Mechanical, 2=221/0-3-8, 4=38/Mechanical
Max Horz 2=121(LC 12)
Max Uplift 3=-83(LC 12), 2=-17(LC 12)
Max Grav 3=116(LC 19), 2=221(LC 1), 4=76(LC 3)

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

**NOTES-**
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-11-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
6) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.


March 22,2019



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Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | J21 | Jack-Open | 4 | 1 | I36483584 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:24:41 2019 Page 1
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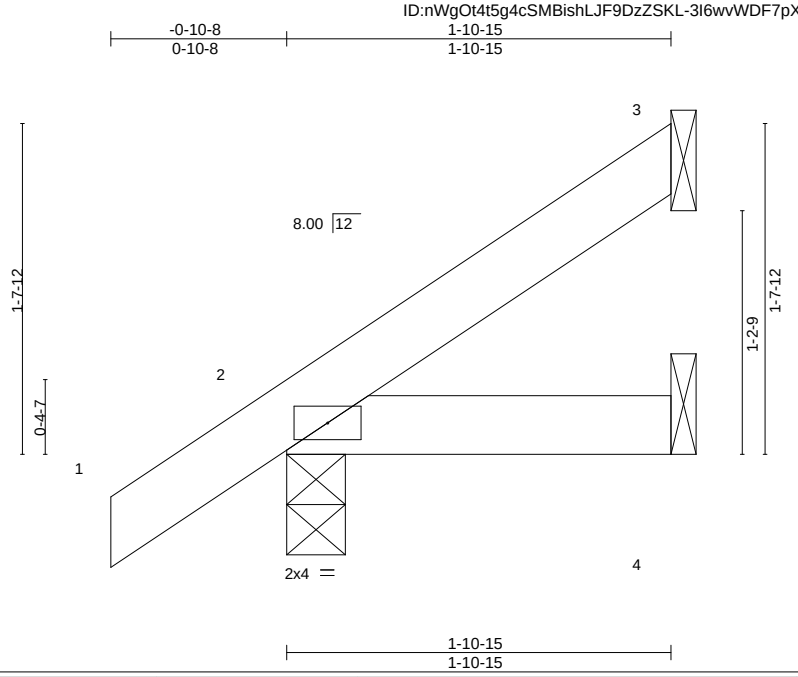



| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.06 | Vert(LL) | -0.00 | 2 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.04 | Vert(CT) | -0.00 | 2-4 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-P | | | | | | | Weight: 8 lb | FT = 20% |

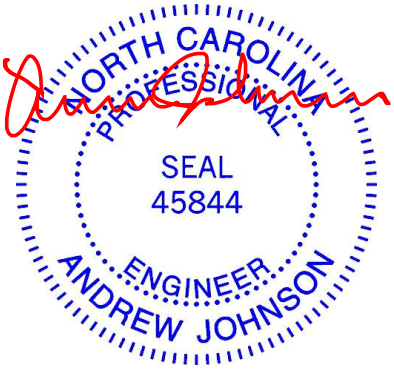
**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 1-10-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 3=43/Mechanical, 2=142/0-3-8, 4=19/Mechanical
Max Horz 2=69(LC 12)
Max Uplift 3=-36(LC 12), 2=-22(LC 12)
Max Grav 3=49(LC 19), 2=142(LC 1), 4=37(LC 3)

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

**NOTES-**
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
6) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.




March 22,2019



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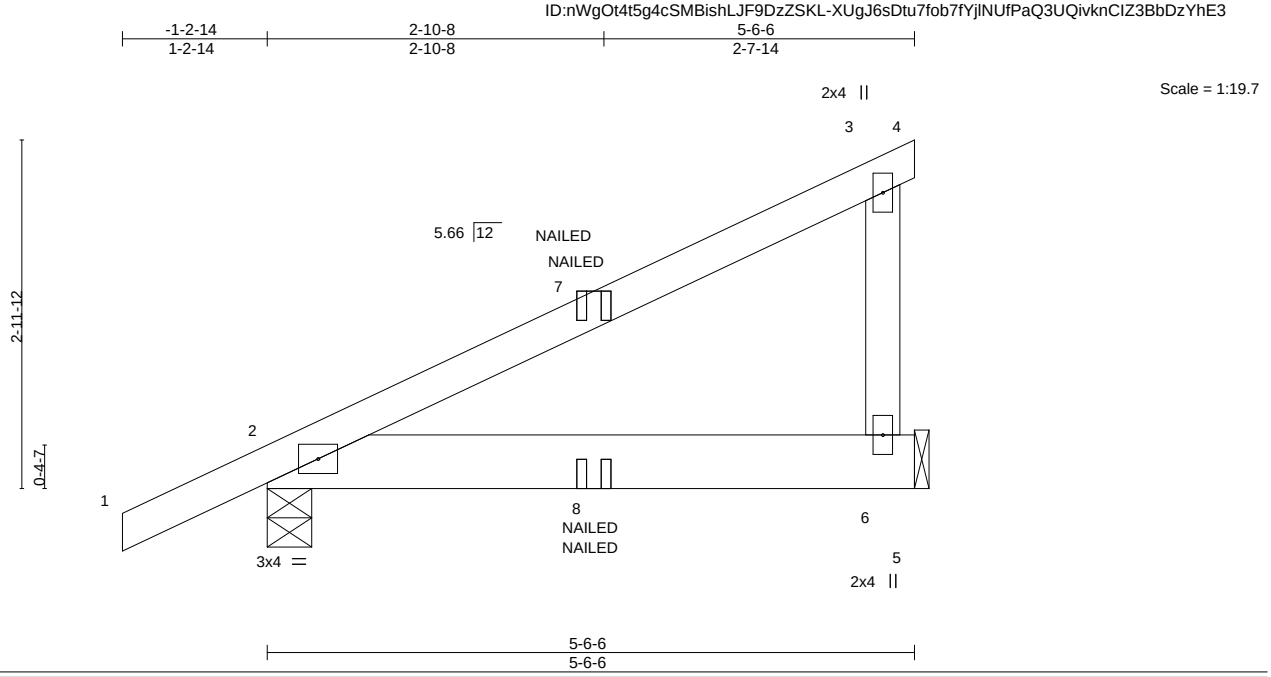
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | J22 | Diagonal Hip Girder | 2 | 1 | I36483585 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:24:42 2019 Page 1
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-XUgJ6sDtu7fob7fYjlNUfPaQ3UQivknCIZ3BbDzYhE3




| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.50 | Vert(LL) | -0.01 | 2-6 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.15 | Vert(CT) | -0.02 | 2-6 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.00 | Horz(CT) | 0.00 | | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-P | | | | | | | Weight: 27 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-6-6 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 6=202/Mechanical, 2=300/0-4-9
Max Horz 2=119(LC 31)
Max Uplift 6=-59(LC 12), 2=-47(LC 12)

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

**NOTES-**
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-2-14 to 3-0-1, Exterior(2) 3-0-1 to 5-6-6 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6.
6) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
7) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-20, 2-5=-20

NORTH CAROLINA PROFESSIONAL SEAL 45844 ENGINEER ANDREW JOHNSON
March 22,2019

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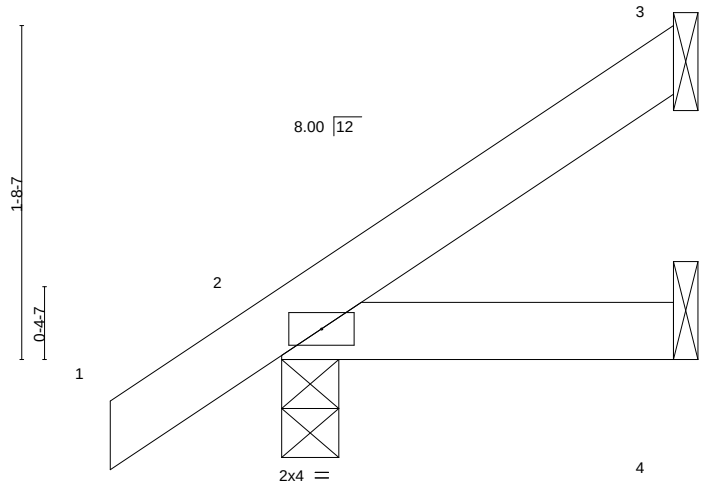
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | JA1 | Jack-Open | 10 | 1 | I36483586 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:24:47 2019 Page 1
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-uSUC9ZH0ifH5huXWWIyfMSINWV9Va?0xSqmyGRzYhE_

-0-10-8 2-0-0
0-10-8 2-0-0

Scale = 1:11.8




2-0-0
2-0-0

| 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 | 2 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.04 | Vert(CT) | -0.00 | 2-4 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-P | | | | | | | Weight: 8 lb | FT = 20% |

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

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

**REACTIONS.** (lb/size) 3=46/Mechanical, 2=145/0-3-8, 4=20/Mechanical
Max Horz 2=71(LC 12)
Max Uplift 3=-38(LC 12), 2=-22(LC 12)
Max Grav 3=52(LC 19), 2=145(LC 1), 4=39(LC 3)

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

**NOTES-**
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
6) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.


March 22,2019

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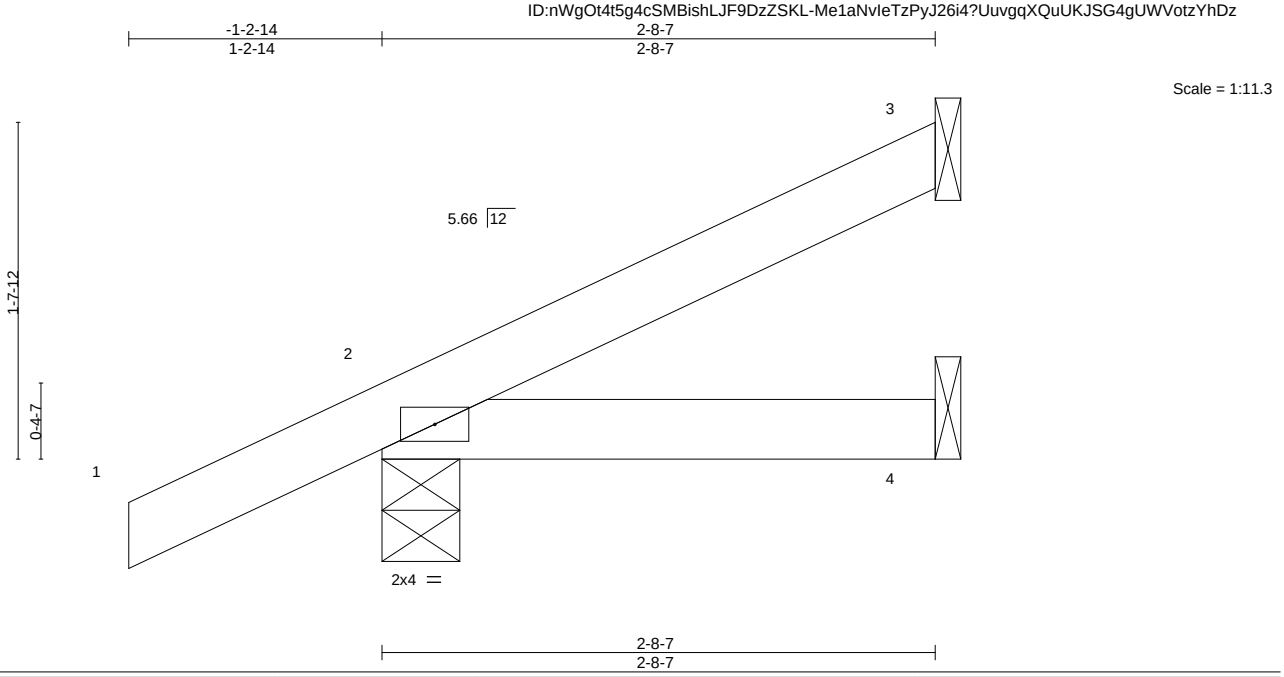
| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | JA2 | Jack-Open | 2 | 1 | I36483587<br>Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:24:48 2019 Page 1
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-Me1aNvIeTzPyJ26i4?UuvgqXQuUKJSG4gUWVotzYhDz




| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.18 | Vert(LL) | -0.00 | 2-4 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.07 | Vert(CT) | -0.00 | 2-4 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-P | | | | | | | Weight: 11 lb | FT = 20% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 2-8-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 3=49/Mechanical, 2=209/0-4-9, 4=25/Mechanical
Max Horz 2=68(LC 12)
Max Uplift 3=-36(LC 12), 2=-45(LC 12)
Max Grav 3=49(LC 1), 2=209(LC 1), 4=49(LC 3)

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

**NOTES-**
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
6) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.


