

Job 20032323	Truss A1	Truss Type ATTIC	Qty 2	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber  
 8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:31:58 2020 Page 1

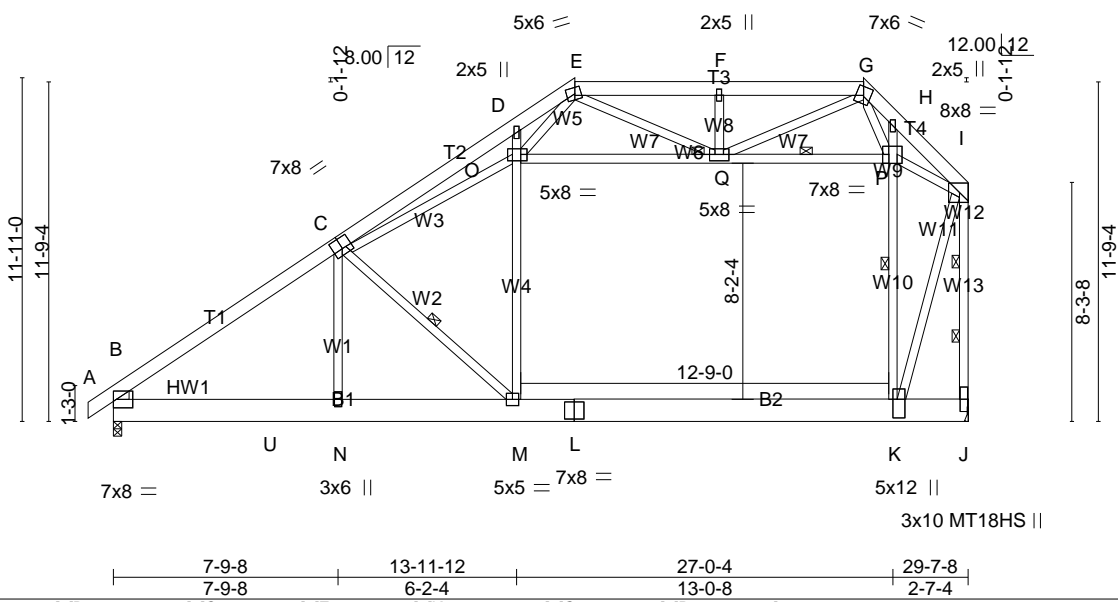
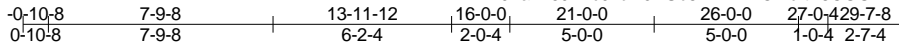


Plate Offsets (X,Y)-- [B:0-0-10,0-0-7], [B:0-4-13,0-0-14], [C:0-4-0,0-4-8], [E:0-2-8,0-2-8], [K:0-7-12,0-1-12], [O:0-2-8,0-3-8], [P:0-2-8,0-3-8]

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.76	Vert(LL) -0.28 K-M >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.88	Vert(CT) -0.46 K-M >766 180	MT18HS	244/190
BCLL 0.0 *	Rep Stress Incr YES	WB 0.77	Horz(CT) 0.02 J n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MSH	Attic -0.15 K-M 1072 360		Weight: 330 lb FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-10-14 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.); E-G.
BOT CHORD 2x10 SP No.1	BOT CHORD Rigid ceiling directly applied or 5-7-7 oc bracing.
WEBS 2x4 SP No.3 *Except* W4,W10,W11: 2x4 SP No.2	WEBS 1 Row at midpt C-M, P-Q, K-P 2 Rows at 1/3 pts I-J
WEDGE Left: 2x4 SP No.2	JOINTS 1 Brace at Jt(s): Q

**REACTIONS.** (lb/size) B=1272/0-3-8, J=1269/Mechanical  
 Max Horz B=353(LC 10)  
 Max Uplift B=102(LC 10), J=45(LC 10)  
 Max Grav B=1446(LC 18), J=1682(LC 2)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=0/29, B-C=-1887/218, C-D=-2865/411, D-E=-2740/504, E-F=-677/226, F-G=-676/225, G-H=-328/1921, H-I=-449/2234, I-J=-2518/226  
 BOT CHORD B-U=-322/1596, N-U=-322/1596, M-N=-322/1595, L-M=-106/979, K-L=-106/979, J-K=-1/6  
 WEBS C-N=-17/332, C-M=-838/331, M-O=-16/886, D-O=-91/158, O-Q=-120/276, P-Q=-1735/285, K-P=-1403/365, H-P=-541/199, C-O=-251/1499, I-P=-2635/447, F-Q=-326/154, I-K=-343/3188, E-Q=-773/159, G-Q=-296/1394, G-P=-1963/375, E-O=-342/2018

- 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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical 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) All plates are MT20 plates unless otherwise indicated.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 7) Ceiling dead load (5.0 psf) on member(s). O-Q, P-Q
  - 8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. K-M
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 102 lb uplift at joint B and 45 lb uplift at joint J.
  - 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 12) Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard

Job 20032323	Truss A1A	Truss Type ATTIC	Qty 5	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber  
 ID:XTYJZa1n607AuJzbMJwUb8z?rVWV-9zS0wwH0VBel9n9YsjTHF3LROMNZNhr5QT0AR6zVWVNS  
 8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:01 2020 Page 1

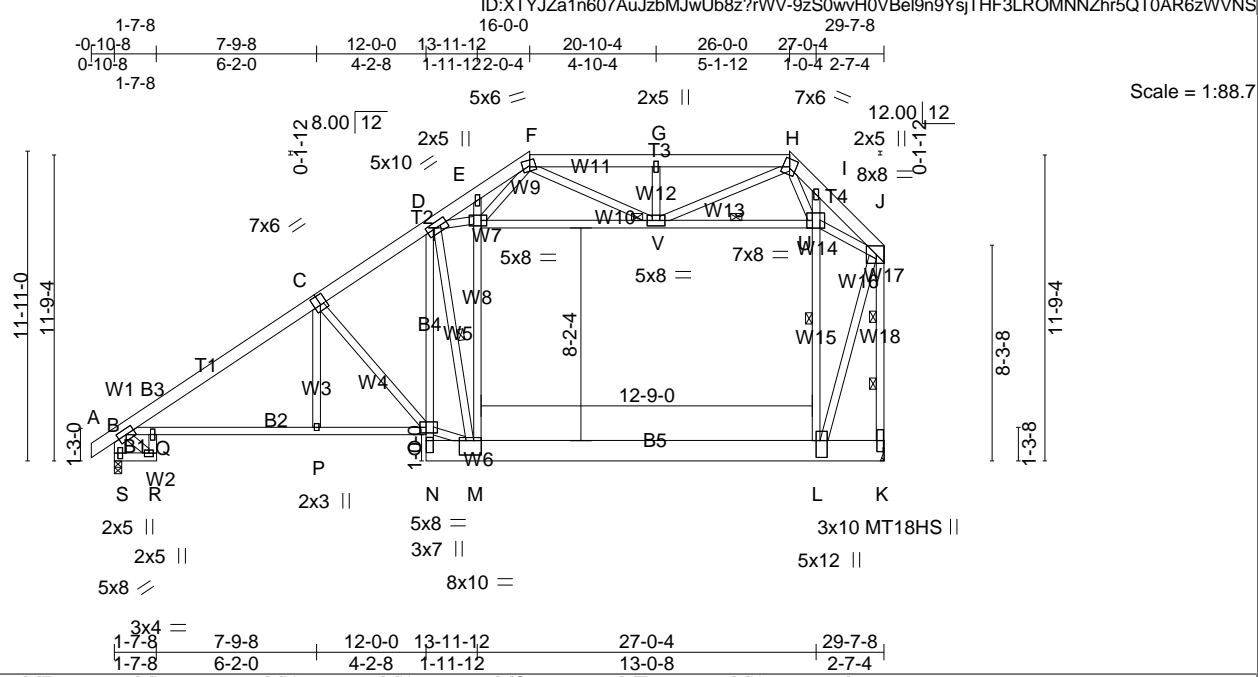


Plate Offsets (X,Y)-- [C:0-3-0,0-4-8], [F:0-2-8,0-2-8], [L:0-7-12,0-1-12], [M:0-3-0,0-6-8], [N:0-5-8,0-1-8], [O:0-2-12,0-2-8], [T:0-2-8,0-2-8], [U:0-2-8,0-3-8]

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.93	Vert(LL) -0.28 L-M >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.85	Vert(CT) -0.48 M >735 180	MT18HS	244/190
BCLL 0.0 *	Rep Stress Incr YES	WB 0.78	Horz(CT) 0.13 K n/a n/a		
BCDL 10.0	Code IRC2015/TP12014	Matrix-MSH	Attic -0.14 L-M 1147 360		Weight: 321 lb FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.2  
 BOT CHORD 2x4 SP No.2 \*Except\*  
 WEBS 2x4 SP No.3 \*Except\*  
 W8,W15,W16: 2x4 SP No.2, W1: 2x6 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-0-10 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.); F-H.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt D-M, U-V, L-U  
 2 Rows at 1/3 pts J-K  
 JOINTS 1 Brace at J(s): V

**REACTIONS.** (lb/size) S=1278/0-3-8, K=1259/Mechanical  
 Max Horz S=393(LC 7)  
 Max Uplift S=120(LC 10), K=27(LC 10)  
 Max Grav S=1394(LC 18), K=1662(LC 2)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=0/40, B-C=-2063/273, C-D=-1694/306, D-E=-2795/342, E-F=-2727/379, F-G=-691/255, G-H=-690/254, H-I=-339/2004, I-J=-401/2338, J-K=-2458/205, B-S=-1397/232  
 BOT CHORD R-S=-261/198, Q-R=-188/138, B-Q=-237/1765, P-Q=-301/1842, O-P=-302/1841, N-O=-214/417, D-O=-327/1214, M-N=-79/282, L-M=-135/1009, K-L=-107/123  
 WEBS M-O=-132/1203, D-M=-2012/428, M-T=-139/1747, E-T=-21/202, T-V=-160/293, U-V=-1751/305, L-U=-1469/322, I-U=-573/163, F-T=-231/1983, H-U=-2035/408, G-V=-324/152, F-V=-791/141, H-V=-271/1430, C-O=-654/259, D-T=-202/1345, J-U=-2681/449, J-L=-238/3198, B-R=-156/257, C-P=0/281

- 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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) All plates are MT20 plates unless otherwise indicated.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 7) Ceiling dead load (5.0 psf) on member(s). T-V, U-V
  - 8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. L-M
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 120 lb uplift at joint S and 27 lb uplift at joint K.
  - 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 12) Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard

Job 20032323	Truss A2	Truss Type Attic	Qty 4	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber  
 8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:02 2020 Page 1  
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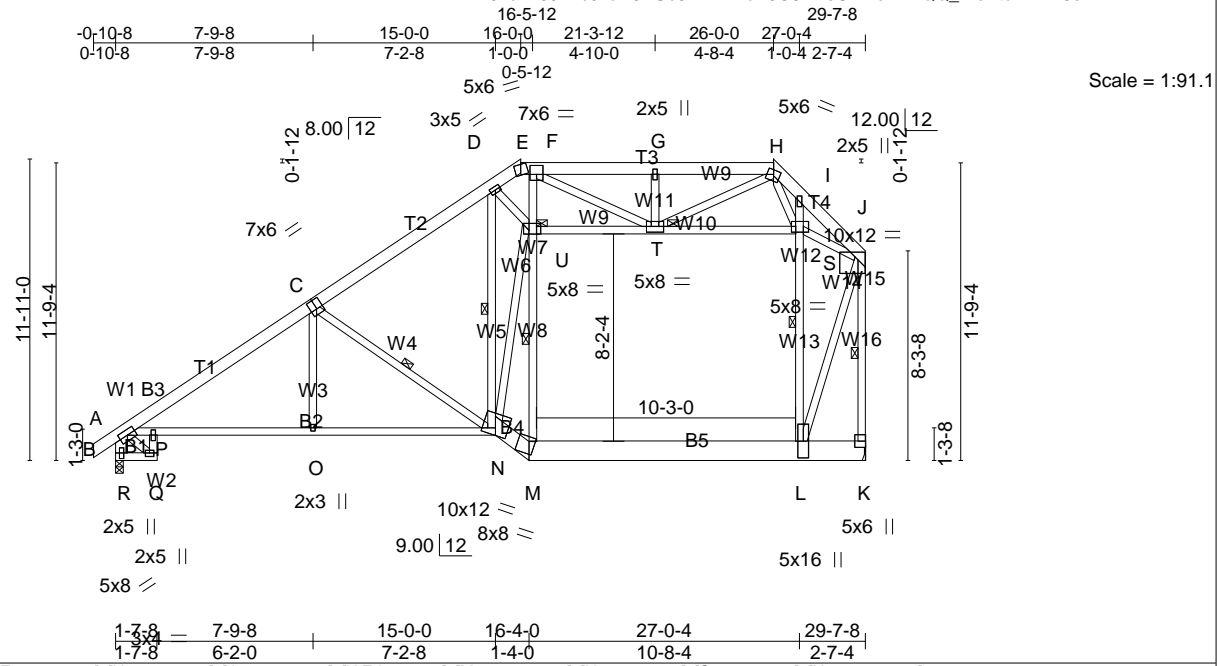