March 22,2019

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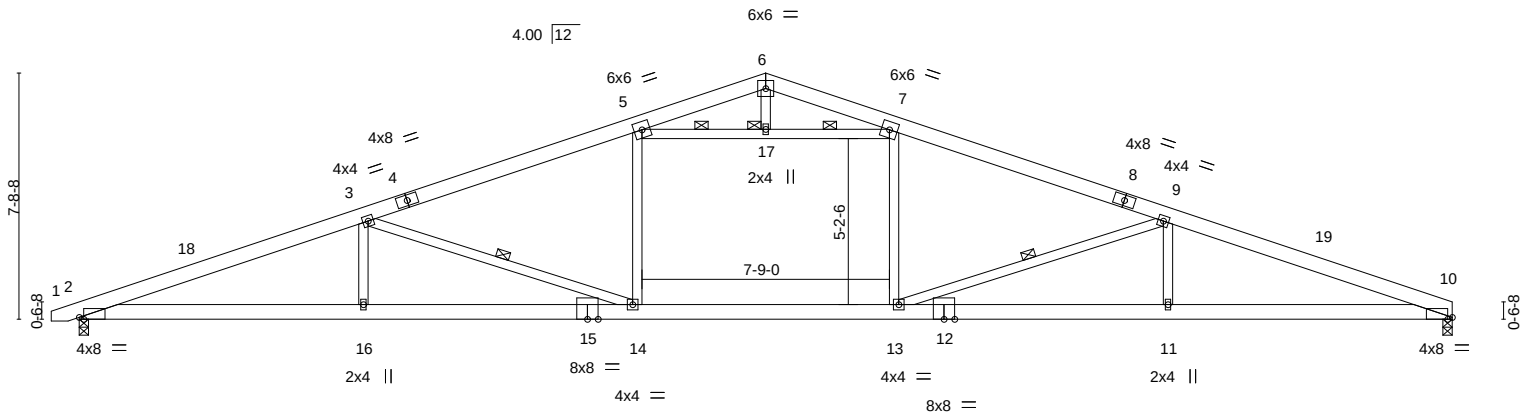
| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | L8 | ROOF TRUSS | 1 | 1 | I36483588 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:24:49 2019 Page 1
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-qqbyaFJGEHXpwChuej?7RtNYvIc_2mcEv8F2KJzYhDy

| -0-10-8 | 7-3-6 | 8-10-13 | 13-4-11 | 21-6-0 | 29-7-5 | 34-1-3 | 35-8-10 | 43-0-0 |
|---|---|---|---|---|---|---|---|---|
| 0-10-8 | 7-3-6 | 1-7-7 | 4-5-14 | 8-1-5 | 8-1-5 | 4-5-14 | 1-7-7 | 7-3-6 |

Scale = 1:72.2




| 8-10-13 | 17-2-13 | 25-9-3 | 34-1-3 | 43-0-0 |
|---|---|---|---|---|
| 8-10-13 | 8-4-0 | 8-6-6 | 8-4-0 | 8-10-13 |

Plate Offsets (X,Y)-- [2:0-1-11,Edge], [10:0-1-11,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) | -0.47 | 11-13 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 1.00 | Vert(CT) | -0.74 | 11-13 | >690 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.57 | Horz(CT) | 0.17 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | Attic | -0.29 | 13-14 | 338 | 360 | Weight: 272 lb | FT = 20% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x6 SP No.2 |
| BOT CHORD | 2x6 SP No.2 *Except* 12-15: 2x6 SP DSS |
| WEBS | 2x4 SP No.3 |

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 2-3-11 oc purlins. |
| BOT CHORD | Rigid ceiling directly applied or 2-2-0 oc bracing, Except: 10-0-0 oc bracing: 13-14. |
| WEBS | 1 Row at midpt 9-13, 3-14, 5-17, 7-17 |
| JOINTS | 1 Brace at Jt(s): 17 |

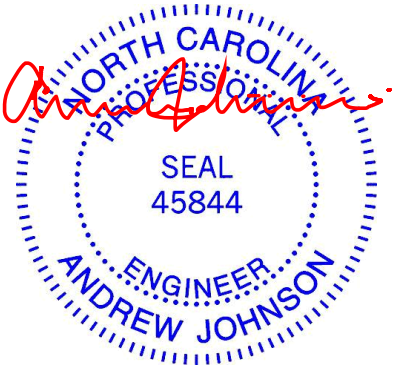
**REACTIONS.** (lb/size) 2=1794/0-3-8, 10=1748/0-3-8
Max Horz 2=125(LC 16)
Max Uplift 2=-246(LC 8), 10=-216(LC 9)
Max Grav 2=1814(LC 2), 10=1776(LC 2)

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

| | |
|---|---|
| TOP CHORD | 2-3=-4626/537, 3-5=-3780/348, 5-6=-1026/131, 6-7=-1026/132, 7-9=-3780/348, 9-10=-4629/540 |
| BOT CHORD | 2-16=-526/4324, 14-16=-526/4324, 13-14=-200/3518, 11-13=-442/4328, 10-11=-442/4328 |
| WEBS | 9-13=-1292/378, 3-14=-1287/375, 5-14=0/728, 7-13=0/730, 5-17=-2594/292, 7-17=-2594/292, 6-17=-18/479, 3-16=0/374, 9-11=0/376 |

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-7-5 to 3-8-4, Interior(1) 3-8-4 to 21-6-0, Exterior(2) 21-6-0 to 25-6-4, Interior(1) 25-6-4 to 42-10-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Ceiling dead load (5.0 psf) on member(s). 5-17, 7-17
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 13-14
7) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.
8) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.




March 22,2019

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| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray | |
|---|---|---|---|---|---|---|
| 20178A | LG1 | Hip Girder | 1 | 2 | Job Reference (optional) | I36483589 |

8.220 s Jan 5 2019 MiTek Industries, Inc. Fri Mar 22 09:27:35 2019 Page 1
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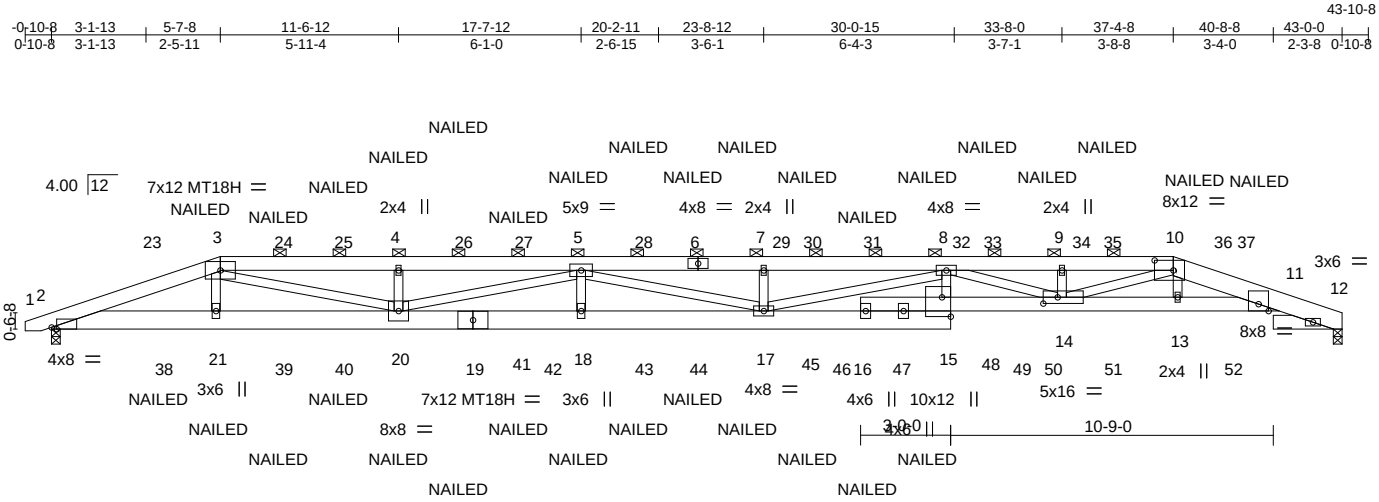



Plate Offsets (X,Y)-- [2:0-2-1,Edge], [10:0-7-8,0-4-0], [14:0-5-12,0-2-8], [15:Edge,0-3-8]

| 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 | 0.83 | Vert(LL) | 0.96 | 17-18 | >536 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.82 | Vert(CT) | -1.89 | 17-18 | >271 | 180 | MT18H | 244/190 |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.97 | Horz(CT) | 0.27 | 12 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 593 lb | FT = 20% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x6 SP No.2 *Except* 10-12: 2x8 SP DSS |
| BOT CHORD | 2x8 SP DSS *Except* 8-15: 2x4 SP No.3, 11-16: 2x6 SP DSS |
| WEBS | 2x4 SP No.3 *Except* 3-20,5-20,5-17,8-17: 2x4 SP No.2 |
| OTHERS | 2x8 SP DSS *Except* 12-22: 2x6 SP No.2 |

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 4-9-13 oc purlins, except 2-0-0 oc purlins (2-10-15 max.): 3-10. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing. |

**REACTIONS.** (lb/size) 2=2992/0-3-8, 12=2996/0-3-8
Max Horz 2=38(LC 16)
Max Uplift 2=-605(LC 8), 12=-553(LC 9)

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

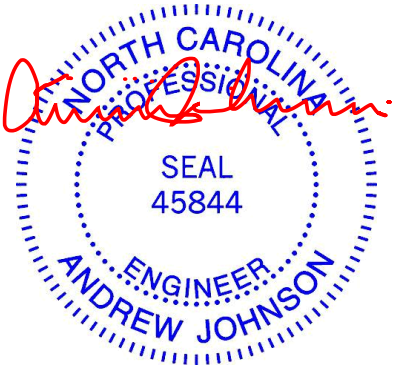
TOP CHORD 2-23=-8450/1683, 3-23=-8380/1694, 3-24=-13254/2818, 24-25=-13254/2818, 4-25=-13254/2818, 4-26=-13254/2818, 26-27=-13254/2818, 5-27=-13254/2818, 5-28=-16530/3433, 6-28=-16530/3433, 6-29=-16530/3433, 7-29=-16530/3433, 7-30=-16530/3433, 30-31=-16530/3433, 31-32=-16530/3433, 8-32=-16530/3433, 8-33=-15613/2983, 33-34=-15613/2983, 9-34=-15613/2983, 9-35=-15613/2983, 10-35=-15613/2983, 10-36=-11617/2150, 36-37=-11633/2142, 11-37=-11719/2152, 11-12=-824/166

BOT CHORD 2-38=-1578/7943, 21-38=-1578/7943, 21-39=-1585/7908, 39-40=-1585/7908, 20-40=-1585/7908, 20-41=-3544/16987, 19-41=-3544/16987, 19-42=-3544/16987, 18-42=-3544/16987, 18-43=-3544/16987, 43-44=-3544/16987, 44-45=-3544/16987, 17-45=-3544/16987, 17-46=-3376/17176, 16-46=-3376/17176, 16-47=-3379/17181, 47-48=-3376/17190, 15-48=-3371/17193, 15-49=-3390/17308, 49-50=-3388/17315, 14-50=-3385/17319, 14-51=-2040/11254, 13-51=-2040/11254, 13-52=-2043/11335, 11-52=-2043/11335

WEBS 3-21=0/602, 3-20=-1269/5669, 4-20=-627/344, 5-20=-3936/835, 5-18=0/726, 5-17=-501/170, 7-17=-637/344, 8-14=-1808/514, 10-14=-952/4686, 10-13=-30/757, 8-17=-695/21

**NOTES-**

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.
   Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) 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.
3) Unbalanced roof live loads have been considered for this design.

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Continued on page 2



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**NOTES-**

4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-7-5 to 3-8-4, Interior(1) 3-8-4 to 5-7-8, Exterior(2) 5-7-8 to 11-6-12, Interior(1) 11-6-12 to 37-4-8, Exterior(2) 37-4-8 to 42-10-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
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) Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 605 lb uplift at joint 2 and 553 lb uplift at joint 12.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-60, 3-10=-60, 10-11=-60, 11-12=-81, 2-15=-20, 11-15=-20
   Concentrated Loads (lb)
   Vert: 6=-97(F) 10=-69(F) 21=-34(F) 20=-34(F) 3=-103(F) 4=-103(F) 5=-97(F) 18=-34(F) 13=-62 24=-103(F) 25=-103(F) 26=-97(F) 27=-97(F) 28=-97(F) 29=-97(F) 30=-97(F) 31=-97(F) 32=-97(F) 33=-69(F) 34=-69(F) 35=-69(F) 37=-144(F) 38=-100(F) 39=-34(F) 40=-34(F) 41=-34(F) 42=-34(F) 43=-34(F) 44=-34(F) 45=-34(F) 46=-34(F) 47=-34(F) 48=-34(F) 49=-62 50=-62 51=-62 52=-31

| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray | |
|---|---|---|---|---|---|---|
| 20178A | LH1 | Hip | 1 | 1 | Job Reference (optional) | I36483590 |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:24:55 2019 Page 1
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-f_zDrIN1q7Iye782_z6Xh8dY3jmpSOX6H4iNXzzYhDs

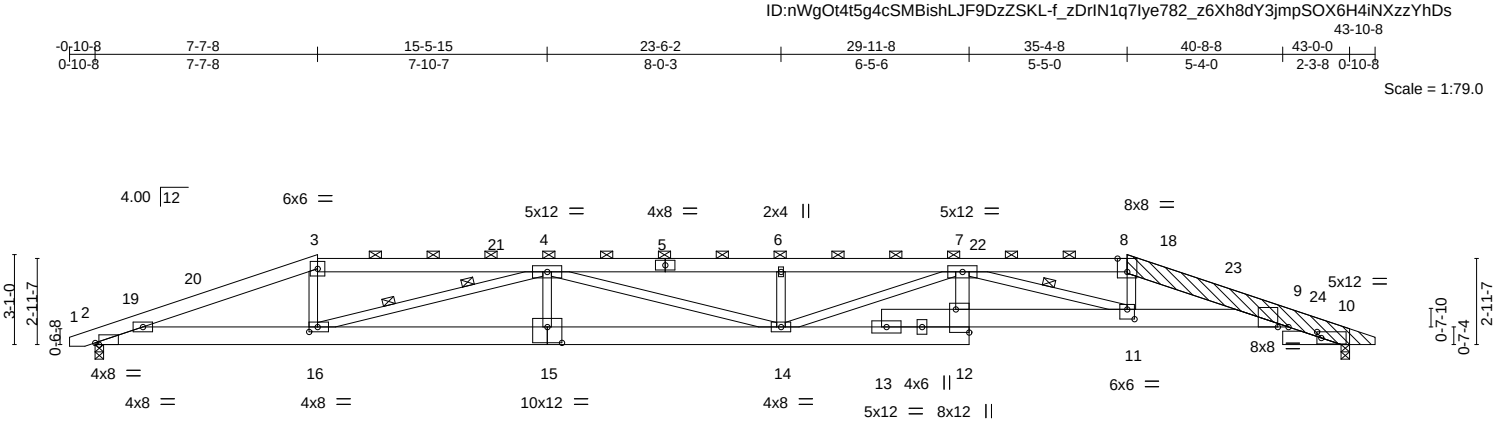


Plate Offsets (X,Y)-- [2:0-1-9,Edge], [8:0-4-0,Edge], [9:0-4-6,Edge], [10:0-1-12,0-2-8], [11:0-3-0,0-4-0], [12:Edge,0-5-8], [15:0-6-0,0-6-8], [16:0-3-8,0-2-0]

| 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 | 0.93 | Vert(LL) | -0.64 | 14-15 | >798 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.52 | Vert(CT) | -1.29 | 14-15 | >398 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.93 | Horz(CT) | 0.22 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | | Weight: 333 lb | FT = 20% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x6 SP No.2 *Except* 8-10: 2x8 SP DSS |
| BOT CHORD | 2x8 SP DSS *Except* 7-12: 2x6 SP No.2 |
| WEBS | 2x4 SP No.3 |
| OTHERS | 2x6 SP No.2 |
| LBR SCAB | 8-10 2x8 SP DSS one side |