Plate Offsets (X,Y)-- [C:0-3-0,0-4-8], [F:0-3-0,0-4-4], [H:0-3-0,0-2-0], [J:0-3-5,0-3-11], [K:Edge,0-3-8], [M:0-0-1,0-2-13], [N:0-6-0,0-3-5], [S:0-2-0,0-2-8], [U:0-2-8,0-1-12]

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc)	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.96	Vert(LL) -0.16 L-M >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.63	Vert(CT) -0.33 N-O >999 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 1.00	Horz(CT) 0.11 K n/a n/a		
BCDL 10.0	Code IRC2015/TP12014	Matrix-MSH	Attic -0.08 L-M 1682 360		Weight: 312 lb FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-10-13 oc purlins, except end verticals, and 2-0-0 oc purlins (5-5-0 max.): E-H.
BOT CHORD 2x4 SP No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
WEBS B3: 2x4 SP No.3, B5: 2x10 SP No.1, B4: 2x8 SP No.2	6-0-0 oc bracing: Q-R,P-Q.
WEBS 2x4 SP No.3 *Except*	WEBS 1 Row at midpt C-N, M-U, L-S, J-K, D-N
W8,W13: 2x4 SP No.2, W1: 2x6 SP No.2	JOINTS 1 Brace at Jt(s): T, U

**REACTIONS.** (lb/size) R=1266/0-3-8, K=1247/Mechanical  
 Max Horz R=393(LC 7)  
 Max Uplift R=127(LC 10), K=34(LC 10)  
 Max Grav R=1306(LC 18), K=1571(LC 2)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=0/40, B-C=-1916/285, C-D=-1400/294, D-E=-1846/364, E-F=-1646/308, F-G=-1022/295, G-H=-1022/295, H-I=-316/1196, I-J=-379/1430, J-K=-2092/212, B-R=-1307/238  
 BOT CHORD Q-R=-247/186, P-Q=-180/132, B-P=-249/1652, O-P=-310/1724, N-O=-310/1723, L-M=-138/783, K-L=-108/123, M-N=-186/952  
 WEBS C-O=0/323, C-N=-722/279, M-U=-524/210, F-U=-183/1102, L-S=-1295/311, I-S=-425/164, T-U=-172/934, S-T=-1089/229, G-T=-355/153, F-T=-881/125, H-T=-266/1450, H-S=-1596/388, J-S=-1769/343, D-U=-163/955, D-N=-974/201, J-L=-247/2457, N-U=-354/2015, B-Q=-148/245

- 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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Ceiling dead load (5.0 psf) on member(s). T-U, S-T
  - 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. L-M
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 127 lb uplift at joint R and 34 lb uplift at joint K.
  - 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 11) Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard

Job 20032323	Truss A3	Truss Type ATTIC	Qty 3	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber

8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:02 2020 Page 1

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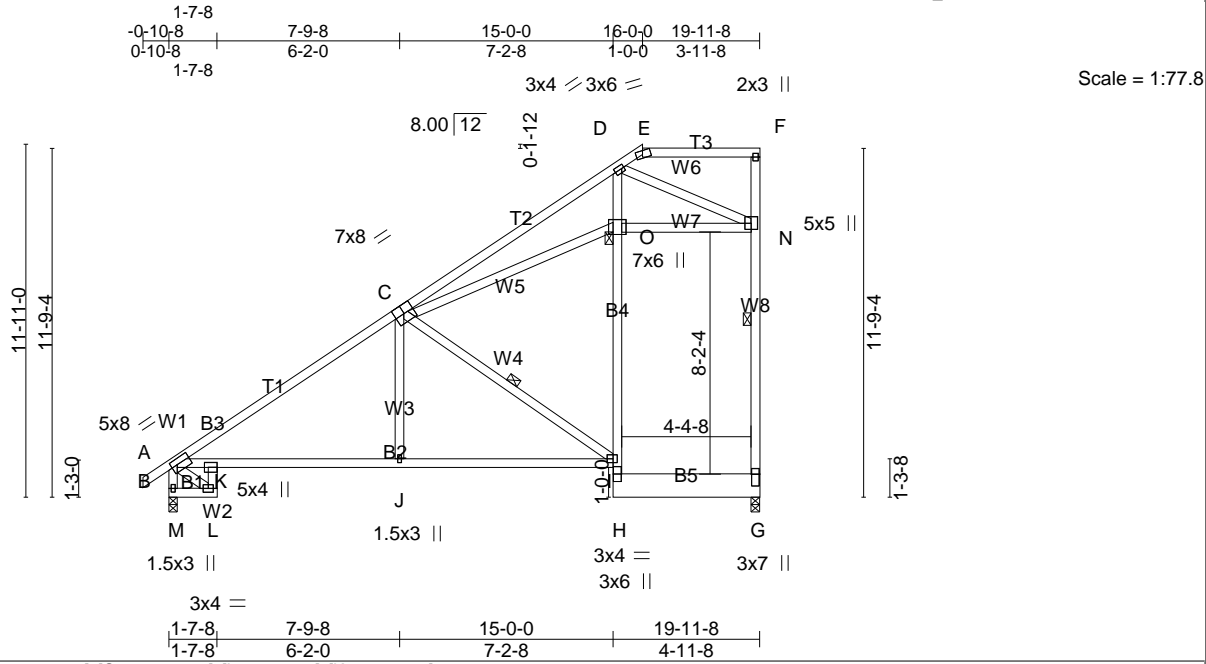


Plate Offsets (X,Y)-- [B:0-2-9,0-2-4], [D:0-1-0,0-1-8], [G:0-4-12,0-1-8], [I:0-2-4,0-1-8], [K:0-2-0,0-1-8]

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.72	Vert(LL) 0.28 J-K >855 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.78	Vert(CT) -0.28 J-K >854 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.80	Horz(CT) 0.16 G n/a n/a		
BCDL 10.0	Code IRC2015/TP12014	Matrix-MSH			
				Weight: 160 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-6-14 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): E-F.
BOT CHORD 2x4 SP No.3 *Except*	BOT CHORD Rigid ceiling directly applied or 8-6-4 oc bracing.
WEBS B1: 2x4 SP No.2, B2: 2x4 SP No.1, B5: 2x10 SP No.1	WEBS 1 Row at midpt F-G, C-I
WEBS 2x4 SP No.3	JOINTS 1 Brace at Jt(s): F, O

**REACTIONS.** (lb/size) G=785/0-3-8, M=850/0-3-8  
 Max Horz M=413(LC 10)  
 Max Uplift G=-215(LC 10), M=-29(LC 10)  
 Max Grav G=842(LC 18), M=850(LC 1)

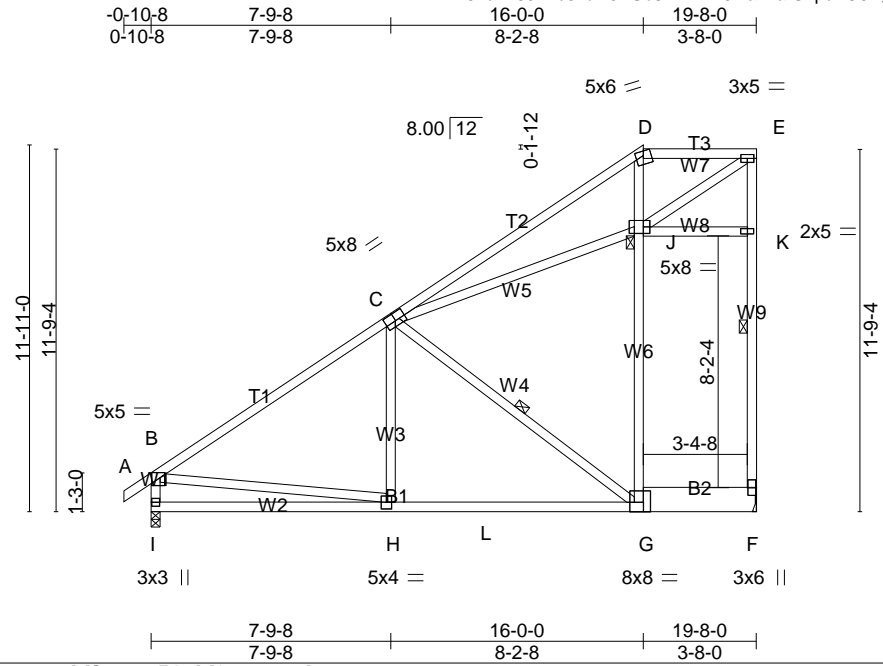
**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=0/36, B-C=-1083/89, C-D=-1832/516, D-E=-75/38, E-F=-10/23, G-N=-713/267, F-N=-127/59, B-M=-842/80  
 BOT CHORD L-M=-460/427, K-L=-281/241, B-K=-230/766, J-K=-371/887, I-J=-371/883, H-I=0/127, I-O=-158/739, D-O=-354/1304, G-H=-5/14  
 WEBS C-J=0/356, C-I=-1048/447, B-L=-326/412, N-O=-489/1444, D-N=-1618/542, C-O=-535/1531

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical 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) The Fabrication Tolerance at joint E = 4%, joint F = 4%, joint G = 4%, joint M = 4%, joint K = 4%, joint B = 4%, joint I = 4%, joint D = 4%, joint H = 4%, joint C = 4%, joint J = 4%, joint L = 4%, joint N = 4%, joint O = 4%
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 215 lb uplift at joint G and 29 lb uplift at joint M.
  - 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 10) Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard

Job 20032323	Truss A4	Truss Type ROOF TRUSS	Qty 1	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber  
 8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:03 2020 Page 1  
 ID:XTYJZa1n607AuJzbMJwUb8z?rWV-6ManLaiG1puTO5lx\_8VIKUQmMA5W1fpNunVHV\_zWVnQ



Scale = 1:74.9

Plate Offsets (X,Y)-- [B:0-3-4,Edge], [C:0-4-0,0-3-0], [G:0-2-12,Edge], [J:0-2-8,0-2-8]

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.90	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.74	Vert(LL) -0.17 G-H >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.56	Vert(CT) -0.29 G-H >811 180		
BCDL 10.0	Rep Stress Incr NO	Matrix-MSH	Horz(CT) -0.01 F n/a n/a		
	Code IRC2015/TP12014			Weight: 165 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 *Except* T2: 2x4 SP SS	TOP CHORD Structural wood sheathing directly applied or 4-7-8 oc purlins, except end verticals, and 2-0-0 oc purlins (5-2-5 max.): D-E.
BOT CHORD 2x4 SP No.2 *Except* B2: 2x10 SP No.1	BOT CHORD Rigid ceiling directly applied or 8-1-8 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt E-F, C-G
	JOINTS 1 Brace at Jt(s): J, E

**REACTIONS.** (lb/size) F=773/Mechanical, l=838/0-3-8  
 Max Horz l=414(LC 10)  
 Max Uplift F=-219(LC 10), l=-27(LC 10)  
 Max Grav F=917(LC 18), l=850(LC 18)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=0/34, B-C=-934/1, C-D=-1562/301, D-E=-1205/318, F-K=-874/250, E-K=-874/250, B-l=-790/84  
 BOT CHORD H-l=-515/584, H-L=-293/779, G-L=-293/779, F-G=-6/14  
 WEBS C-H=0/300, C-G=-980/366, G-J=-124/919, D-J=-12/502, B-H=0/508, J-K=-32/11, E-J=-390/1488, C-J=-332/1298