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 2-11-12 oc purlins, except 2-0-0 oc purlins (2-2-0 max.): 3-8. |
| BOT CHORD | Rigid ceiling directly applied or 8-11-0 oc bracing. |
| WEBS | 1 Row at midpt 7-11<br>2 Rows at 1/3 pts 4-16 |

**REACTIONS.** (lb/size) 2=1754/0-3-8, 10=1710/0-3-8
Max Horz 2=48(LC 16)
Max Uplift 2=-334(LC 8), 10=-303(LC 9)

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

| | |
|---|---|
| TOP CHORD | 2-3=-4621/804, 3-4=-4260/791, 4-6=-7283/1308, 6-7=-7283/1308, 7-8=-5689/1030, 8-9=-5997/1041, 9-10=-524/108 |
| BOT CHORD | 2-16=-729/4318, 15-16=-1207/6993, 14-15=-1207/6994, 12-14=-1185/7050, 11-12=-1195/7089, 9-11=-943/5779 |
| WEBS | 3-16=-78/1035, 4-16=-2967/572, 4-15=0/357, 4-14=-79/389, 6-14=-411/186, 7-11=-1595/329, 8-11=-126/1151, 7-14=-83/362 |

**NOTES-**

1) Attached 9-0-7 scab 8 to 10, front face(s) 2x8 SP DSS with 2 row(s) of 10d (0.131"x3") nails spaced 9" o.c.except : starting at 0-0-1 from end at joint 8, nail 2 row(s) at 7" o.c. for 2-0-0; starting at 4-10-0 from end at joint 8, nail 2 row(s) at 3" o.c. for 2-7-0; starting at 7-10-10 from end at joint 8, nail 2 row(s) at 3" o.c. for 1-0-0.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-7-5 to 3-8-4, Interior(1) 3-8-4 to 7-7-8, Exterior(2) 7-7-8 to 13-8-8, Interior(1) 13-8-8 to 35-4-8, Exterior(2) 35-4-8 to 41-5-8, Interior(1) 41-5-8 to 42-10-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
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) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.
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 | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | LH2 | Hip | 1 | 1 | I36483591 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:24:56 2019 Page 1
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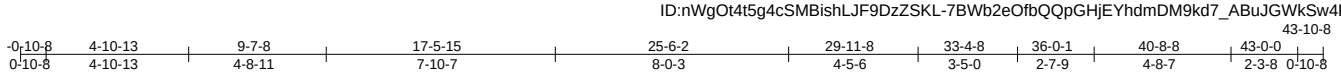


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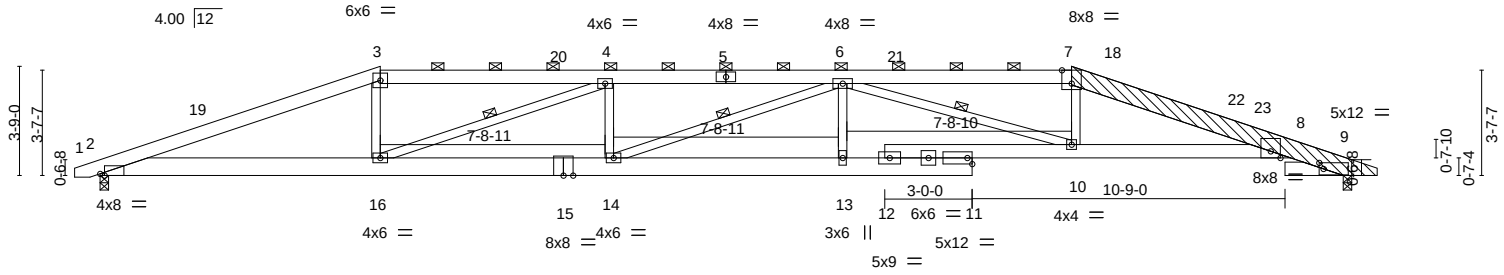


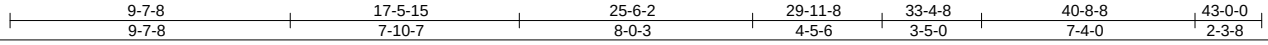




Plate Offsets (X,Y)-- [2:0-1-13,Edge], [7:0-4-0,Edge], [9:0-1-12,0-2-8]

| 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 | 0.87 | Vert(LL) | -0.47 | 13-14 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.96 | Vert(CT) | -0.94 | 13-14 | >543 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.76 | Horz(CT) | 0.24 | 9 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 328 lb | FT = 20% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x6 SP No.2 *Except* 7-9: 2x8 SP DSS |
| BOT CHORD | 2x8 SP DSS *Except* 2-15: 2x8 SP No.2, 8-12: 2x6 SP DSS |
| WEBS | 2x4 SP No.3 |
| OTHERS | 2x6 SP No.2 |
| LBR SCAB | 7-9 2x8 SP DSS one side |

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (2-8-2 max.): 3-7. |
| BOT CHORD | Rigid ceiling directly applied or 2-2-0 oc bracing. |
| WEBS | 1 Row at midpt 4-16, 6-14, 6-10 |

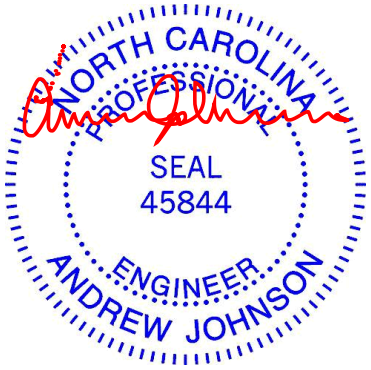
**REACTIONS.** (lb/size) 2=1754/0-3-8, 9=1709/0-3-8
Max Horz 2=59(LC 16)
Max Uplift 2=-329(LC 8), 9=-297(LC 9)

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

| | |
|---|---|
| TOP CHORD | 2-3=-4430/755, 3-4=-4078/756, 4-6=-5706/1022, 6-7=-5095/915, 7-8=-5387/910, 8-9=-468/95 |
| BOT CHORD | 2-16=-674/4117, 14-16=-940/5706, 13-14=-929/5822, 10-13=-929/5822, 8-10=-796/5147 |
| WEBS | 3-16=-42/915, 4-16=-1918/383, 4-14=0/288, 6-10=-994/238, 7-10=-62/965 |

**NOTES-**

1) Attached 11-1-12 scab 7 to 9, front face(s) 2x8 SP DSS with 2 row(s) of 10d (0.131"x3") nails spaced 9" o.c.except : starting at 0-0-1 from end at joint 7, nail 2 row(s) at 7" o.c. for 2-0-0; starting at 5-5-3 from end at joint 7, nail 2 row(s) at 3" o.c. for 3-6-5; starting at 9-11-14 from end at joint 7, nail 2 row(s) at 3" o.c. for 1-0-0.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-7-5 to 3-8-4, Interior(1) 3-8-4 to 9-7-8, Exterior(2) 9-7-8 to 15-8-8, Interior(1) 15-8-8 to 33-4-8, Exterior(2) 33-4-8 to 39-5-8, Interior(1) 39-5-8 to 42-10-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
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) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 9. This connection is for uplift only and does not consider lateral forces.
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 | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | LH3 | Hip | 1 | 1 | I36483592 |
| | | | | | Job Reference (optional) |

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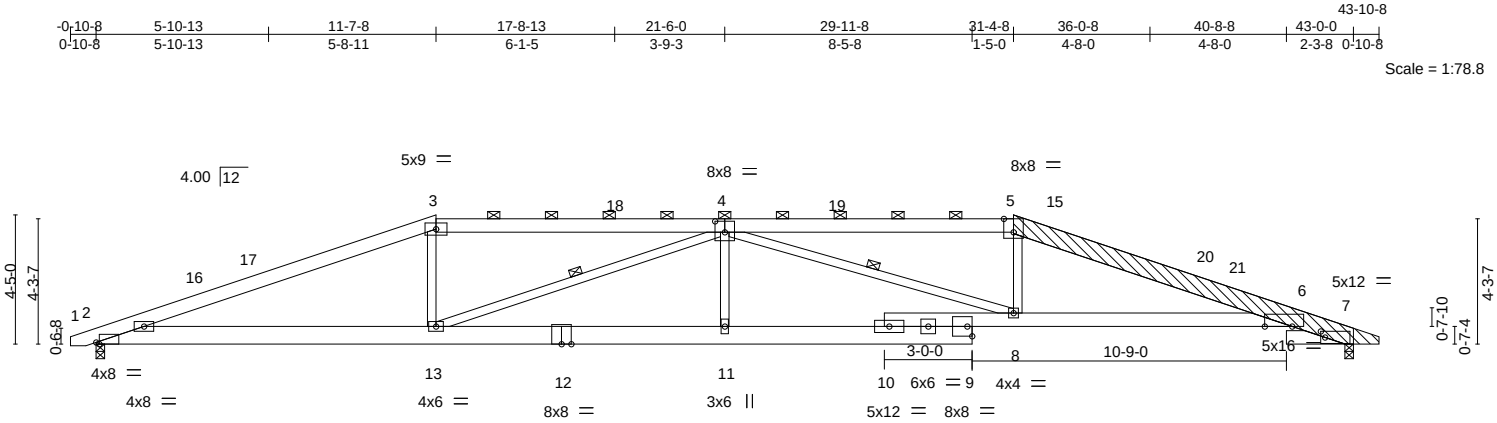


Plate Offsets (X,Y)-- [2:0-1-5,Edge], [4:0-4-0,0-4-8], [5:0-4-0,Edge], [6:0-11-4,Edge], [7:0-1-12,0-2-8]

| 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 | 0.78 | Vert(LL) | -0.37 | 11-13 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.89 | Vert(CT) | -0.73 | 11-13 | >697 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.74 | Horz(CT) | 0.22 | 7 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 330 lb | FT = 20% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x6 SP No.2 *Except* |
| | 1-3: 2x6 SP DSS, 5-7: 2x8 SP DSS |
| BOT CHORD | 2x6 SP DSS *Except* |
| | 2-12: 2x8 SP No.2, 9-12: 2x8 SP DSS |
| WEBS | 2x4 SP No.3 |
| OTHERS | 2x6 SP No.2 |
| LBR SCAB | 5-7 2x8 SP DSS one side |

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 3-3-3 oc purlins, except 2-0-0 oc purlins (2-7-4 max.): 3-5. |
| BOT CHORD | Rigid ceiling directly applied or 9-8-12 oc bracing. |
| WEBS | 1 Row at midpt 4-13, 4-8 |

**REACTIONS.** (lb/size) 2=1754/0-3-8, 7=1709/0-3-8
Max Horz 2=70(LC 16)
Max Uplift 2=-322(LC 8), 7=-291(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4257/699, 3-4=-3910/714, 4-5=-4532/804, 5-6=-4804/783, 6-7=-468/94
BOT CHORD 2-13=-611/3936, 11-13=-754/4868, 8-11=-754/4868, 6-8=-655/4561
WEBS 3-13=0/791, 4-13=-1270/290, 4-8=-645/186, 5-8=0/742

**NOTES-**

1) Attached 13-3-1 scab 5 to 7, front face(s) 2x8 SP DSS with 2 row(s) of 10d (0.131"x3") nails spaced 9" o.c.except : starting at 0-0-1 from end at joint 5, nail 2 row(s) at 7" o.c. for 2-0-0; starting at 9-0-14 from end at joint 5, nail 2 row(s) at 4" o.c. for 2-0-0; starting at 12-1-3 from end at joint 5, nail 2 row(s) at 3" o.c. for 1-0-0.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-7-5 to 3-8-4, Interior(1) 3-8-4 to 11-7-8, Exterior(2) 11-7-8 to 17-8-8, Interior(1) 17-8-8 to 31-4-8, Exterior(2) 31-4-8 to 37-5-8, Interior(1) 37-5-8 to 42-10-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
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) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 7. This connection is for uplift only and does not consider lateral forces.
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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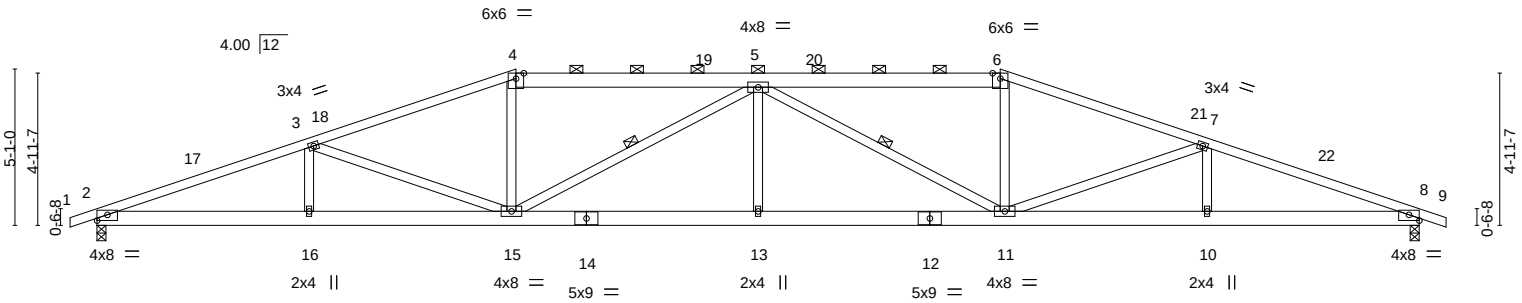
| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | LH4 | Hip | 1 | 1 | I36483593 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:24:58 2019 Page 1
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-3ZeMTKQv72gXWbtdf6fEInF40wi7frDY_2x18IzYhDp

| -0-10-8 | 6-10-13 | 13-7-8 | 21-6-0 | 29-4-8 | 36-1-3 | 43-0-0 | 43-10-8 |
|---|---|---|---|---|---|---|---|
| 0-10-8 | 6-10-13 | 6-8-11 | 7-10-8 | 7-10-8 | 6-8-11 | 6-10-13 | 0-10-8 |