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - The Fabrication Tolerance at joint D = 4%, joint F = 4%, joint I = 4%, joint G = 4%, joint C = 4%, joint H = 4%, joint B = 4%, joint J = 4%, joint K = 4%, joint E = 4%
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 219 lb uplift at joint F and 27 lb uplift at joint I.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard

Job 20032323	Truss A5	Truss Type ROOF TRUSS	Qty 1	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber ID:XTYJZa1n607AuJzbMjwUb8z?WV-aY79ZwJun60K0Ft7Xr0\_tiz?bZWpM2fX6RFr1QzVWVNP 8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:04 2020 Page 1

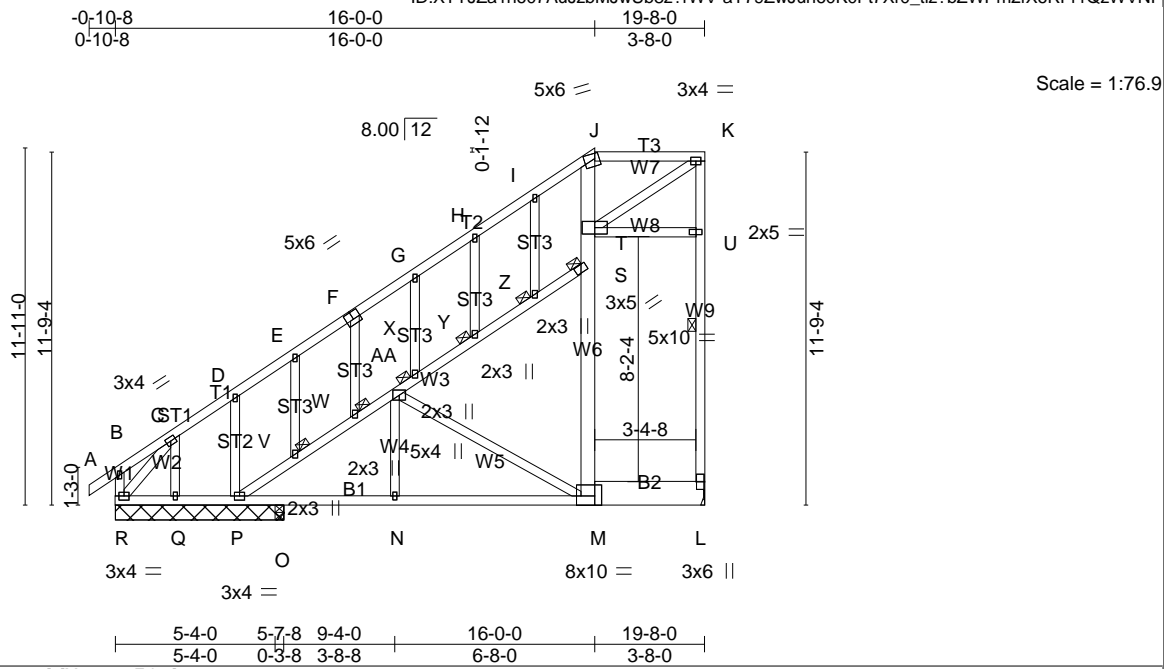


Plate Offsets (X,Y)-- [F:0-3-0,0-3-0], [J:0-1-12,0-2-0], [M:0-2-12,Edge]

<b>LOADING</b> (psf)	<b>SPACING</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.68	Vert(LL) -0.09 M-N >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.38	Vert(CT) -0.21 M-N >816 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.78	Horz(CT) 0.01 O n/a n/a		
BCDL 10.0	Code IRC2015/TP12014	Matrix-MSH			
				Weight: 201 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	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.); J-K.
BOT CHORD 2x4 SP No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
B2: 2x10 SP No.1	WEBS 1 Row at midpt K-L
WEBS 2x4 SP No.3 *Except*	JOINTS 1 Brace at Jt(s): S, K, V, W, X, Y, Z
W6: 2x6 SP No.2, W3: 2x4 SP No.2	
OTHERS 2x4 SP No.3	

**REACTIONS.** (lb/size) L=753/Mechanical, R=923/5-7-8, P=103/5-7-8, Q=254/5-7-8, O=86/0-3-8  
 Max Horz R=414(LC 10)  
 Max Uplift L=183(LC 10), P=123(LC 10), Q=296(LC 20)  
 Max Grav L=783(LC 18), R=923(LC 1), P=113(LC 18), O=119(LC 3)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=0/34, B-C=-112/64, C-D=-760/0, D-E=-826/0, E-F=-762/0, F-G=-776/39, G-H=-831/137, H-I=-789/161, I-J=-767/195, J-K=-886/269,  
 L-U=-692/223, K-U=-692/223, B-R=-181/103  
 BOT CHORD Q-R=-204/667, P-Q=-204/667, O-P=-191/470, N-O=-191/470, M-N=-191/470, L-M=-6/24  
 WEBS C-R=-927/0, M-S=-17/369, S-T=-183/865, J-T=-3/245, P-V=-31/259, V-W=-38/266, W-AA=-88/324, X-AA=-144/638, X-Y=-228/775,  
 Y-Z=-241/794, S-Z=-261/828, T-U=-43/8, K-T=-326/1099, C-Q=0/326, D-P=-243/146, E-V=-18/15, F-W=-147/103, G-X=-247/165, H-Y=-35/24,  
 I-Z=-61/42, M-AA=-537/220, N-AA=0/238

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - All plates are 1.5x3 MT20 unless otherwise indicated.
  - The Fabrication Tolerance at joint J = 4%, joint L = 4%, joint R = 4%, joint B = 4%, joint C = 4%, joint M = 4%, joint P = 4%, joint S = 4%, joint T = 4%, joint U = 4%, joint K = 4%, joint Q = 4%, joint D = 4%, joint V = 4%, joint E = 4%, joint W = 4%, joint F = 4%, joint X = 4%, joint G = 4%, joint Y = 4%, joint H = 4%, joint Z = 4%, joint I = 4%, joint AA = 4%, joint N = 4%
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 183 lb uplift at joint L, 123 lb uplift at joint P and 296 lb uplift at joint Q.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Attic room checked for L/360 deflection.

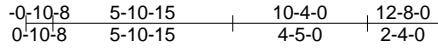
**LOAD CASE(S)** Standard

Job 20032323	Truss A6	Truss Type PIGGYBACK BASE	Qty 1	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber

8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:04 2020 Page 1

ID:XYTJZa1n607AuJzbMjwUb8z?rWV-aY79ZwJun60K0Ft7Xr0\_tiz1wZS3mB6X6RFr1QzWVNP



Scale = 1:75.7

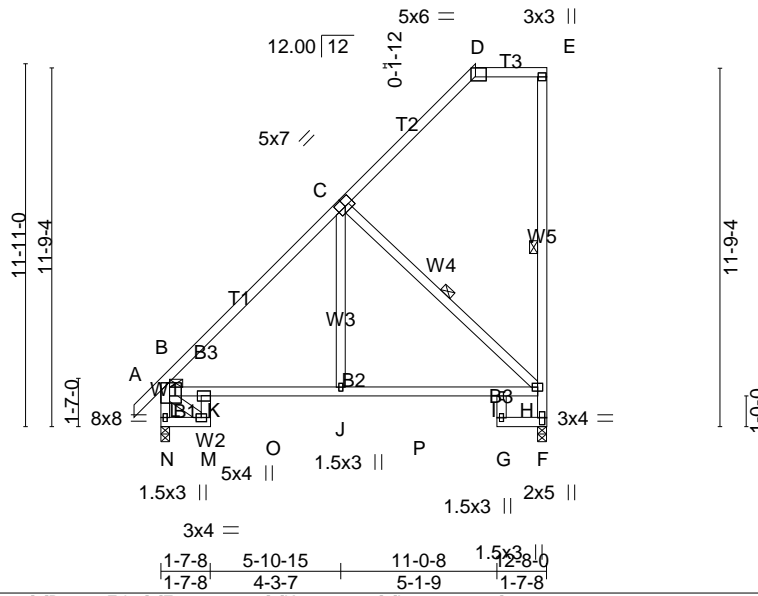


Plate Offsets (X,Y)-- [B:0-1-12,0-1-12], [C:0-3-8,0-3-0], [D:0-4-4,Edge], [F:0-2-12,0-1-0], [K:0-2-0,0-1-8], [L:0-3-8,0-2-12]

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.53	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.59	Vert(LL) 0.14 J-K >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.23	Vert(CT) 0.13 J-K >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MSH	Horz(CT) 0.06 F n/a n/a		
	Code IRC2015/TP12014			Weight: 94 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	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.): D-E.
BOT CHORD 2x4 SP No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
B3: 2x4 SP No.3	WEBS 1 Row at midpt E-F, C-H
WEBS 2x4 SP No.3	

**REACTIONS.** (lb/size) F=492/0-3-8, N=559/0-3-8  
 Max Horz N=406(LC 10)  
 Max Uplift F=-261(LC 10)  
 Max Grav F=559(LC 17), N=570(LC 17)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=0/43, B-C=-558/0, C-D=-173/25, D-E=-17/7, F-H=-543/318, E-H=-163/114, L-N=-565/0, B-L=-540/57  
 BOT CHORD M-N=-496/343, K-M=-264/183, K-L=-95/357, K-O=-260/424, J-O=-260/424, J-P=-260/423, I-P=-260/423, H-I=-276/444, G-I=-1/11, F-G=-29/16  
 WEBS C-J=-25/307, C-H=-563/349, L-M=-253/411

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - The Fabrication Tolerance at joint C = 4%, joint D = 4%, joint E = 4%, joint F = 4%, joint N = 4%, joint K = 4%, joint L = 4%, joint H = 4%, joint I = 4%, joint G = 4%, joint J = 4%, joint B = 4%, joint M = 4%, joint L = 4%
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 261 lb uplift at joint F.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

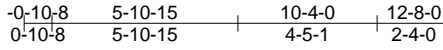
**LOAD CASE(S)** Standard

Job 20032323	Truss A6A	Truss Type PIGGYBACK BASE	Qty 1	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber

8.320 s Nov. 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:05 2020 Page 1

ID:XYTJZa1n607AuJzbMJwUb8z?rWV-2lhXmGKXYQ9BeOSJ5ZXDQvVCszoVeEgL5\_oatzWVNO



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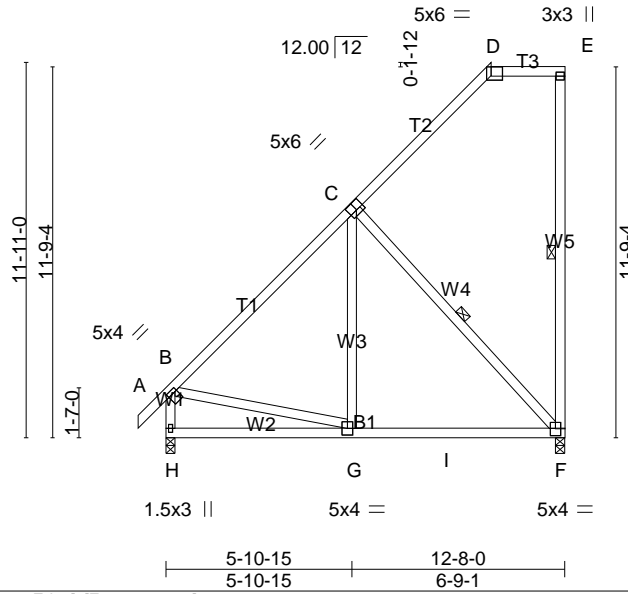


Plate Offsets (X,Y)-- [B:0-0-12,0-1-8], [C:0-3-0,0-3-4], [D:0-4-4,Edge], [F:0-2-0,0-2-12]

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.52	Vert(LL) -0.06 F-G >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.39	Vert(CT) -0.11 F-G >999 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.24	Horz(CT) -0.01 F n/a n/a		
BCDL 10.0	Code IRC2015/TP12014	Matrix-MSH		Weight: 97 lb	FT = 20%

<b>LUMBER-</b> TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3	<b>BRACING-</b> 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.): D-E. BOT CHORD Rigid ceiling directly applied or 8-2-12 oc bracing. WEBS 1 Row at midpt E-F, C-F
<b>REACTIONS.</b> (lb/size) F=492/0-3-8, H=559/0-3-8 Max Horz H=406(LC 10) Max Uplift F=261(LC 10) Max Grav F=545(LC 17), H=559(LC 1)	
<b>FORCES.</b> (lb) - Maximum Compression/Maximum Tension TOP CHORD A-B=0/43, B-C=-470/0, C-D=-168/31, D-E=-11/8, E-F=-164/120, B-H=-510/0 BOT CHORD G-H=-505/440, G-I=-204/351, F-I=-204/351 WEBS C-G=0/257, C-F=-505/293, B-G=-90/326	

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - The Fabrication Tolerance at joint D = 4%, joint E = 4%, joint F = 4%, joint H = 4%, joint G = 4%, joint C = 4%, joint B = 4%
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 261 lb uplift at joint F.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

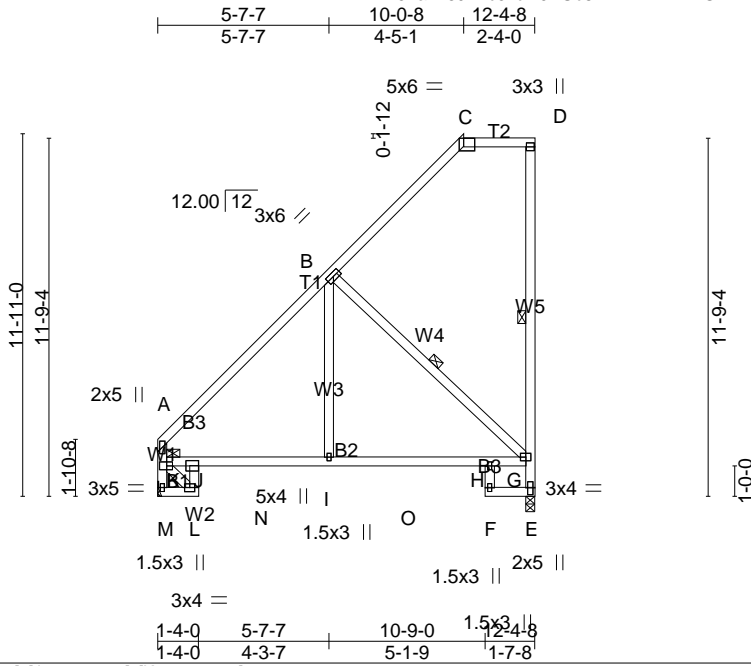


Job 20032323	Truss A7	Truss Type PIGGYBACK BASE	Qty 5	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber

8.320 s Nov. 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:05 2020 Page 1

ID:XYTJZa1n607AuJzbMJwUb8z?rWV-2lhXmGKXYQ9BeOSJ5ZXDQvVCLzpyVePgL5\_OatzWVNO



Scale = 1:75.7

Plate Offsets (X,Y)-- [C:0-4-4,Edge], [E:0-2-12,0-1-0], [J:0-2-0,0-1-8], [K:0-2-4,0-1-8]

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.55	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.55	Vert(LL) 0.11 I-J >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.23	Vert(CT) 0.11 I-J >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MSH	Horz(CT) 0.06 E n/a n/a		
	Code IRC2015/TP12014			Weight: 91 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	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.): C-D.
BOT CHORD 2x4 SP No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
B3: 2x4 SP No.3	WEBS 1 Row at midpt D-E, B-G
WEBS 2x4 SP No.3	

**REACTIONS.** (lb/size) E=483/0-3-8, M=483/Mechanical  
 Max Horz M=357(LC 10)  
 Max Uplift E=260(LC 10)  
 Max Grav E=549(LC 17), M=501(LC 2)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=-529/0, B-C=-174/27, C-D=-18/7, E-G=-539/320, D-G=-166/117, K-M=-501/0, A-K=-452/6  
 BOT CHORD L-M=-464/320, J-L=-317/235, J-K=-108/386, J-N=-264/419, I-N=-264/419, I-O=-264/419, H-O=-264/419, G-H=-280/442, F-H=-2/10, E-F=-32/16  
 WEBS B-I=-29/287, B-G=-553/351, K-L=-284/423

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical 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) The Fabrication Tolerance at joint A = 4%, joint C = 4%, joint D = 4%, joint E = 4%, joint M = 4%, joint J = 4%, joint K = 4%, joint G = 4%, joint H = 4%, joint F = 4%, joint I = 4%, joint B = 4%, joint L = 4%
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 260 lb uplift at joint E.
  - 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

Job 20032323	Truss A8	Truss Type ROOF TRUSS	Qty 2	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber

8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:06 2020 Page 1

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-0-10-8	7-2-0	8-7-1	14-4-0
0-10-8	7-2-0	1-5-1	5-8-15

Scale = 1:66.9

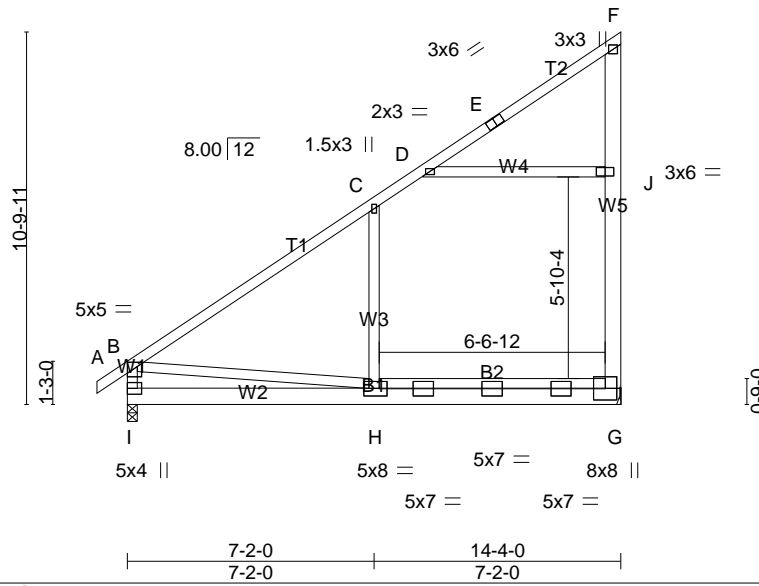


Plate Offsets (X,Y)-- [B:0-1-8,0-1-8], [H:0-1-12,0-2-8]

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.96	Vert(LL) 0.34 H-I >499 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.83	Vert(CT) -0.56 H-I >301 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.68	Horz(CT) 0.01 G n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MSH	Attic -0.31 G-H 537 360		
				Weight: 121 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 \*Except\*  
B1: 2x6 SP No.1  
WEBS 2x4 SP No.3 \*Except\*  
W5: 2x6 SP No.1

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 7-3-1 oc bracing.

**REACTIONS.** (lb/size) G=608/Mechanical, I=639/0-3-8  
Max Horz I=370(LC 10)  
Max Uplift G=-215(LC 10)  
Max Grav G=964(LC 18), I=702(LC 18)

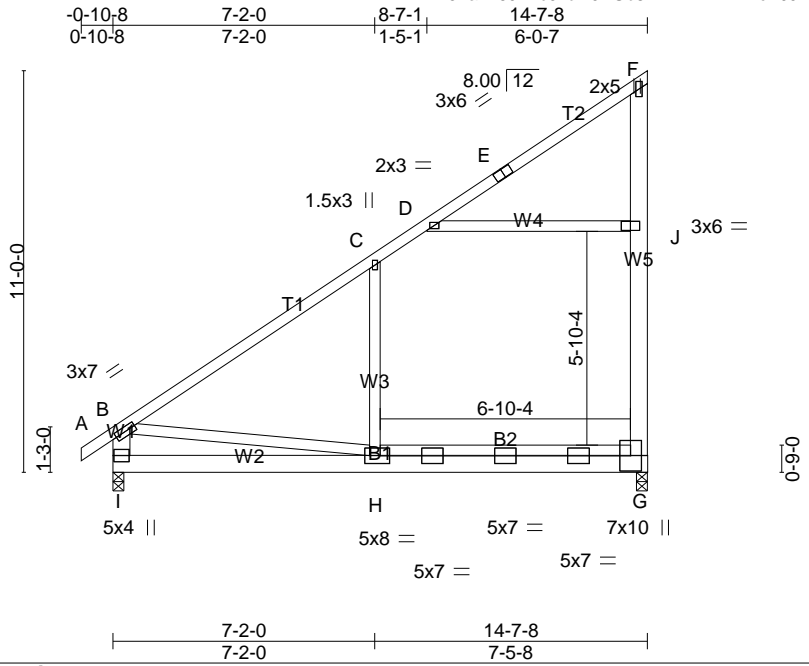
**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=0/34, B-C=-523/134, C-D=-288/42, D-E=-291/433, E-F=-278/471, G-J=-413/213, F-J=-385/229, B-I=-447/0  
BOT CHORD H-I=-884/1096, G-H=-230/384  
WEBS C-H=-220/227, B-H=-718/660, D-J=-635/178

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for 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) Ceiling dead load (5.0 psf) on member(s). C-D, D-J
  - 5) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. G-H
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 215 lb uplift at joint G.
  - 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 8) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

**LOAD CASE(S)** Standard

Job 20032323	Truss A9	Truss Type ROOF TRUSS	Qty 1	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber  
 ID:XTYJZa1n607AuJzbMJwUb8z?rWV-WxFvzck9JkH1FY1VfG3Sy72I8N4GEzDqalkx6JzWVNN  
 8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:06 2020 Page 1



Scale = 1:63.1

Plate Offsets (X,Y)-- [B:0-1-12,0-1-8], [H:0-1-8,0-2-8]

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.87	Vert(LL) 0.35 H-I >493 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.86	Vert(CT) -0.57 H-I >296 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.71	Horz(CT) 0.01 G n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MSH	Attic -0.32 G-H 542 360		
				Weight: 124 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2 \*Except\*  
 B1: 2x6 SP No.1  
 WEBS 2x4 SP No.3 \*Except\*  
 W5: 2x6 SP No.1, W1: 2x6 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 7-1-11 oc bracing.

**REACTIONS.** (lb/size) G=618/0-3-8, I=654/0-3-8  
 Max Horz I=376(LC 10)  
 Max Uplift G=219(LC 10)  
 Max Grav G=985(LC 18), I=723(LC 18)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=0/37, B-C=-536/131, C-D=-301/39, D-E=-298/431, E-F=-284/472, G-J=-424/220, F-J=-395/237, B-I=-451/0  
 BOT CHORD H-I=-905/1163, G-H=-235/393  
 WEBS C-H=-219/225, B-H=-778/677, D-J=-638/180

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for 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) Ceiling dead load (5.0 psf) on member(s). C-D, D-J
  - 5) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. G-H
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 219 lb uplift at joint G.
  - 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 8) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

**LOAD CASE(S)** Standard

Job 20032323	Truss A10	Truss Type ROOF TRUSS	Qty 2	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber  
 8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:07 2020 Page 1  
 ID:XTYJZa1n607AuJzbMJwUb8z?rWV-7pHByLn41PuticiDzahVKbTnTVzOdozPTVeizWVNM