Scale = 1:74.9




| 6-10-13 | 13-7-8 | 21-6-0 | 29-4-8 | 36-1-3 | 43-0-0 |
|---|---|---|---|---|---|
| 6-10-13 | 6-8-11 | 7-10-8 | 7-10-8 | 6-8-11 | 6-10-13 |

Plate Offsets (X,Y)-- [2:Edge,0-2-4], [8:Edge,0-2-4]

| 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 | 0.82 | Vert(LL) | -0.33 | 13 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.87 | Vert(CT) | -0.67 | 13 | >762 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.55 | Horz(CT) | 0.18 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | | Weight: 254 lb | FT = 20% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x4 SP No.1 *Except* 4-6: 2x6 SP No.2 |
| BOT CHORD | 2x6 SP No.2 |
| WEBS | 2x4 SP No.3 |

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-6-12 max.): 4-6. |
| BOT CHORD | Rigid ceiling directly applied or 9-0-4 oc bracing. |
| WEBS | 1 Row at midpt 5-15, 5-11 |

**REACTIONS.** (lb/size) 2=1770/0-3-8, 8=1770/0-3-8
Max Horz 2=79(LC 12)
Max Uplift 2=-324(LC 8), 8=-324(LC 9)

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

| | |
|---|---|
| TOP CHORD | 2-3=-4329/717, 3-4=-3719/634, 4-5=-3462/629, 5-6=-3462/629, 6-7=-3719/634, 7-8=-4329/717 |
| BOT CHORD | 2-16=-668/4007, 15-16=-668/4007, 13-15=-588/4133, 11-13=-588/4133, 10-11=-609/4007, 8-10=-609/4007 |
| WEBS | 3-16=0/254, 3-15=-582/216, 4-15=-32/753, 5-15=-954/215, 5-13=0/317, 5-11=-954/214, 6-11=-32/753, 7-11=-582/217, 7-10=0/254 |

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-5-2, Interior(1) 3-5-2 to 13-7-8, Exterior(2) 13-7-8 to 19-8-8, Interior(1) 19-8-8 to 29-4-8, Exterior(2) 29-4-8 to 35-5-8, Interior(1) 35-5-8 to 43-10-8 zone;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.
6) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 8. This connection is for uplift only and does not consider lateral forces.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.


March 22,2019

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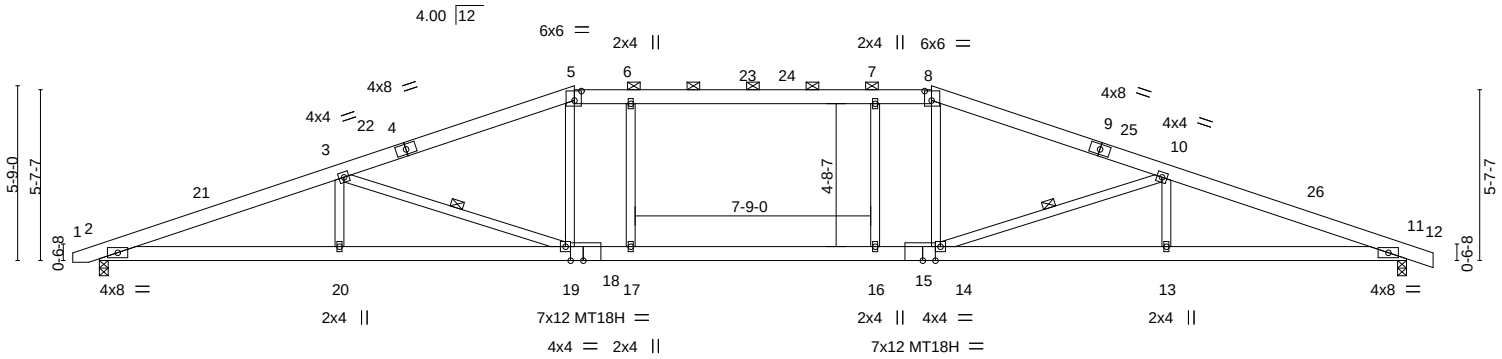
| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | LH5 | ROOF TRUSS | 1 | 1 | I36483594 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:24:59 2019 Page 1
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-XlCkggRYtLoO7kSpDpATr_nIHK49OLxiCigagkzYhDo

| -0-10-8 | 7-10-13 | 15-7-8 | 17-7-8 | 21-6-0 | 25-4-8 | 27-4-8 | 35-1-3 | 43-0-0 | 43-10-8 |
|---|---|---|---|---|---|---|---|---|---|
| 0-10-8 | 7-10-13 | 7-8-11 | 2-0-0 | 3-10-8 | 3-10-8 | 2-0-0 | 7-8-11 | 7-10-13 | 0-10-8 |

Scale = 1:75.8




| 7-10-13 | 15-7-8 | 21-6-0 | 25-4-8 | 27-4-8 | 35-1-3 | 43-0-0 |
|---|---|---|---|---|---|---|
| 7-10-13 | 7-8-11 | 5-10-8 | 3-10-8 | 2-0-0 | 7-8-11 | 7-10-13 |

Plate Offsets (X,Y)-- [5:0-2-12,0-3-12], [8:0-2-12,0-3-12], [15:0-5-0,0-0-0], [18:0-5-0,0-0-0]

| 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 | 0.59 | Vert(LL) | -0.55 | 16-17 | >929 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.75 | Vert(CT) | -0.91 | 16-17 | >562 | 180 | MT18H | 244/190 |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.32 | Horz(CT) | 0.14 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | Attic | 0.29 | 16-17 | 330 | 360 | Weight: 268 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x6 SP No.2 *Except*
5-8: 2x6 SP DSS
BOT CHORD 2x6 SP DSS
WEBS 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 2-10-3 oc purlins, except
2-0-0 oc purlins (3-5-15 max.): 5-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-19, 10-14

**REACTIONS.** (lb/size) 2=1812/0-3-8, 11=1829/0-3-8
Max Horz 2=-92(LC 13)
Max Uplift 2=-269(LC 8), 11=-280(LC 9)
Max Grav 2=1832(LC 2), 11=1846(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4654/612, 3-5=-4192/458, 5-6=-3911/457, 6-7=-3918/455, 7-8=-3911/456, 8-10=-4192/456, 10-11=-4650/609
BOT CHORD 2-20=-574/4336, 19-20=-574/4336, 17-19=-302/3918, 16-17=-302/3918, 14-16=-302/3918, 13-14=-500/4332, 11-13=-500/4332
WEBS 3-20=-57/272, 6-17=-353/135, 8-14=-66/776, 10-13=-58/272, 3-19=-893/374, 5-19=-66/776, 10-14=-888/373, 7-16=-354/135

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-7-5 to 3-8-4, Interior(1) 3-8-4 to 15-7-8, Exterior(2) 15-7-8 to 21-8-8, Interior(1) 21-8-8 to 27-4-8, Exterior(2) 27-4-8 to 33-5-8, Interior(1) 33-5-8 to 43-10-8 zone;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) Ceiling dead load (5.0 psf) on member(s). 5-6, 6-7, 7-8
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 16-17
9) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 11. This connection is for uplift only and does not consider lateral forces.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.


March 22,2019

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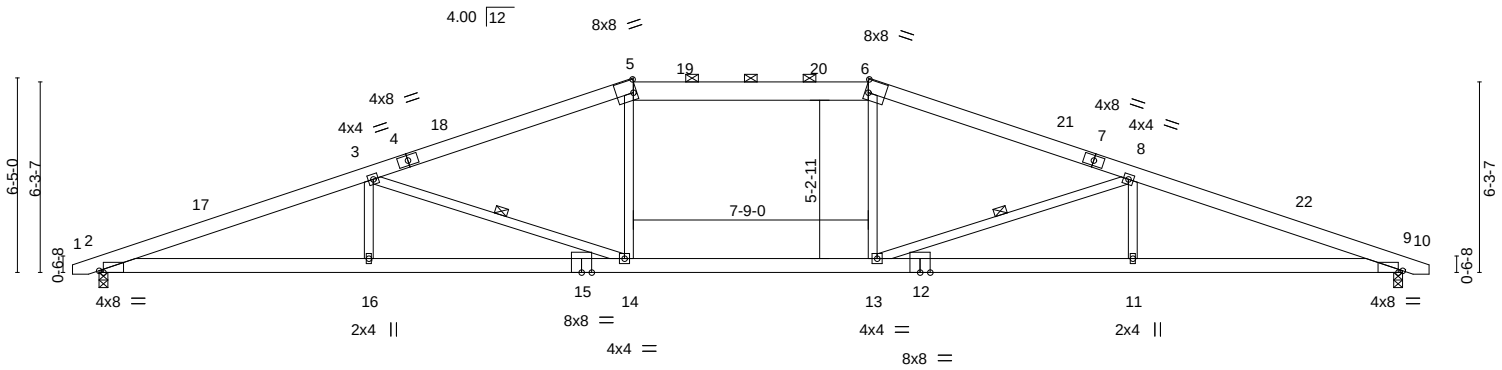
| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | LH6 | ROOF TRUSS | 1 | 1 | I36483595<br>Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:25:01 2019 Page 1
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-T8KU5LSoPz26N2bCLEDxwPtde8iqsCC?g09hldzYhDm

| -0-10-8 | 5-10-13 | 8-10-13 | 11-9-11 | 17-7-8 | 25-4-8 | 31-2-5 | 34-1-3 | 37-1-3 | 43-0-0 | 43-10-8 |
|---|---|---|---|---|---|---|---|---|---|---|
| 0-10-8 | 5-10-13 | 3-0-0 | 2-10-14 | 5-9-13 | 7-9-0 | 5-9-13 | 2-10-14 | 3-0-0 | 5-10-13 | 0-10-8 |

Scale = 1:76.0




| 8-10-13 | 17-7-8 | 25-4-8 | 34-1-3 | 43-0-0 |
|---|---|---|---|---|
| 8-10-13 | 8-8-11 | 7-9-0 | 8-8-11 | 8-10-13 |

Plate Offsets (X,Y)-- [2:0-1-11,Edge], [5:0-1-5,0-5-2], [6:0-1-5,0-5-2], [9:0-1-11,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 | 0.66 | Vert(LL) | -0.47 | 14-16 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 1.00 | Vert(CT) | -0.74 | 14-16 | >696 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.53 | Horz(CT) | 0.17 | 9 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | Attic | -0.26 | 13-14 | 365 | 360 | Weight: 266 lb | FT = 20% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x6 SP No.2 *Except* 5-6: 2x8 SP No.2 |
| BOT CHORD | 2x6 SP No.2 *Except* 12-15: 2x6 SP DSS |
| WEBS | 2x4 SP No.3 |

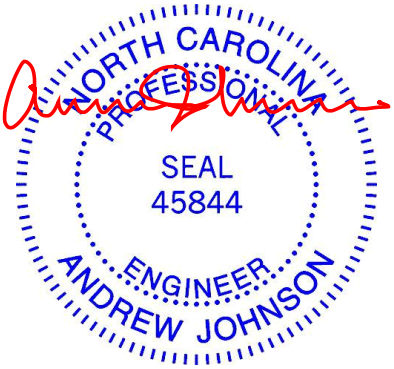
**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 2-7-4 oc purlins, except 2-0-0 oc purlins (4-2-6 max.): 5-6. |
| BOT CHORD | Rigid ceiling directly applied or 2-2-0 oc bracing, Except: 10-0-0 oc bracing: 13-14. |
| WEBS | 1 Row at midpt 3-14, 8-13 |

**REACTIONS.** (lb/size) 2=1793/0-3-8, 9=1793/0-3-8
Max Horz 2=-100(LC 17)
Max Uplift 2=-271(LC 8), 9=-271(LC 9)
Max Grav 2=1813(LC 2), 9=1813(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4617/611, 3-5=-3816/457, 5-6=-3546/461, 6-8=-3816/457, 8-9=-4617/612
BOT CHORD 2-16=-576/4315, 14-16=-576/4315, 13-14=-261/3546, 11-13=-501/4315, 9-11=-501/4315
WEBS 3-14=-1202/375, 5-14=0/709, 6-13=0/709, 3-16=0/375, 8-11=0/375, 8-13=-1201/376

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-7-5 to 3-8-4, Interior(1) 3-8-4 to 17-7-8, Exterior(2) 17-7-8 to 23-8-8, Interior(1) 23-8-8 to 25-4-8, Exterior(2) 25-4-8 to 31-5-8, Interior(1) 31-5-8 to 43-7-5 zone;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.
6) Ceiling dead load (5.0 psf) on member(s). 5-6
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 13-14
8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 9. This connection is for uplift only and does not consider lateral forces.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.




March 22,2019

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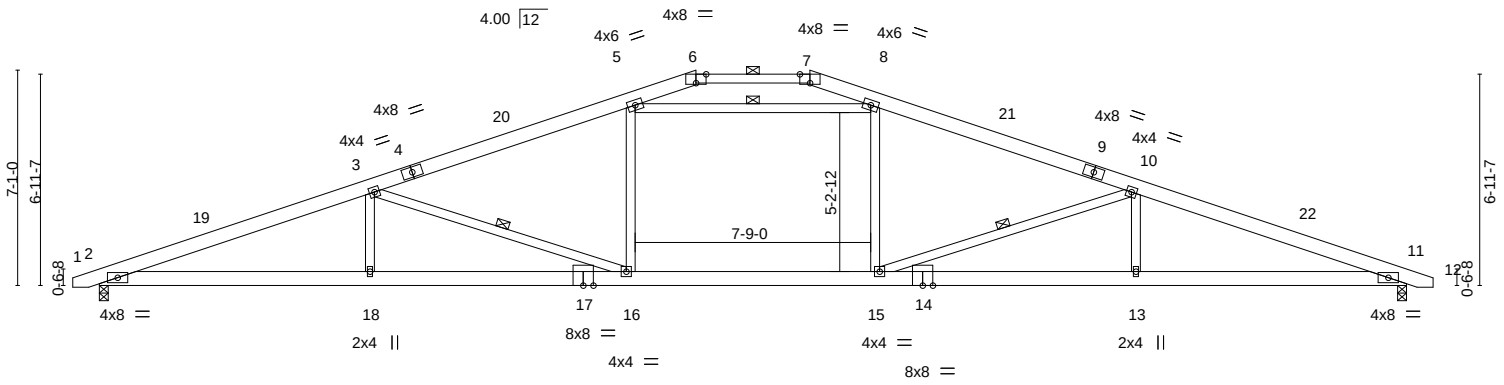
| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | LH7 | Hip | 1 | 1 | I36483596 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:25:02 2019 Page 1
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-yKutJhTQAGAz_CAOuxkATdPqTYBpbYf8ugvEH3zYhDI

| -0-10-8 | 8-10-13 | 13-1-11 | 19-7-8 | 23-4-8 | 29-10-5 | 34-1-3 | 37-5-3 | 43-0-0 | 43-10-8 |
|---|---|---|---|---|---|---|---|---|---|
| 0-10-8 | 8-10-13 | 4-2-14 | 6-5-13 | 3-9-0 | 6-5-13 | 4-2-14 | 3-4-0 | 5-6-13 | 0-10-8 |

Scale = 1:75.8




| 8-10-13 | 19-7-8 | 23-4-8 | 34-1-3 | 43-0-0 |
|---|---|---|---|---|
| 8-10-13 | 10-8-11 | 3-9-0 | 10-8-11 | 8-10-13 |

Plate Offsets (X,Y)-- [6:0-4-0,Edge], [7:0-4-0,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 | 0.53 | Vert(LL) | -0.45 | 16-18 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.44 | Vert(CT) | -0.69 | 16-18 | >747 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.97 | Horz(CT) | 0.13 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | | Weight: 269 lb | FT = 20% |

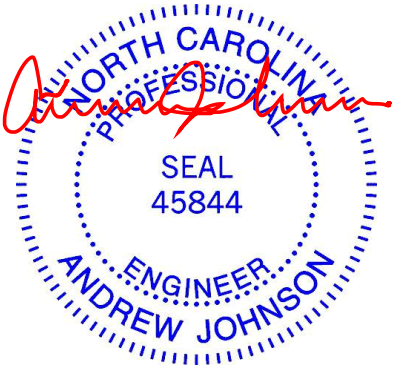
**LUMBER-**
TOP CHORD 2x6 SP No.2 *Except* 6-7: 2x4 SP No.2
BOT CHORD 2x6 SP DSS
WEBS 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 2-11-2 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 10-15, 5-8, 3-16

**REACTIONS.** (lb/size) 2=1754/0-3-8, 11=1754/0-3-8
Max Horz 2=112(LC 12)
Max Uplift 2=-282(LC 8), 11=-282(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4361/646, 3-5=-3279/499, 5-6=-486/149, 6-7=-440/137, 7-8=-486/149, 8-10=-3279/499, 10-11=-4361/647
BOT CHORD 2-18=-617/4048, 16-18=-617/4048, 15-16=-298/3025, 13-15=-533/4048, 11-13=-533/4048
WEBS 5-16=0/615, 10-15=-1295/373, 8-15=0/615, 5-8=-2607/384, 3-18=0/363, 3-16=-1295/372, 10-13=0/363

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-7-5 to 3-8-4, Interior(1) 3-8-4 to 19-7-8, Exterior(2) 19-7-8 to 29-5-8, Interior(1) 29-5-8 to 43-7-5 zone;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) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 11. This connection is for uplift only and does not consider lateral forces.
7) 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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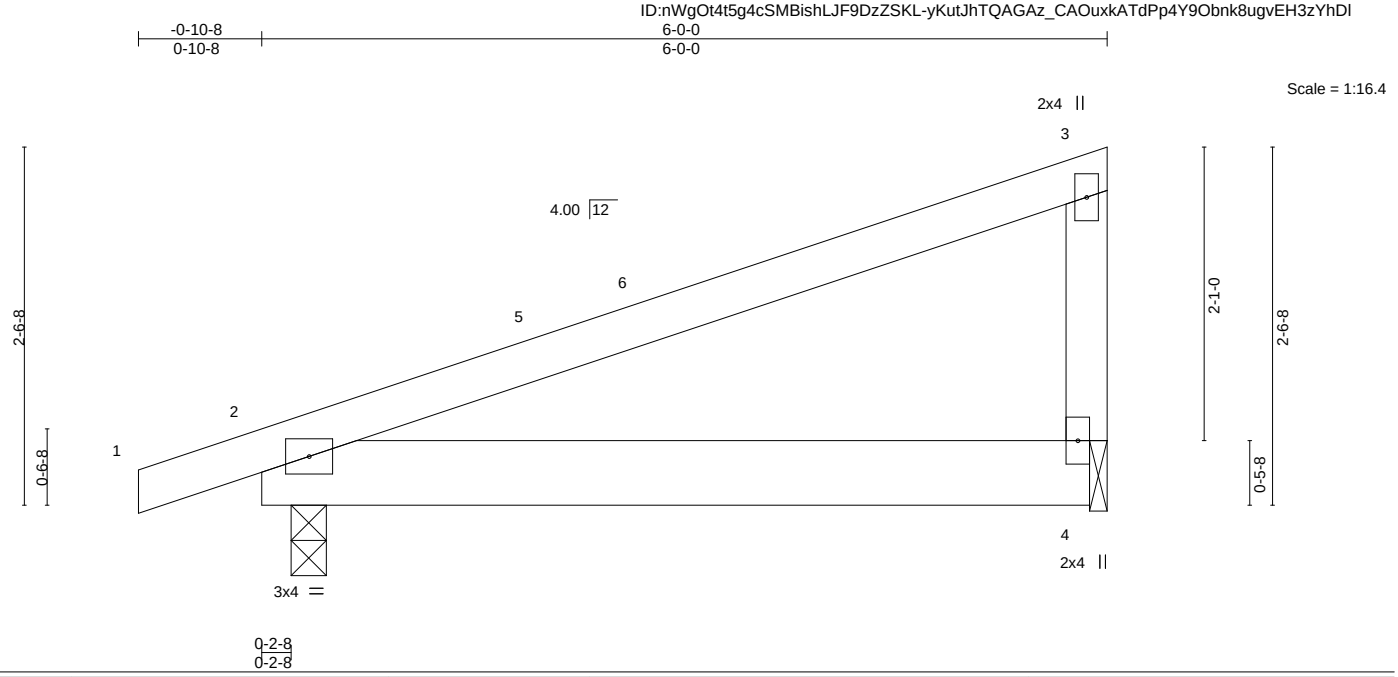
| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | P1 | MONOPITCH | 3 | 1 | I36483597 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:25:02 2019 Page 1
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-yKutJhTQAGAz_CAOuxkATdPp4Y9Obnk8ugvEH3zYhDl




| 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) | 0.03 | 2-4 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.53 | Vert(CT) | -0.03 | 2-4 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-P | | | | | | | Weight: 27 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

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

**REACTIONS.** (lb/size) 2=294/0-3-0, 4=224/0-1-8
Max Horz 2=88(LC 8)
Max Uplift 2=-123(LC 8), 4=-106(LC 8)

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

**NOTES-**
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-10-4 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=106.
7) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.


March 22,2019

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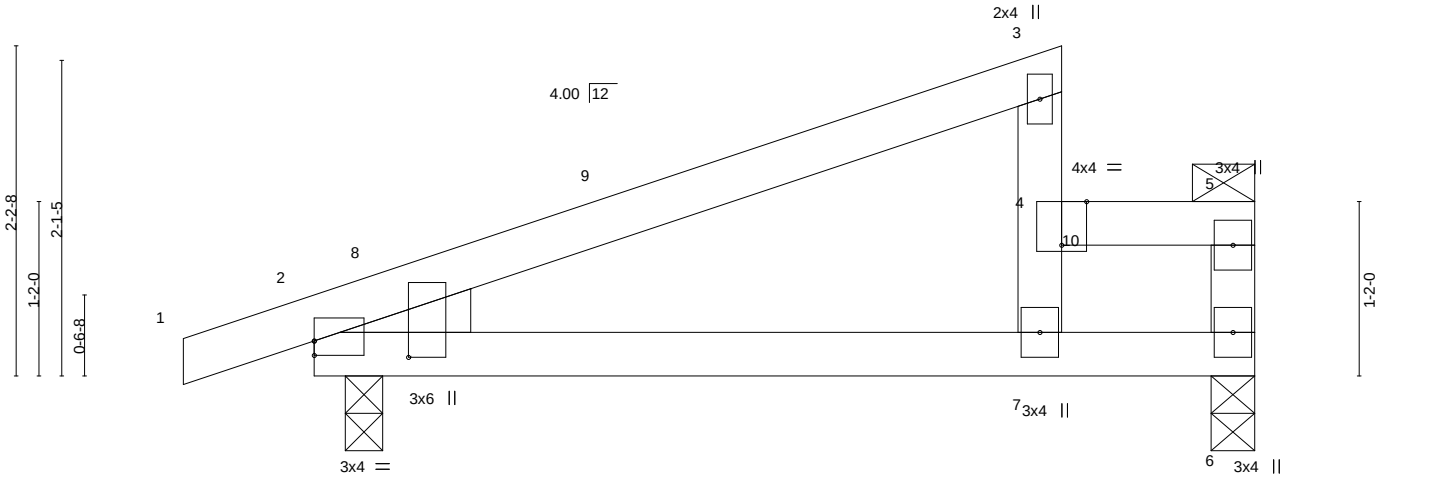
| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | P2 | HALF HIP | 6 | 1 | I36483598 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:25:03 2019 Page 1
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-QXRFW1U2xaIqcMlbSfFP?qyz_xQvKEzH7KeopVzYhDk

-0-10-8 / 0-10-8 | 5-0-0 / 5-0-0 | 6-3-8 / 1-3-8

Scale = 1:15.4




0-2-8 / 0-2-8 | 5-0-0 / 4-9-8 | 6-3-8 / 1-3-8

Plate Offsets (X,Y)-- [2:0-1-5,0-7-9], [2:0-0-0,0-1-2], [4:0-2-0,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 | 0.67 | Vert(LL) | 0.07 | 2-7 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.83 | Vert(CT) | -0.05 | 2-7 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.00 | Horz(CT) | -0.00 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-R | | | | | | | Weight: 25 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 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-7, 4-5.
BOT CHORD Rigid ceiling directly applied or 9-9-9 oc bracing.

**REACTIONS.** (lb/size) 6=404/0-3-8, 2=338/0-3-0
Max Horz 2=117(LC 12)
Max Uplift 6=-155(LC 8), 2=-144(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-322/244, 5-6=-264/300
BOT CHORD 2-7=-319/254

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-1-12 zone; porch left 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.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=155.
7) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) . The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 4-5=-60, 2-6=-20
Concentrated Loads (lb)
Vert: 10=-200(F)


March 22,2019

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| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | P3 | HALF HIP GIRDER | 1 | 1 | I36483599 |
| | | | | | Job Reference (optional) |

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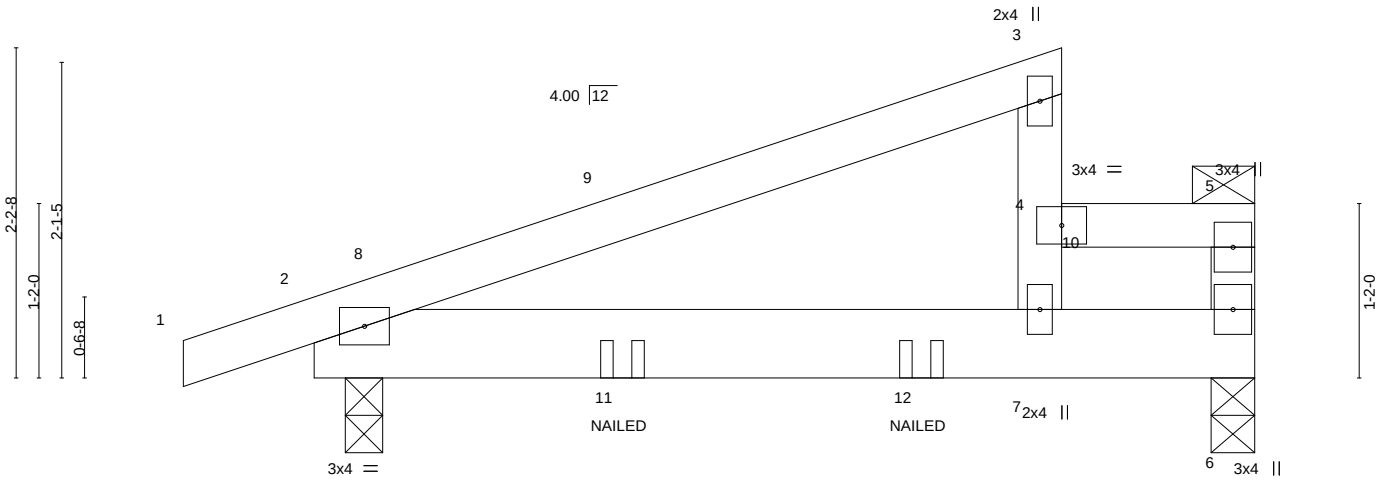
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-uj?dkNUgiuQhEWKn0MmeY2V9ULqy3hDRM_OLMxzYhDj