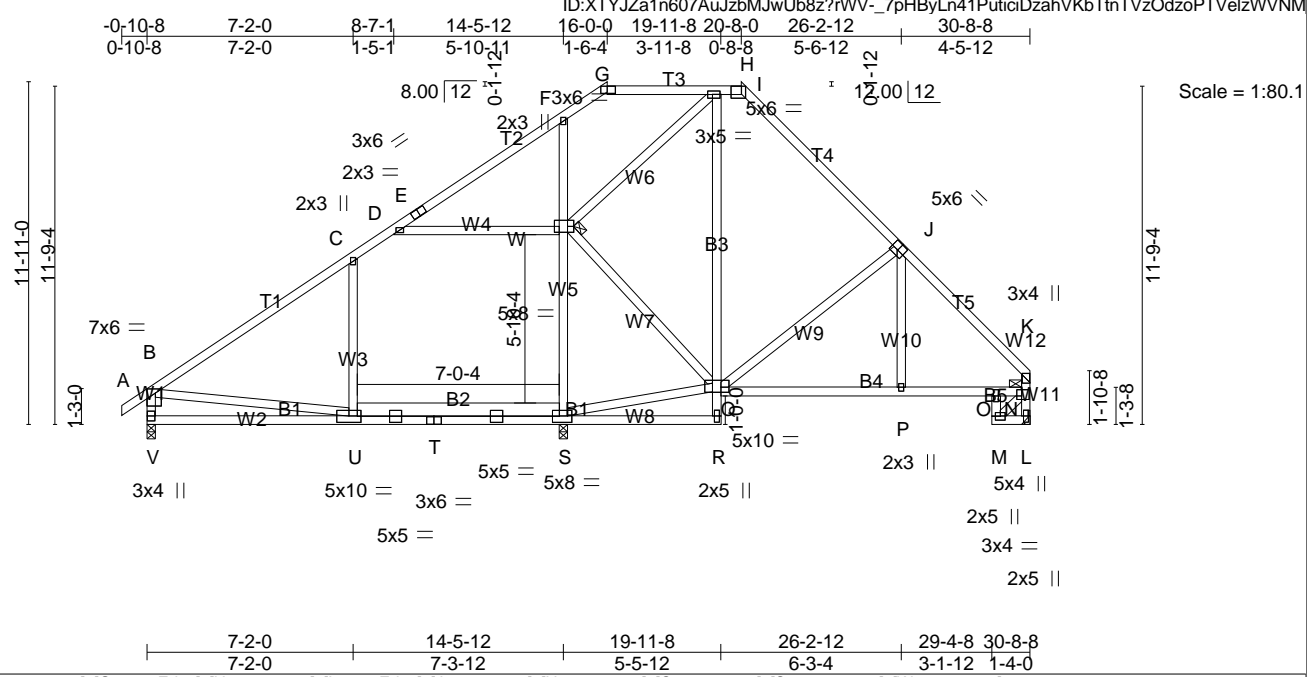


Plate Offsets (X,Y)-- [B:0-2-8,0-1-12], [G:0-3-6,Edge], [H:0-2-0,0-1-8], [I:0-4-4,Edge], [J:0-3-0,0-3-0], [N:0-2-8,0-2-0], [Q:0-3-4,0-2-0], [S:0-1-12,0-2-8], [W:0-2-8,0-2-8]

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc)	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.87	Vert(LL) -0.19 U >899 L/d 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.67	Vert(CT) -0.35 U-V >485 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.89	Horz(CT) 0.02 L n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MSH	Attic -0.10 S-U 919 360		
				Weight: 235 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): G-I.
BOT CHORD 2x4 SP No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except*	JOINTS 1 Brace at Jt(s): N, W
W1,W12: 2x4 SP No.2	

**REACTIONS.** (lb/size) V=899/0-3-8, L=860/Mechanical, S=809/0-3-8  
 Max Horz V=315(LC 7)  
 Max Uplift V=-114(LC 10), L=-51(LC 10), S=-42(LC 11)  
 Max Grav V=1057(LC 18), L=860(LC 1), S=864(LC 2)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=0/34, B-C=-1154/142, C-D=-826/202, D-E=-128/221, E-F=-106/363, F-G=-27/165, G-H=0/221, H-I=-501/251, I-J=-741/248, J-K=-965/169,  
 B-V=-964/182, L-N=-856/133, K-N=-751/145  
 BOT CHORD U-V=-347/671, T-U=-172/1018, S-T=-172/1018, R-S=-63/0, Q-R=-3/73, H-Q=-219/852, P-Q=0/625, O-P=0/625, N-O=0/718, M-O=-106/9,  
 L-M=-222/7  
 WEBS C-U=0/333, S-W=-750/174, F-W=-450/195, Q-S=-167/1102, Q-W=-701/299, J-Q=-331/229, B-U=0/491, D-W=-1143/361, H-W=-917/257,  
 M-N=-1/178, J-P=0/189

- 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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Ceiling dead load (5.0 psf) on member(s). C-D, D-W
  - 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. S-U
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 114 lb uplift at joint V, 51 lb uplift at joint L and 42 lb uplift at joint S.
  - 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 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.

**LOAD CASE(S)** Standard

Job 20032323	Truss A11	Truss Type ROOF TRUSS	Qty 2	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber  
 8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:08 2020 Page 1

ID:XYTJZa1n607AuJzbMJwUb8z?rWV-SKngOIMPrLXIVsBumh5w1Y7fRBmndiq4613D2ACzWVNL  
 -0-10-8 7-2-0 8-7-1 14-5-12 16-0-0 20-8-0 26-0-14 31-0-0 31-10-8  
 0-10-8 7-2-0 1-5-1 5-10-11 1-6-4 4-8-0 5-4-14 4-11-2 0-10-8

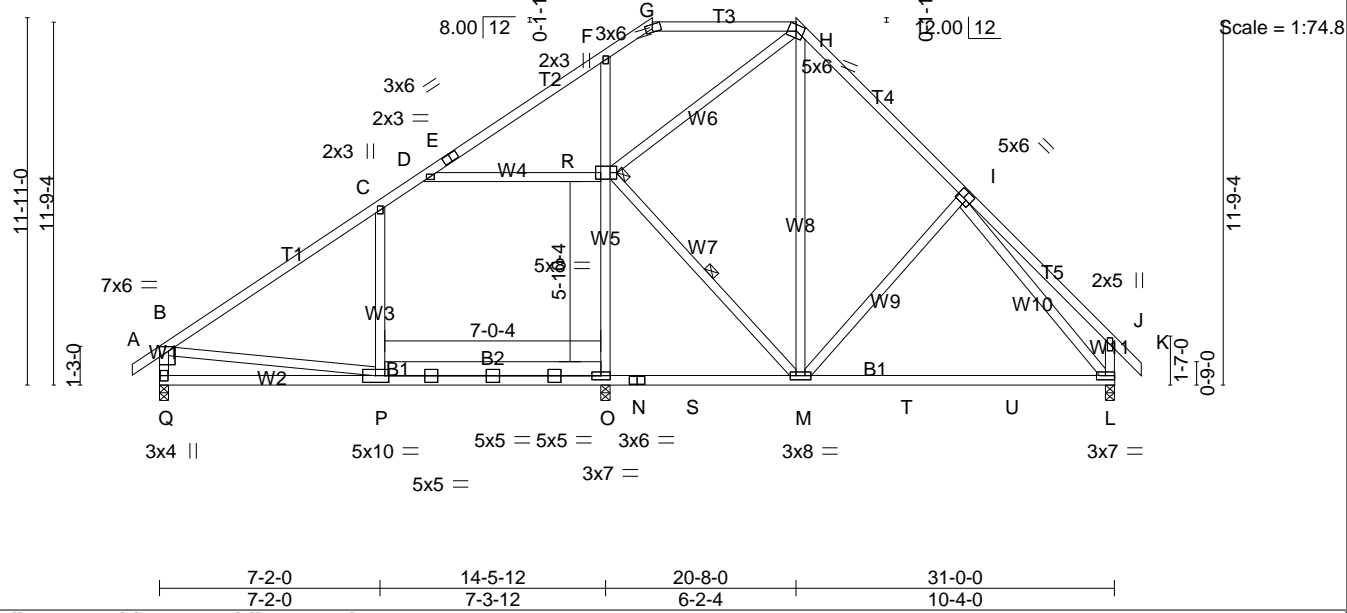


Plate Offsets (X,Y)-- [B:0-2-8,0-1-12], [I:0-2-12,0-3-0], [R:0-2-8,0-2-8]

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.82	Vert(LL) -0.28 L-M >714 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.87	Vert(CT) -0.51 L-M >384 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.94	Horz(CT) 0.03 L n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MSH	Attic -0.08 O-P 1094 360		Weight: 233 lb FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.1 \*Except\*  
 B2: 2x6 SP No.2  
 WEBS 2x4 SP No.3 \*Except\*  
 W1: 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): G-H.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt M-R  
 JOINTS 1 Brace at Jt(s): R

**REACTIONS.** (lb/size) Q=1068/0-3-8, O=507/0-3-8, L=1079/0-3-8  
 Max Horz Q=320(LC 9)  
 Max Uplift Q=112(LC 10), O=111(LC 11), L=52(LC 10)  
 Max Grav Q=1219(LC 18), O=728(LC 19), L=1123(LC 2)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=0/34, B-C=-1400/155, C-D=-1082/217, D-E=-250/140, E-F=-224/177, F-G=-200/142, G-H=-144/130, H-I=-966/281, I-J=-374/199, J-K=0/43, B-Q=-1127/190, J-L=-396/218  
 BOT CHORD P-Q=-332/673, O-P=-196/1238, N-O=-193/1238, N-S=-193/1238, M-S=-193/1238, M-T=-7/689, T-U=-7/689, L-U=-7/689  
 WEBS C-P=0/320, O-R=-353/173, F-R=-309/186, M-R=-831/301, H-M=-200/856, I-M=-250/281, B-P=0/688, I-L=-852/74, D-R=-1152/359, H-R=-752/245

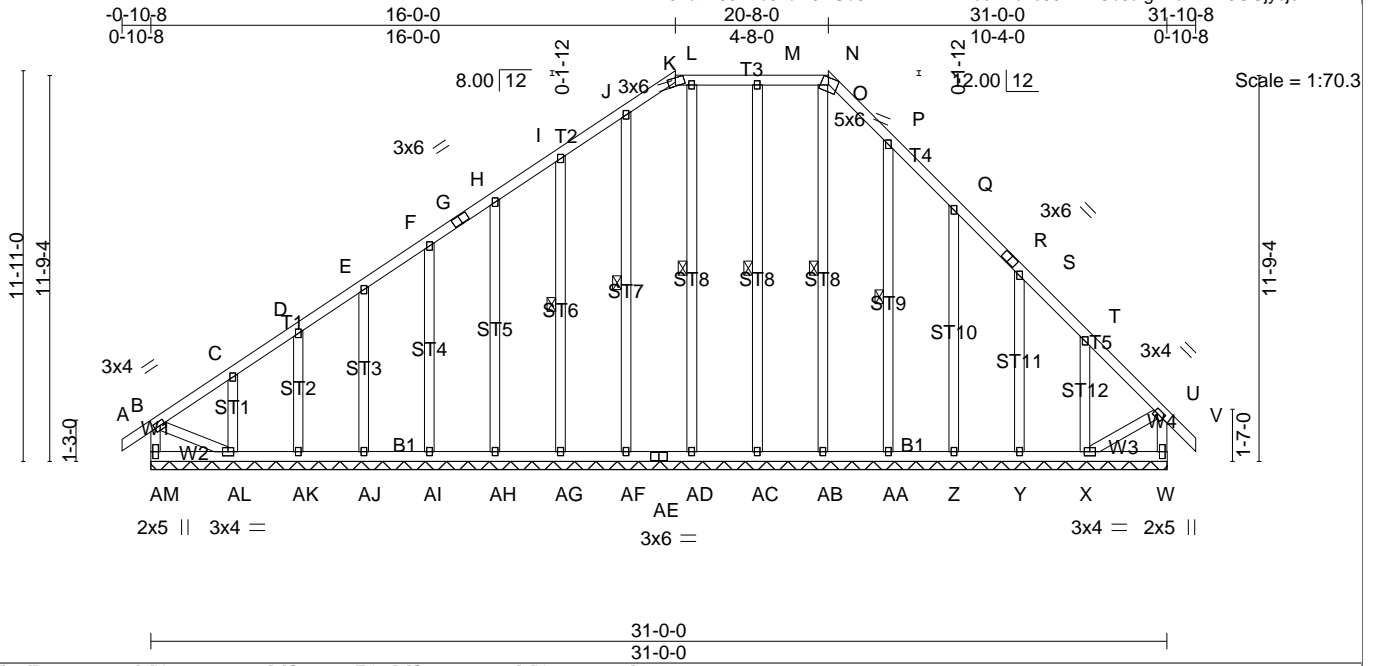
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Ceiling dead load (5.0 psf) on member(s). C-D, D-R
  - 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. O-P
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 112 lb uplift at joint Q, 111 lb uplift at joint O and 52 lb uplift at joint L.
  - 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 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.