-0-10-8 / 0-10-8 | 5-0-0 / 5-0-0 | 6-3-8 / 1-3-8

Scale = 1:15.4




0-2-8 / 0-2-8 | 5-0-0 / 4-9-8 | 6-3-8 / 1-3-8

| 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 | 0.63 | Vert(LL) | 0.04 | 2-7 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.52 | Vert(CT) | -0.04 | 2-7 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.00 | Horz(CT) | -0.00 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-R | | | | | | | Weight: 29 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

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

**REACTIONS.** (lb/size) 6=434/0-3-8, 2=372/0-3-0
Max Horz 2=117(LC 12)
Max Uplift 6=-181(LC 8), 2=-172(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-300/183
BOT CHORD 2-7=-257/234

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-1-12 zone; porch left 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.
6) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6 and 2. This connection is for uplift only and does not consider lateral forces.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
8) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) . The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 4-5=-60, 2-6=-20
Concentrated Loads (lb)
Vert: 10=-200(F) 11=-37(F) 12=-27(F)


March 22,2019

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| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | P4 | HALF HIP | 1 | 1 | I36483600 |
| | | | | | Job Reference (optional) |

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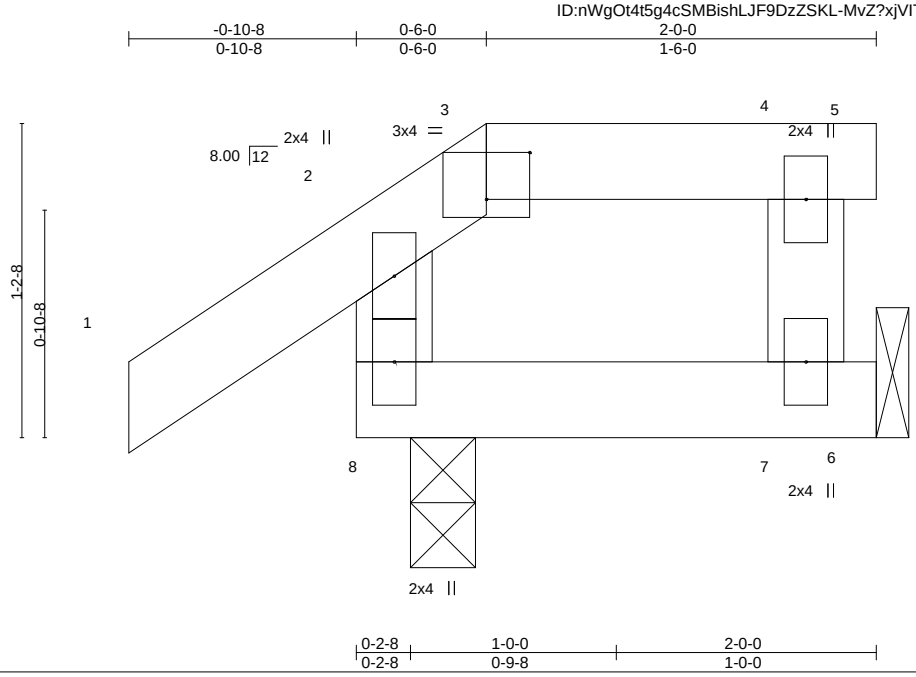


Plate Offsets (X,Y)-- [3:0-2-0,0-2-3]

| 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 | 0.09 | Vert(LL) | 0.00 | 8 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.03 | Vert(CT) | -0.00 | 8 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.00 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-R | | | | | | | Weight: 10 lb | FT = 20% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 2-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 6=47/Mechanical, 8=151/0-3-0
Max Horz 8=33(LC 12)
Max Uplift 6=-32(LC 9), 8=-26(LC 9)
Max Grav 6=57(LC 24), 8=151(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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-0-0 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 8.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.


March 22,2019



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| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | P5 | HALF HIP | 1 | 1 | I36483601 |
| | | | | | Job Reference (optional) |

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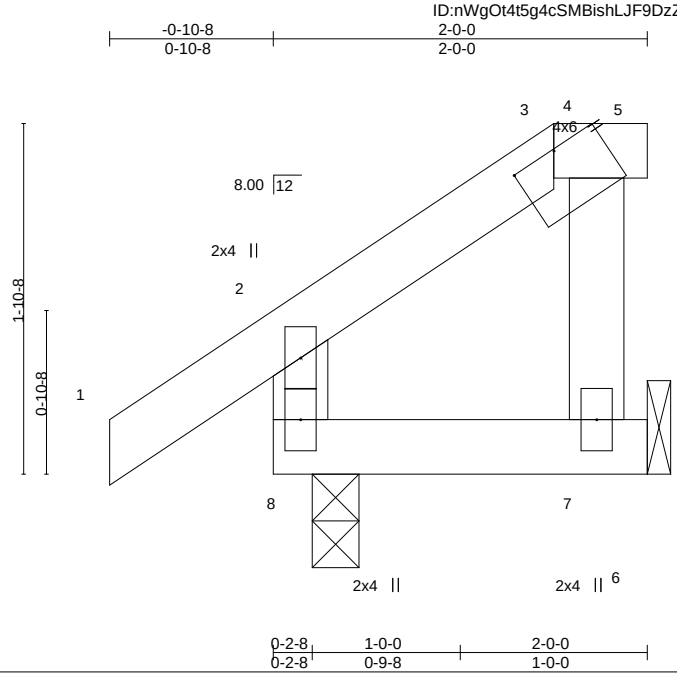


Plate Offsets (X,Y)-- [3:0-3-0,0-0-2], [4:0-1-7,0-1-0]

| 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 | 0.11 | Vert(LL) | 0.00 | 8 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.03 | Vert(CT) | -0.00 | 8 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.00 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-R | | | | | | | Weight: 11 lb | FT = 20% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 2-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 6=47/Mechanical, 8=151/0-3-0
Max Horz 8=59(LC 12)
Max Uplift 6=-34(LC 9), 8=-14(LC 12)
Max Grav 6=50(LC 3), 8=151(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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-0-0 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 8.
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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| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | T1 | ROOF TRUSS | 5 | 1 | I36483602 |
| | | | | | Job Reference (optional) |

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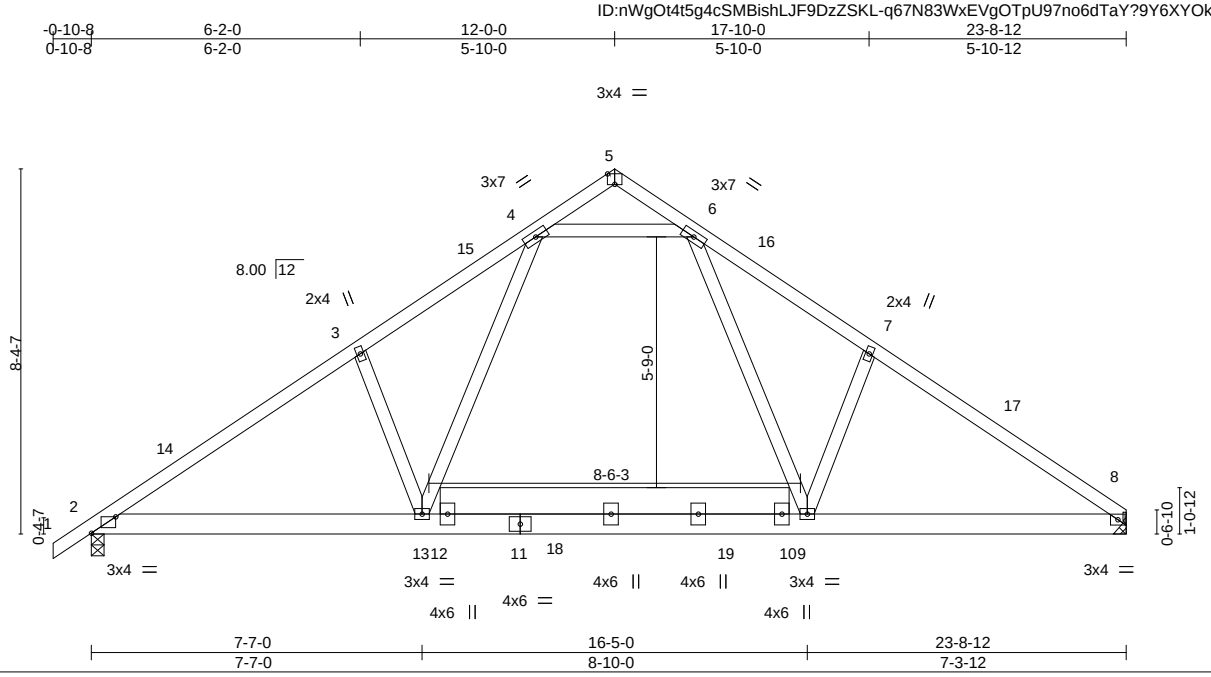


Plate Offsets (X,Y)-- [2:0-6-11,Edge], [5:0-2-0,Edge]

| 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 | 0.43 | Vert(LL) | -0.11 | 2-13 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.41 | Vert(CT) | -0.15 | 2-13 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.21 | Horz(CT) | 0.02 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | | Weight: 162 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
10-12: 2x8 SP No.2
WEBS 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 4-3-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 8=936/Mechanical, 2=1000/0-3-8
Max Horz 2=207(LC 9)
Max Uplift 8=-99(LC 13), 2=-123(LC 12)
Max Grav 8=939(LC 21), 2=1000(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1375/161, 3-4=-1262/223, 6-7=-1243/234, 7-8=-1358/168
BOT CHORD 2-13=-149/1180, 9-13=-36/860, 8-9=-58/1054
WEBS 6-9=-97/546, 7-9=-299/236, 4-13=-97/579, 3-13=-333/233, 4-6=-770/194

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 12-0-0, Exterior(2) 12-0-0 to 15-0-0, Interior(1) 15-0-0 to 23-7-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8.
7) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
8) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.


March 22,2019




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| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | T2 | COMMON | 4 | 1 | I36483603 |
| | | | | | Job Reference (optional) |

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ID:nWgOt4t5g4cSMBishLJF9DzZSKL-IIhmMPXZ?ppF5z3MhVJLAg7iuZppG_3t2yc?yGzYhDg

-0-10-8 6-2-0 12-0-0 17-10-0 24-0-0 24-10-8
0-10-8 6-2-0 5-10-0 5-10-0 6-2-0 0-10-8

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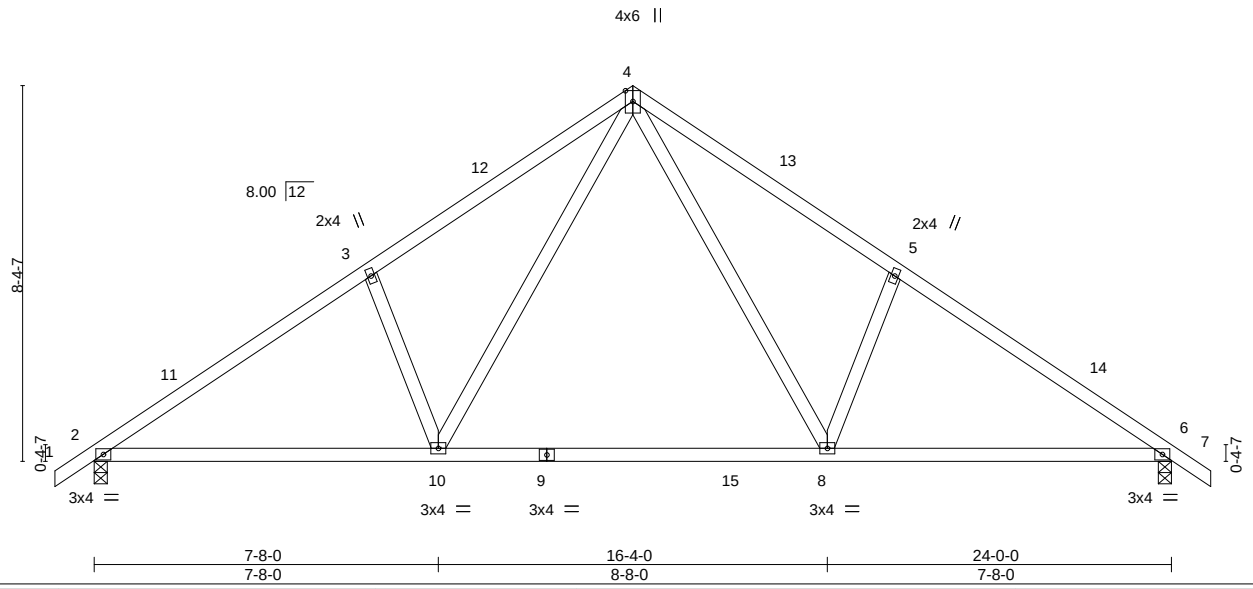


7-8-0 16-4-0 24-0-0
7-8-0 8-8-0 7-8-0

| 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 | 0.49 | Vert(LL) | -0.24 | 8-10 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.70 | Vert(CT) | -0.35 | 8-10 | >805 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.25 | Horz(CT) | 0.04 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | | Weight: 121 lb | FT = 20% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 4-5-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 2=1010/0-3-8, 6=1010/0-3-8
Max Horz 2=212(LC 11)
Max Uplift 2=-123(LC 12), 6=-123(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1390/161, 3-4=-1284/252, 4-5=-1287/252, 5-6=-1390/161
BOT CHORD 2-10=-163/1205, 8-10=-1/764, 6-8=-39/1073
WEBS 4-8=-155/672, 5-8=-356/251, 4-10=-155/666, 3-10=-356/251

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 12-0-0, Exterior(2) 12-0-0 to 15-0-0, Interior(1) 15-0-0 to 24-10-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.