**LOAD CASE(S)** Standard

Job 20032323	Truss A12	Truss Type Piggyback Base Supported Gable	Qty 1	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber

8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:09 2020 Page 1  
ID:XTYJZa1n607AuJzbMJwUb8z?rWV-wWx2ceN1cfc60m4K0c9alg?ValRRTOGGjycjezVWVNK



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	V	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	-0.00	V	n/r	90		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.19	Horz(CT)	0.01	X	n/a	n/a		
BCDL 10.0	Code IRC2015/TP12014		Matrix-SH							

Weight: 272 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): K-O.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* W4: 2x4 SP No.2	WEBS 1 Row at midpt J-AF, I-AG, L-AD, M-AC, N-AB, P-AA
OTHERS 2x4 SP No.3	

**REACTIONS.** (lb/size) AM=174/31-0-0, W=182/31-0-0, AF=155/31-0-0, AG=161/31-0-0, AH=160/31-0-0, AI=160/31-0-0, AJ=161/31-0-0, AK=155/31-0-0, AL=171/31-0-0, AD=152/31-0-0, AC=163/31-0-0, AB=141/31-0-0, AA=159/31-0-0, Z=162/31-0-0, Y=155/31-0-0, X=169/31-0-0  
 Max Horz AM=320(LC 9)  
 Max Uplift AM=114(LC 6), W=54(LC 7), AF=22(LC 10), AG=72(LC 10), AH=63(LC 10), AI=64(LC 10), AJ=64(LC 10), AK=61(LC 10), AL=180(LC 10), AD=11(LC 7), AC=42(LC 6), AA=80(LC 11), Z=114(LC 11), Y=103(LC 11), X=239(LC 11)  
 Max Grav AM=258(LC 18), W=255(LC 20), AF=171(LC 17), AG=171(LC 17), AH=170(LC 17), AI=170(LC 17), AJ=172(LC 17), AK=163(LC 17), AL=252(LC 17), AD=168(LC 20), AC=167(LC 22), AB=173(LC 20), AA=178(LC 18), Z=185(LC 18), Y=176(LC 18), X=249(LC 18)

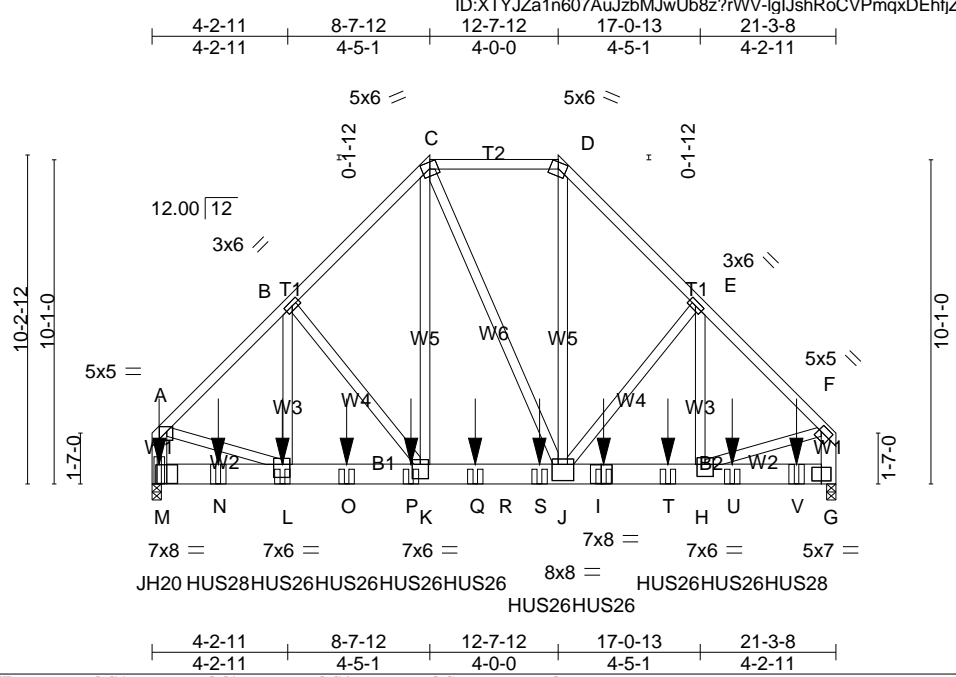
**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD B-AM=235/124, A-B=0/34, B-C=258/207, C-D=193/179, D-E=164/158, E-F=147/144, F-G=130/133, G-H=118/140, H-I=134/173, I-J=188/230, J-K=-210/254, K-L=-187/232, L-M=-191/239, M-N=-191/239, N-O=-183/226, O-P=-238/287, P-Q=-171/210, Q-R=66/101, R-S=-79/85, S-T=-110/71, T-U=-212/135, U-V=0/43, U-W=-233/113  
 BOT CHORD AL-AM=-298/300, AK-AL=-133/230, AJ-AK=-133/230, AI-AJ=-133/230, AH-AI=-133/230, AG-AH=-133/230, AF-AG=-133/230, AE-AF=-133/230, AD-AE=-133/230, AC-AD=-133/230, AB-AC=-133/230, AA-AB=-133/230, Z-AA=-133/230, Y-Z=-133/230, X-Y=-133/230, W-X=-15/35  
 WEBS J-AF=-131/46, I-AG=-137/96, H-AH=-130/87, F-AI=-130/88, E-AJ=-131/88, D-AK=-127/85, C-AL=-150/99, L-AD=-128/35, M-AC=-127/71, N-AB=-137/72, P-AA=-138/104, Q-Z=-169/138, S-Y=-152/126, T-X=-190/143, B-AL=-203/266, U-X=-157/244

- 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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Truss designed for wind loads in the plane of the truss only.
  - 4) Provide adequate drainage to prevent water ponding.
  - 5) All plates are 2x3 MT20 unless otherwise indicated.
  - 6) Gable requires continuous bottom chord bearing.
  - 7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 8) Gable studs spaced at 2-0-0 oc.
  - 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 10) \* 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.
  - 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 114 lb uplift at joint AM, 54 lb uplift at joint W, 22 lb uplift at joint AF, 72 lb uplift at joint AG, 63 lb uplift at joint AH, 64 lb uplift at joint AI, 64 lb uplift at joint AJ, 61 lb uplift at joint AK, 180 lb uplift at joint AL, 11 lb uplift at joint AD, 42 lb uplift at joint AC, 80 lb uplift at joint AA, 114 lb uplift at joint Z, 103 lb uplift at joint Y and 239 lb uplift at joint X.
  - 12) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TP1.
  - 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

Job 20032323	Truss B1	Truss Type Piggyback Base Girder	Qty 1	Ply 3	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber  
 8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:15 2020 Page 1  
 ID:XTYJZa1n607AuJzbMJwUb8z?rVW-lglJshRoCVmQxDHfjZq0wz8?Flr2m8eePwwizVWNE



Scale = 1:71.7

Plate Offsets (X,Y)-- [A:0-2-12,0-1-12], [F:0-1-0,0-2-4], [H:0-3-0,0-4-8], [J:0-4-0,0-6-0], [K:0-3-0,0-5-4], [L:0-2-8,0-4-12]

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFLL</b> in (loc)	<b>L/defl</b>	<b>L/d</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.34	Vert(LL) -0.07	K-L >999	240	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.46	Vert(CT) -0.11	K-L >999	180		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.75	Horz(CT) 0.02	G n/a	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-MSH					
	Code IRC2015/TP12014						
						Weight: 602 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x8 SP No.1  
 WEBS 2x4 SP No.3 \*Except\*  
 W1: 2x6 SP No.2

**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.); C-D.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) M=8032/0-3-8, G=7248/0-3-8  
 Max Horz M=254(LC 5)  
 Max Uplift M=304(LC 8), G=290(LC 9)  
 Max Grav M=10257(LC 2), G=9026(LC 2)

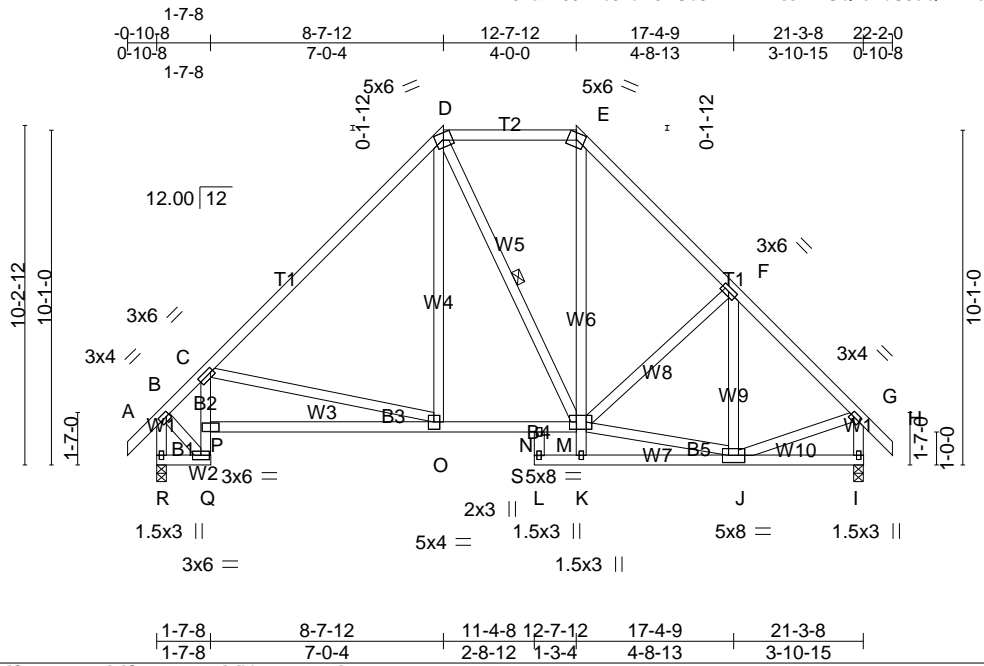
**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=-8238/280, B-C=-7051/339, C-D=-4936/304, D-E=-7076/349, E-F=-8062/294, A-M=-7571/249, F-G=-7381/260  
 BOT CHORD M-N=-255/593, L-N=-255/593, L-O=-279/5769, O-P=-279/5769, K-P=-279/5769, K-Q=-201/4904, Q-R=-201/4904, R-S=-201/4904, J-S=-201/4904, I-J=-140/5643, I-T=-140/5643, H-T=-140/5643, H-U=-53/673, U-V=-53/673, G-V=-53/673  
 WEBS B-L=-49/1706, B-K=-1277/217, C-K=-197/4615, C-J=-122/200, D-J=-199/4694, E-J=-1025/221, E-H=-64/1364, A-L=-114/5445, F-H=-122/5228

- NOTES-**
- 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-4-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Bearing at joint(s) M, G considers parallel to grain value using ANSI/TP1 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 304 lb uplift at joint M and 290 lb uplift at joint G.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TP1 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Use USP JH20 (With 14-10d nails into Girder & 6-10d nails into Truss) or equivalent at 0-2-12 from the left end to connect truss(es) A1 (1 ply 2x10 SP) to back face of bottom chord.
  - Use USP HUS28 (With 22-16d nails into Girder & 8-16d nails into Truss) or equivalent spaced at 18-0-0 oc max. starting at 2-0-12 from the left end to 20-0-12 to connect truss(es) A1A (1 ply 2x10 SP), A2 (1 ply 2x10 SP) to back face of bottom chord.
  - Use USP HUS26 (With 14-16d nails into Girder & 6-16d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 4-0-12 from the left end to 18-0-12 to connect truss(es) A1A (1 ply 2x10 SP), A1 (1 ply 2x10 SP), A2 (1 ply 2x10 SP) to back face of bottom chord.
  - 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: A-C=-60, C-D=-60, D-F=-60, G-M=-20  
 Concentrated Loads (lb)  
 Vert: I=-1227(B) L=-1239(B) M=-1261(B) N=-1239(B) O=-1239(B) P=-1239(B) Q=-1239(B) S=-1249(B) T=-1227(B) U=-1227(B) V=-1227(B)