March 22,2019




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| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | T3 | Common | 2 | 1 | I36483604 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:25:08 2019 Page 1
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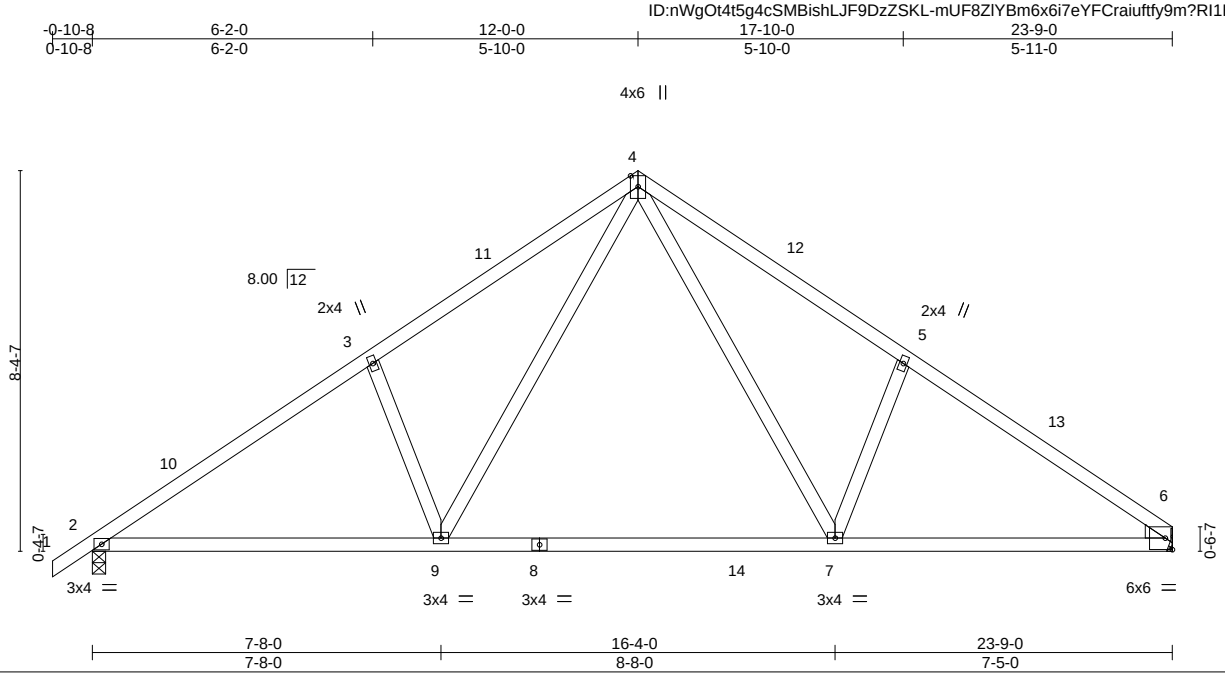


Plate Offsets (X,Y)-- [6:0-0-15,0-0-10], [6:0-5-6,0-1-4], [6:Edge,0-3-1]

| 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 | 0.49 | Vert(LL) | -0.25 | 7-9 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.72 | Vert(CT) | -0.36 | 7-9 | >775 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.25 | Horz(CT) | 0.04 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | | Weight: 119 lb | FT = 20% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 4-4-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 2=1004/0-3-8, 6=940/Mechanical
Max Horz 2=208(LC 9)
Max Uplift 2=-123(LC 12), 6=-99(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1381/160, 3-4=-1283/252, 4-5=-1273/253, 5-6=-1349/167
BOT CHORD 2-9=-172/1198, 7-9=-10/754, 6-7=-54/1050
WEBS 4-7=-156/655, 5-7=-339/253, 4-9=-155/674, 3-9=-356/251

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 12-0-0, Exterior(2) 12-0-0 to 15-0-0, Interior(1) 15-0-0 to 23-8-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6.
7) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.


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Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | V1 | GABLE | 1 | 1 | I36483605 |
| | | | | | Job Reference (optional) |

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5-10-8 11-9-0
5-10-8 5-10-8

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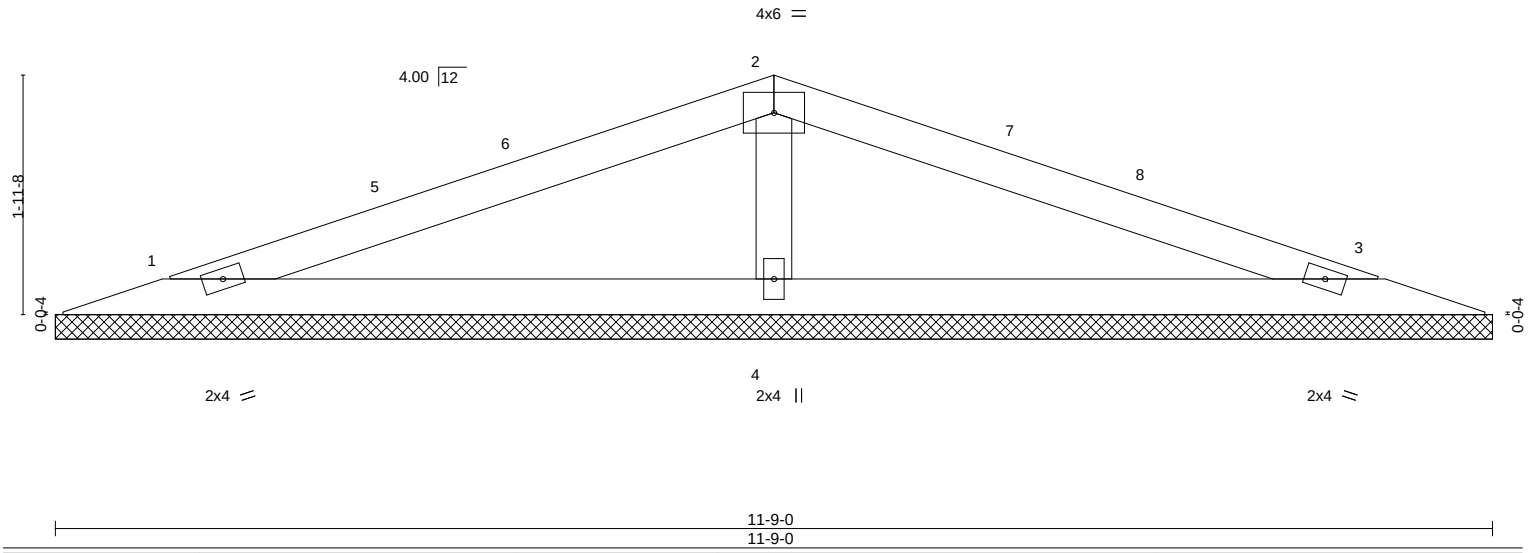


11-9-0
11-9-0

| 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 | 0.35 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.24 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.06 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 35 lb | FT = 20% |

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

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

**REACTIONS.** (lb/size) 1=169/11-9-0, 3=169/11-9-0, 4=452/11-9-0
Max Horz 1=28(LC 16)
Max Uplift 1=-37(LC 8), 3=-40(LC 13), 4=-37(LC 8)
Max Grav 1=175(LC 23), 3=175(LC 24), 4=452(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-308/138

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-11-5 to 3-11-5, Interior(1) 3-11-5 to 5-10-8, Exterior(2) 5-10-8 to 8-10-8, Interior(1) 8-10-8 to 10-9-11 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.


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| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | V2 | Valley | 1 | 1 | I36483606 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:25:09 2019 Page 1
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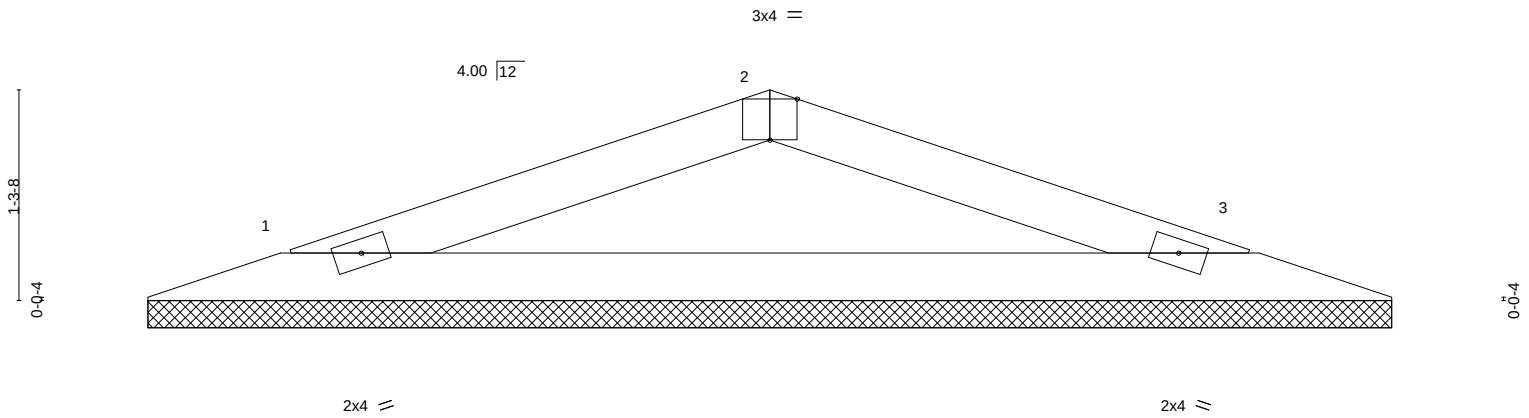
3-10-8 7-9-0
3-10-8 3-10-8

Scale = 1:14.1




0-0-12 7-9-0
0-0-12 7-8-4

Plate Offsets (X,Y)-- [2:0-2-0,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 | 0.16 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.46 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-P | | | | | | | Weight: 21 lb | FT = 20% |

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

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

**REACTIONS.** (lb/size) 1=235/7-7-8, 3=235/7-7-8
Max Horz 1=-17(LC 17)
Max Uplift 1=-33(LC 8), 3=-33(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-297/195, 2-3=-297/195
BOT CHORD 1-3=-154/260

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.


March 22,2019

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| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | VA1 | GABLE | 1 | 1 | I36483607 |
| | | | | | Job Reference (optional) |

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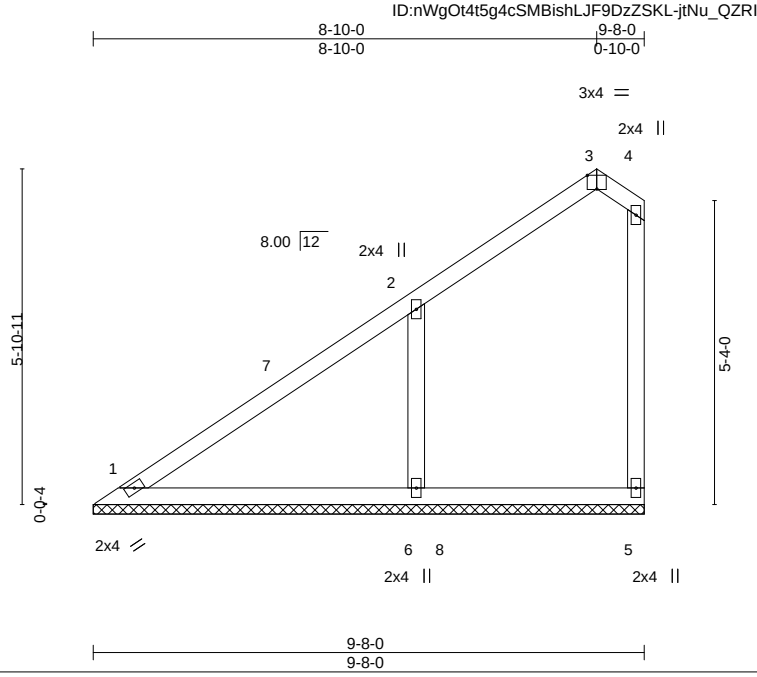


Plate Offsets (X,Y)-- [3:0-2-0,Edge]

| 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 | 0.35 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.22 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.09 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | | Weight: 43 lb | FT = 20% |

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

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

**REACTIONS.** (lb/size) 1=170/9-8-0, 5=103/9-8-0, 6=450/9-8-0
Max Horz 1=205(LC 12)
Max Uplift 5=-16(LC 12), 6=-174(LC 12)
Max Grav 1=170(LC 1), 5=151(LC 19), 6=526(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-6=-357/231

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 8-10-0, Exterior(2) 8-10-0 to 9-6-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 6=174.


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| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | VA2 | GABLE | 1 | 1 | I36483608 |
| | | | | | Job Reference (optional) |

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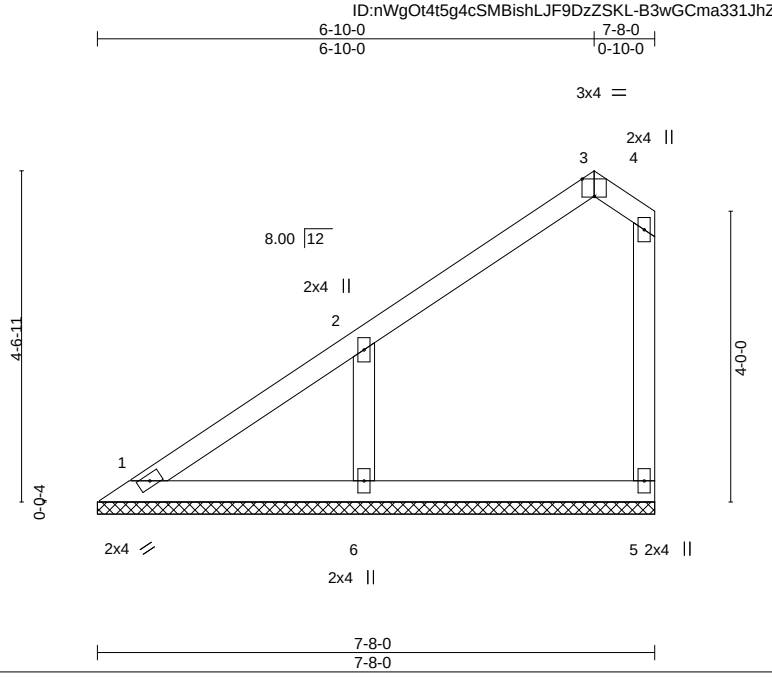


Plate Offsets (X,Y)-- [3:0-2-0,Edge]

| 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 | 0.17 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.12 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.05 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | | Weight: 33 lb | FT = 20% |

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

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

**REACTIONS.** (lb/size) 1=101/7-8-0, 5=132/7-8-0, 6=330/7-8-0
Max Horz 1=154(LC 12)
Max Uplift 5=-28(LC 12), 6=-125(LC 12)
Max Grav 1=106(LC 21), 5=132(LC 1), 6=351(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-6=-269/174

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-5-12 to 3-8-0, Interior(1) 3-8-0 to 6-10-0, Exterior(2) 6-10-0 to 7-6-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 6=125.


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| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | VA3 | GABLE | 1 | 1 | I36483609 |
| | | | | | Job Reference (optional) |

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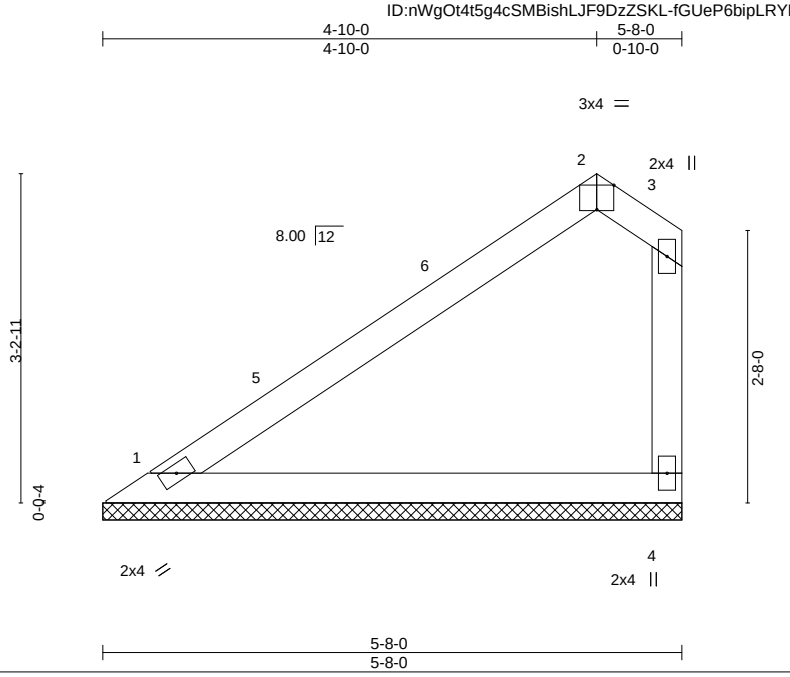


Plate Offsets (X,Y)-- [2:0-2-0,Edge]

| 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 | 0.36 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.24 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-R | | | | | | | Weight: 21 lb | FT = 20% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-8-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 1=202/5-8-0, 4=202/5-8-0
Max Horz 1=102(LC 12)
Max Uplift 1=-9(LC 12), 4=-53(LC 12)

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

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 4-10-0, Exterior(2) 4-10-0 to 5-6-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4.


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| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | VA4 | GABLE | 1 | 1 | I36483610 |
| | | | | | Job Reference (optional) |

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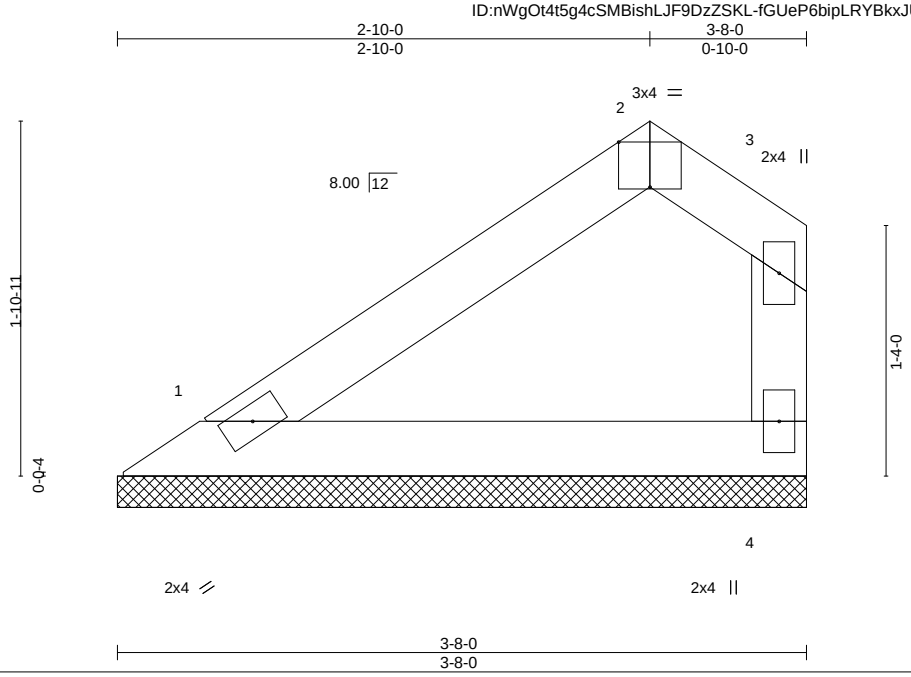



Plate Offsets (X,Y)-- [2:0-2-0,Edge]

| 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 | 0.10 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.08 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-R | | | | | | | Weight: 13 lb | FT = 20% |

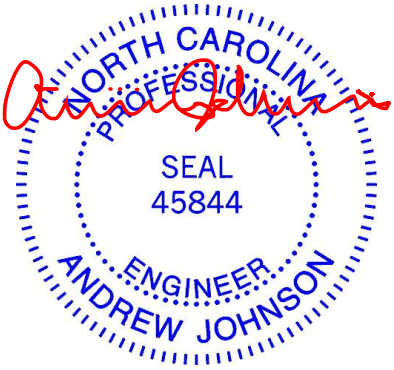
**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

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

**REACTIONS.** (lb/size) 1=122/3-8-0, 4=122/3-8-0
Max Horz 1=51(LC 12)
Max Uplift 1=-10(LC 12), 4=-23(LC 12)

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

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4.

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Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | VB1 | GABLE | 1 | 1 | I36483611 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:25:13 2019 Page 1
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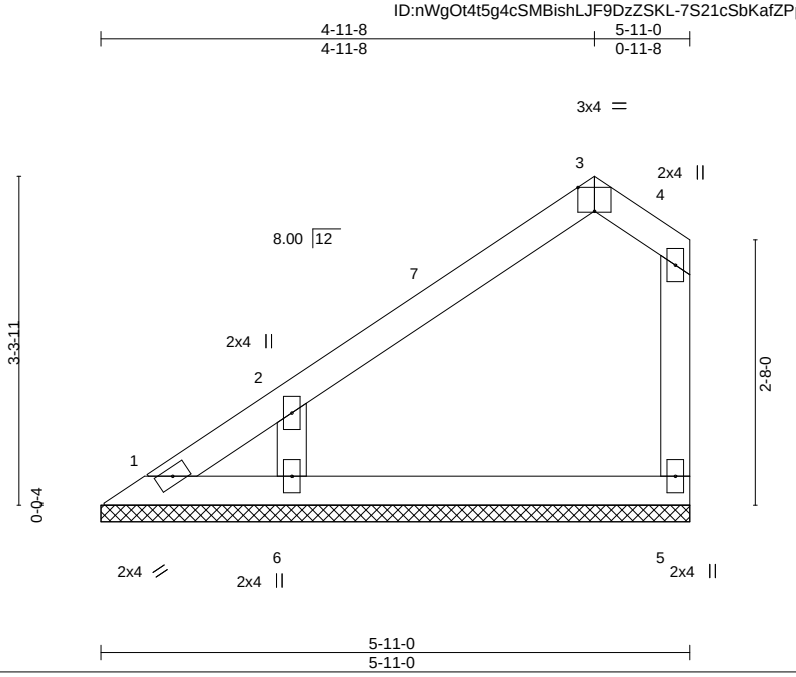


Plate Offsets (X,Y)-- [3:0-2-0,Edge]

| 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 | 0.18 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.10 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.05 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | | Weight: 23 lb | FT = 20% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-11-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 1=16/5-11-0, 5=139/5-11-0, 6=269/5-11-0
Max Horz 1=103(LC 12)
Max Uplift 1=-22(LC 10), 5=-27(LC 12), 6=-94(LC 12)
Max Grav 1=57(LC 12), 5=139(LC 1), 6=285(LC 19)

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

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 4-11-8, Exterior(2) 4-11-8 to 5-9-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 6.


March 22,2019



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| Job | Truss | Truss Type | Qty | Ply | 243.2939 D 12x12-8CP Tray |
|---|---|---|---|---|---|
| 20178A | VB2 | GABLE | 1 | 1 | I36483612 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Mar 21 14:25:14 2019 Page 1
ID:nWgOt4t5g4cSMBishLJF9DzZSKL-becPqocyLyhGQ25ibTx_y9v_uNMzPCivfXptiMzYhDZ

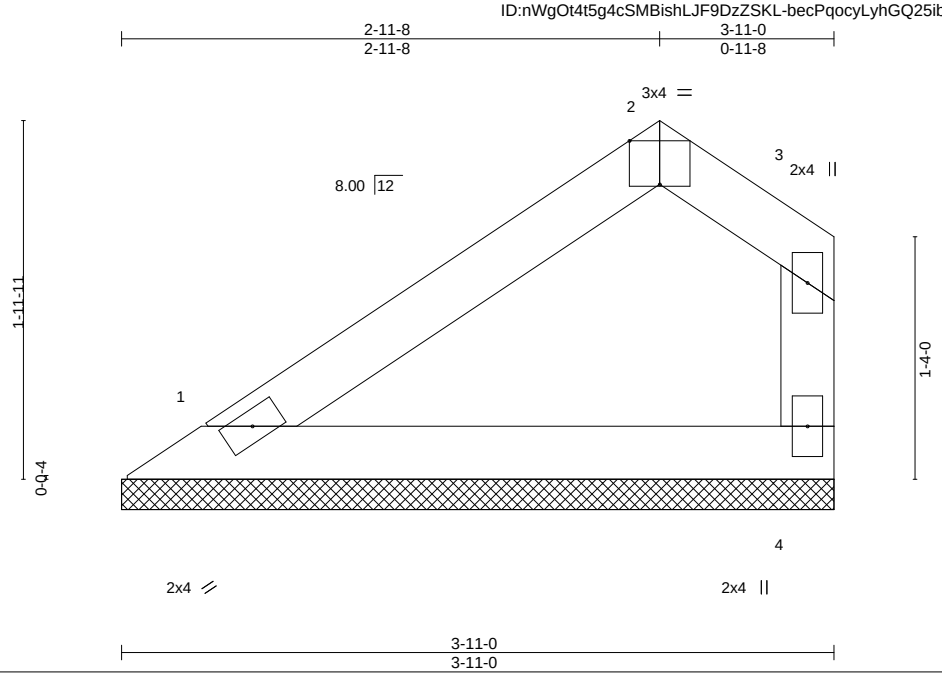



Plate Offsets (X,Y)-- [2:0-2-0,Edge]

| 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 | 0.12 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.10 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-R | | | | | | | Weight: 14 lb | FT = 20% |

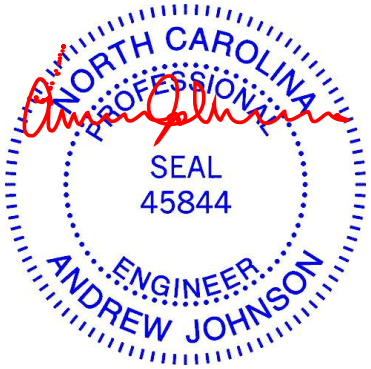
**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

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

**REACTIONS.** (lb/size) 1=132/3-11-0, 4=132/3-11-0
Max Horz 1=52(LC 12)
Max Uplift 1=-11(LC 12), 4=-23(LC 12)

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

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4.

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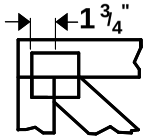
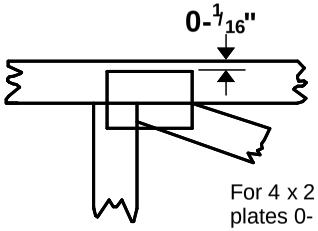
# Symbols

## PLATE LOCATION AND ORIENTATION




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




For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

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

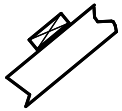
*** Plate location details available in MiTek 20/20 software or upon request.**

## PLATE SIZE

4 x 4

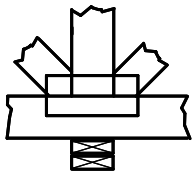
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

## BEARING

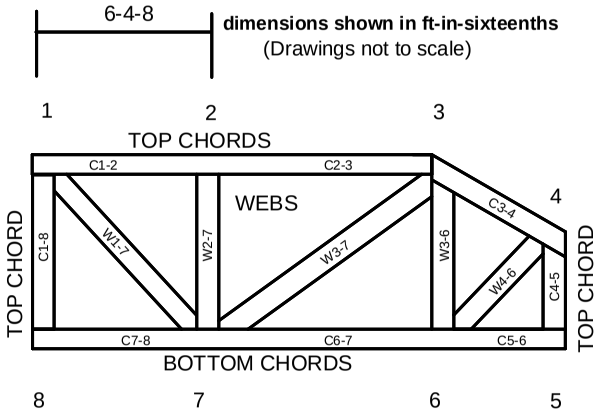


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

**Industry Standards:**

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System




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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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



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# 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/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.