Job 20032323	Truss B2	Truss Type Piggyback Base	Qty 1	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber  
 8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:16 2020 Page 1  
 ID:XTYJZa1n607AuJzbMJwUb8z?rWV-Dssh41SQzoXdS5oQEMeMET34PWLaaXtl9TTkzWVND



Scale = 1:69.4

Plate Offsets (X,Y)-- [B:0-1-4,0-1-8], [C:0-1-0,0-1-8], [G:0-1-4,0-1-8], [M:0-2-8,0-2-8]

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.65	Vert(LL) -0.08 O-P >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.82	Vert(CT) -0.17 O-P >999 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.44	Horz(CT) 0.08 I n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MSH			
				Weight: 170 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-6-8 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): D-E.
BOT CHORD 2x4 SP No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
B4: 2x4 SP No.3	WEBS 1 Row at midpt D-M
WEBS 2x4 SP No.3	

**REACTIONS.** (lb/size) R=901/0-3-8, I=901/0-3-8  
 Max Horz R=-283(LC 8)  
 Max Uplift R=-77(LC 10), I=-77(LC 11)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=0/43, B-C=-628/141, C-D=-878/210, D-E=-525/240, E-F=-784/249, F-G=-802/188, G-H=0/43, B-R=-989/195, G-I=-870/197  
 BOT CHORD Q-R=-264/250, P-Q=-363/112, C-P=-305/151, O-P=-348/1003, O-S=-86/570, N-S=-86/570, M-N=-92/548, L-N=-25/0, K-L=-5/53, J-K=0/79, I-J=-18/31  
 WEBS C-O=-443/393, D-O=-17/315, D-M=-158/121, K-M=0/157, E-M=-84/308, F-M=-193/199, F-J=-198/48, B-Q=-152/666, G-J=0/533, J-M=0/466

- 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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 77 lb uplift at joint R and 77 lb uplift at joint I.
  - 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard



Job 20032323	Truss B2A	Truss Type PIGGYBACK BASE	Qty 3	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber ID:XTYJZa1n607AuJzbMJwUb8z?rWV-h2Q3HNT2k6fU4ENdo4l1vR?KEpqLJODR6yv1?AzWVNC 8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:17 2020 Page 1

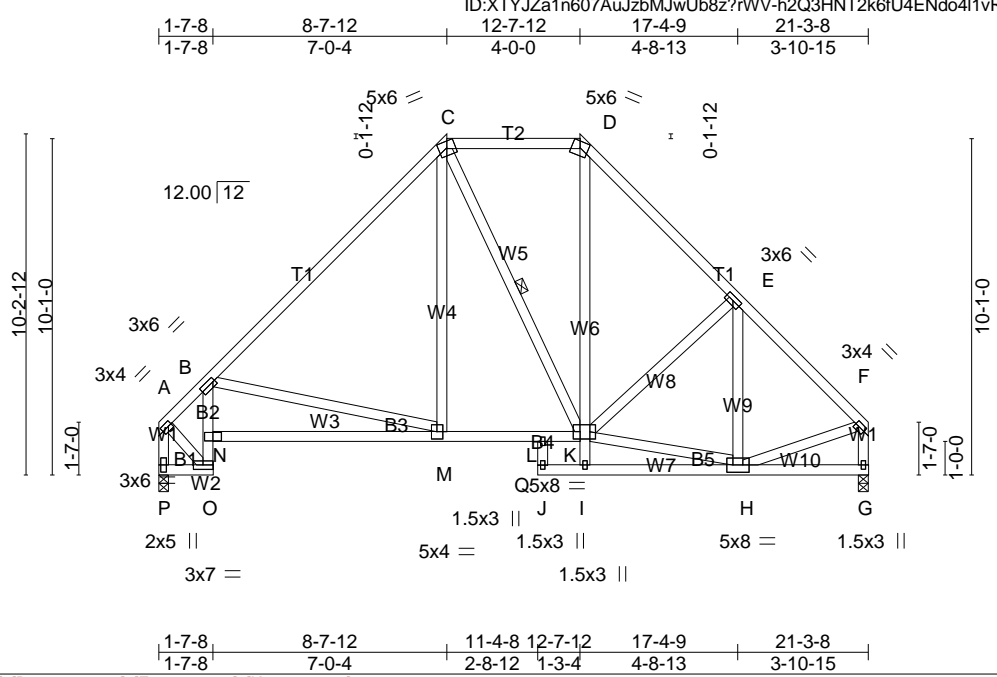


Plate Offsets (X,Y)-- [A:0-1-4,0-1-8], [B:0-0-12,0-1-8], [F:0-1-4,0-1-8], [K:0-2-8,0-2-8]

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.30	Vert(LL) -0.08 M-N >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.83	Vert(CT) -0.17 M-N >999 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.43	Horz(CT) 0.08 G n/a n/a		
BCDL 10.0	Code IRC2015/TP12014	Matrix-MSH			
				Weight: 166 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP SS *Except* T2: 2x4 SP No.2	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.): C-D.
BOT CHORD 2x4 SP No.2 *Except* B4: 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt C-K

**REACTIONS.** (lb/size) P=840/0-3-8, G=840/0-3-8  
Max Horz P=258(LC 9)  
Max Uplift P=56(LC 10), G=56(LC 11)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=-639/126, B-C=-882/215, C-D=-524/243, D-E=-790/255, E-F=-807/174, A-P=-931/162, F-G=-809/152  
BOT CHORD O-P=-242/241, N-O=-361/131, B-N=-304/171, M-N=-354/992, M-Q=-96/559, L-Q=-96/559, K-L=-102/537, J-L=-25/0, I-J=-5/53, H-I=0/78, G-H=-23/28  
WEBS B-M=-440/389, C-M=-18/315, C-K=-156/120, I-K=0/157, D-K=-84/308, E-K=-200/195, E-H=-200/71, A-O=-194/667, F-H=-22/535, H-K=-26/474

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - The Fabrication Tolerance at joint A = 4%, joint C = 4%, joint D = 4%, joint F = 4%, joint P = 4%, joint B = 4%, joint N = 4%, joint L = 4%, joint J = 4%, joint G = 4%, joint M = 4%, joint I = 4%, joint K = 4%, joint E = 4%, joint H = 4%, joint O = 4%
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 56 lb uplift at joint P and 56 lb uplift at joint G.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

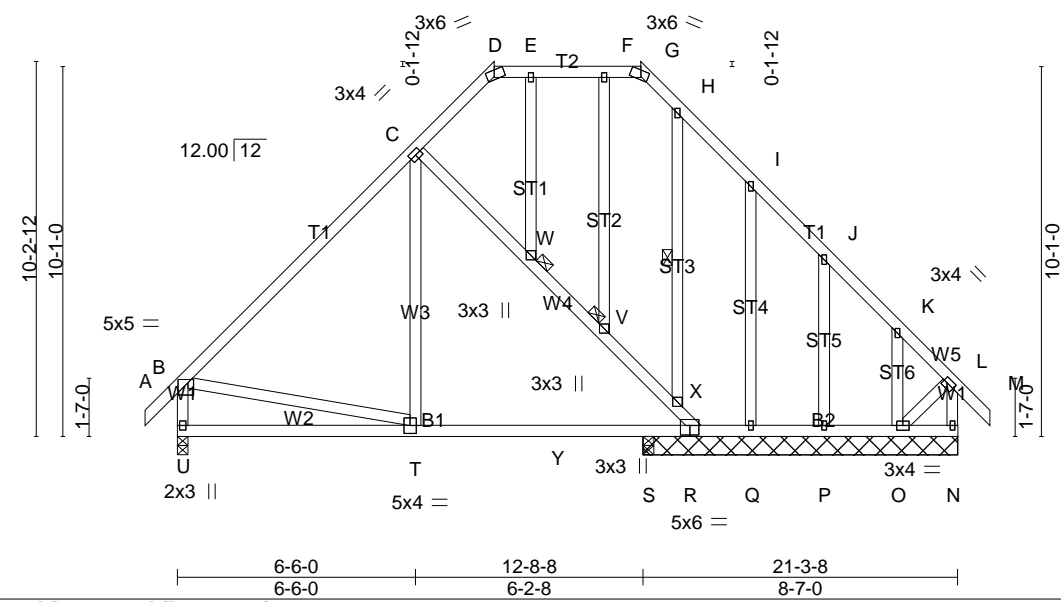
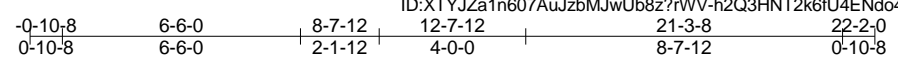


Plate Offsets (X,Y)-- [B:0-3-4,0-1-0], [L:0-1-4,0-1-8], [R:0-3-0,0-3-0]

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.42	Vert(LL) -0.06 S-T >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.35	Vert(CT) -0.08 S-T >999 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.17	Horz(CT) -0.01 N n/a n/a		
BCDL 10.0	Code IRC2015/TP12014	Matrix-MSH			Weight: 171 lb FT = 20%

<b>LUMBER-</b> TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3 *Except* W1: 2x4 SP No.2 OTHERS 2x4 SP No.3	<b>BRACING-</b> 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.); D-G. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 6-0-0 oc bracing: N-O. WEBS 1 Row at midpt H-X JOINTS 1 Brace at Jt(s): V, W
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**REACTIONS.** (lb/size) U=683/0-3-8, N=371/8-7-0, R=278/8-7-0, Q=163/8-7-0, P=161/8-7-0, O=14/8-7-0, S=133/0-3-0  
 Max Horz U=283(LC 8)  
 Max Uplift N=175(LC 9), R=255(LC 10), Q=112(LC 11), P=109(LC 11), O=363(LC 11)  
 Max Grav U=683(LC 1), N=524(LC 20), R=286(LC 17), Q=203(LC 18), P=181(LC 18), O=251(LC 9), S=272(LC 16)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=0/43, B-C=602/57, C-D=264/111, D-E=-144/91, E-F=-145/91, F-G=-145/91, G-H=-217/104, H-I=-246/82, I-J=-252/97, J-K=-310/182, K-L=-367/263, L-M=0/43, B-U=625/88, L-N=-509/335  
 BOT CHORD T-U=-295/374, T-Y=-141/423, S-Y=-141/423, R-S=-141/423, Q-R=-210/341, P-Q=-210/341, O-P=-210/341, N-O=-24/45  
 WEBS C-W=-421/235, V-W=-416/226, V-X=-444/243, R-X=-537/286, C-T=0/248, B-T=-106/342, F-V=-43/25, E-W=-18/19, H-X=-135/92, I-Q=-160/141, J-P=-164/133, K-O=-155/108, L-O=-267/403

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only.
  - Provide adequate drainage to prevent water ponding.
  - All plates are 1.5x3 MT20 unless otherwise indicated.
  - The Fabrication Tolerance at joint D = 4%, joint G = 4%, joint U = 4%, joint B = 4%, joint N = 4%, joint L = 4%, joint R = 4%, joint C = 4%, joint T = 4%, joint V = 4%, joint F = 4%, joint W = 4%, joint E = 4%, joint X = 4%, joint H = 4%, joint Q = 4%, joint I = 4%, joint P = 4%, joint J = 4%, joint O = 4%, joint K = 4%
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 175 lb uplift at joint N, 255 lb uplift at joint R, 112 lb uplift at joint Q, 109 lb uplift at joint P and 363 lb uplift at joint O.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TP1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

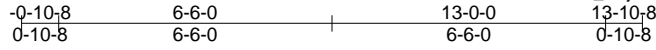
**LOAD CASE(S)** Standard

Job 20032323	Truss B4	Truss Type Common Supported Gable	Qty 1	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber

8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:18 2020 Page 1

ID:XTYJZa1n607AuJzbMJwUb8z?rVVV-9F\_SvjUhUqnLiOypMnGGRfYV9DLO2XAbKceaXczVVNB



3x6 =

Scale = 1:54.8

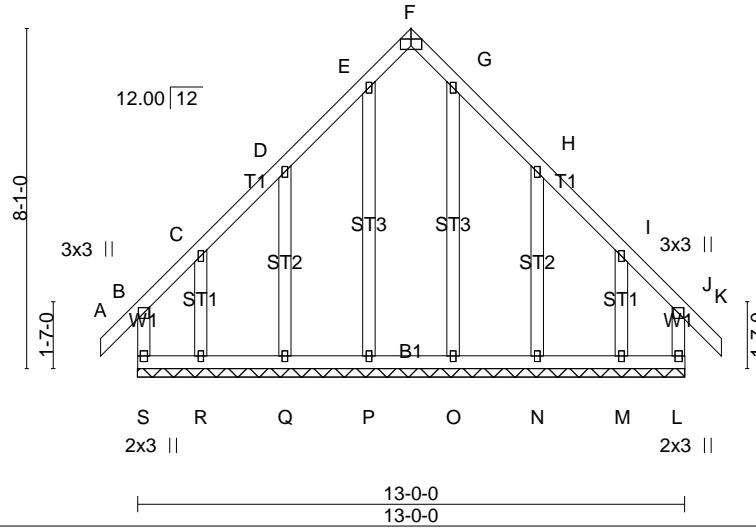


Plate Offsets (X,Y)-- [F:0-3-0,Edge]

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.23	Vert(LL) -0.00 K n/r 120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.14	Vert(CT) -0.00 K n/r 90		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.13	Horz(CT) 0.00 L n/a n/a		
BCDL 10.0	Code IRC2015/TP12014	Matrix-R		Weight: 95 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) S=127/13-0-0, L=127/13-0-0, P=159/13-0-0, Q=167/13-0-0, R=117/13-0-0, O=159/13-0-0, N=167/13-0-0, M=117/13-0-0  
Max Horz S=232(LC 9)  
Max Uplift S=152(LC 6), L=141(LC 7), Q=134(LC 10), R=216(LC 10), N=135(LC 11), M=214(LC 11)  
Max Grav S=233(LC 18), L=224(LC 17), P=196(LC 20), Q=175(LC 17), R=256(LC 8), O=194(LC 19), N=177(LC 18), M=248(LC 9)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD B-S=-175/112, A-B=0/43, B-C=-160/153, C-D=-89/106, D-E=-172/256, E-F=-124/160, F-G=-124/160, G-H=-172/256, H-I=-81/106, I-J=-150/143, J-K=0/43, J-L=-168/103  
BOT CHORD R-S=-121/129, Q-R=-121/129, P-Q=-121/129, O-P=-121/129, N-O=-121/129, M-N=-121/129, L-M=-121/129  
WEBS E-P=-155/27, D-Q=-205/190, C-R=-178/165, G-O=-153/27, H-N=-205/190, I-M=-178/164

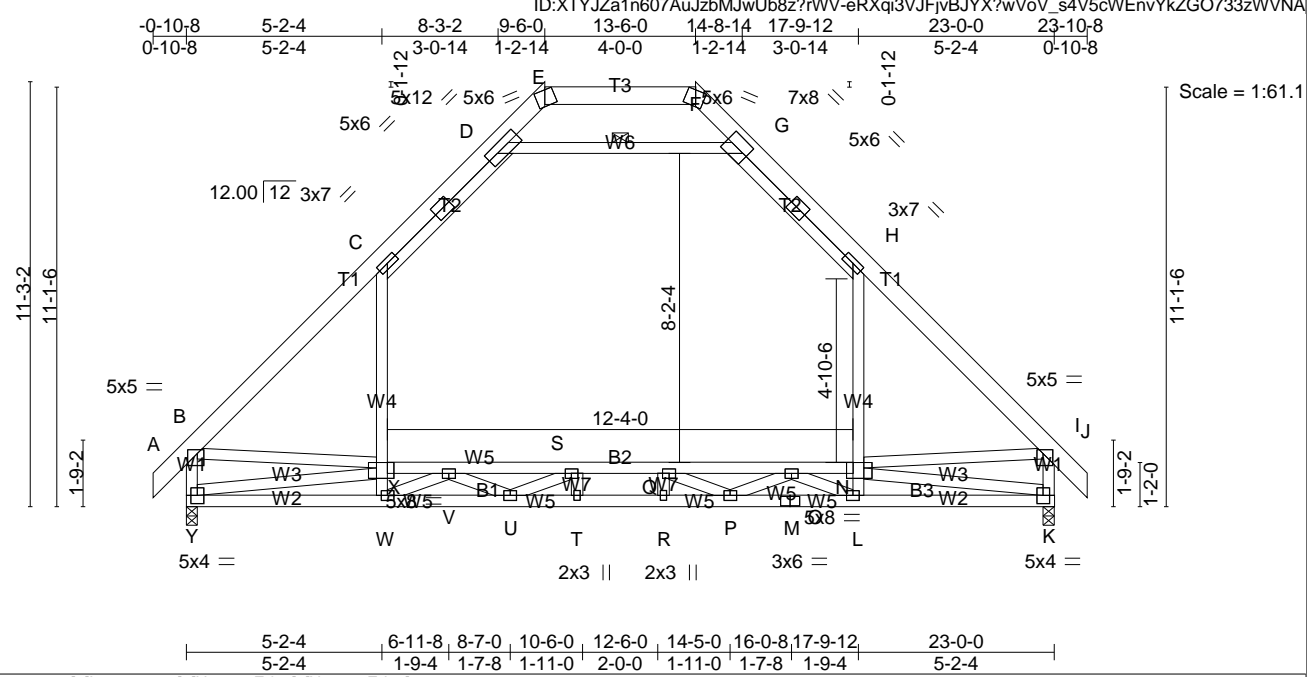
**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only.
- All plates are 1.5x3 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 152 lb uplift at joint S, 141 lb uplift at joint L, 134 lb uplift at joint Q, 216 lb uplift at joint R, 135 lb uplift at joint N and 214 lb uplift at joint M.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job 20032323	Truss C1	Truss Type PIGGYBACK BASE	Qty 1	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber  
 8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:19 2020 Page 1  
 ID:XTYJZa1n607AuJzbMJwUb8z?rWV-eRXqi3VJFivBJYX?wVoV\_s4V5cWEnvYkZGO733zVWVNA



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.92	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.87	Vert(LL) -0.22 R-T >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.51	Vert(CT) -0.36 R-T >747 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MSH	Horz(CT) 0.05 K n/a n/a		
	Code IRC2015/TP12014		Attic -0.10 N-X 1412 360	Weight: 223 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1 *Except* T3: 2x6 SP No.2, T2: 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): E-F.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS 2x4 SP No.3 *Except* W4,W6: 2x4 SP No.2	8-0-2 oc bracing: W-Y 9-0-15 oc bracing: K-L. 4-2-0 oc bracing: O-V 6-0-0 oc bracing: V-X, N-O 1 Row at midpt D-G 1 Brace at Jt(s): V, O

**REACTIONS.** (lb/size) Y=1156/0-3-8, K=1156/0-3-8  
 Max Horz Y=-307(LC 8)  
 Max Grav Y=1402(LC 2), K=1402(LC 2)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=0/43, B-C=-1477/6, C-D=-896/173, D-E=-6/526, E-F=0/771, F-G=-0/526, G-H=-896/173, H-I=-1494/6, I-J=0/43, B-Y=-1306/77, I-K=-1313/77  
 BOT CHORD W-Y=-537/870, U-W=-236/1767, T-U=0/2709, R-T=0/2709, P-R=0/2709, M-P=-159/1627, L-M=-159/1627, K-L=-417/729, V-X=-306/905, S-V=-1307/115, Q-S=-1929/0, O-Q=-1350/169, N-O=-440/965  
 WEBS W-X=0/754, C-X=0/709, D-G=-1595/205, L-N=0/754, H-N=0/709, B-X=-5/786, I-N=-18/797, X-Y=-555/326, K-N=-563/381, Q-R=-55/113, S-T=-57/115, V-W=-1446/0, U-V=0/763, S-U=-776/152, L-O=-1446/0, O-P=0/765, P-Q=-774/149

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) All plates are 3x4 MT20 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). C-D, G-H, D-G
  - 8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. V-X, S-V, Q-S, O-Q, N-O
  - 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 11) Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard

Job 20032323	Truss C2	Truss Type PIGGYBACK BASE	Qty 7	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber  
 8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:20 2020 Page 1  
 ID:XTYJZa1n607AuJzbMJwUb8z?rWV-6d5CwOVx0122xi6CTCJkX4dgk0sTWMluow7hcvzVWN9

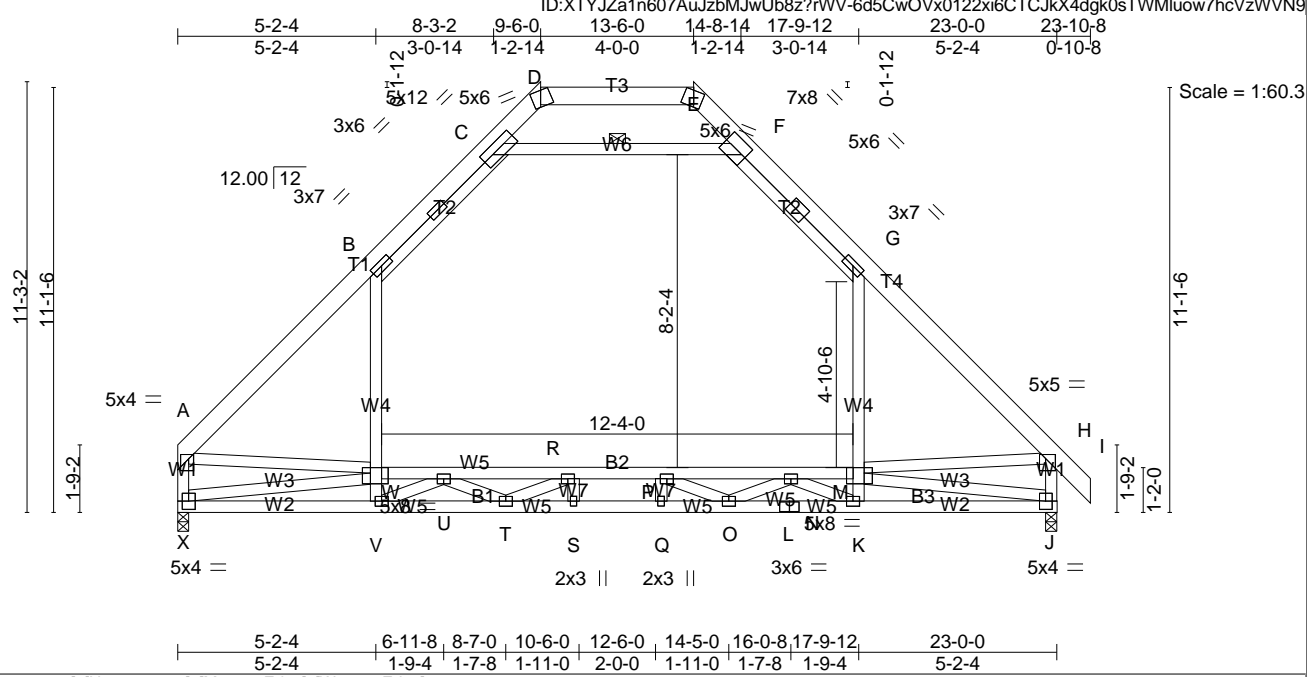


Plate Offsets (X,Y)-- [A:0-2-8,0-1-4], [H:0-3-0,0-1-4], [M:0-5-8,Edge], [W:0-5-8,Edge]

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.93	Vert(LL) -0.22 Q-S >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.87	Vert(CT) -0.37 Q-S >744 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.51	Horz(CT) 0.05 J n/a n/a		
BCDL 10.0	Code IRC2015/TP12014	Matrix-MSH	Attic -0.10 M-W 1412 360		Weight: 220 lb FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1 *Except* T3: 2x6 SP No.2, T2: 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): D-E.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS 2x4 SP No.3 *Except* W4,W6: 2x4 SP No.2	8-0-8 oc bracing: V-X 9-0-15 oc bracing: J-K. 4-2-0 oc bracing: N-U 6-0-0 oc bracing: U-W, M-N 1 Row at midpt C-F 1 Brace at Jt(s): U, N

**REACTIONS.** (lb/size) X=1094/0-3-8, J=1158/0-3-8  
 Max Horz X=-299(LC 6)  
 Max Grav X=1350(LC 2), J=1404(LC 2)

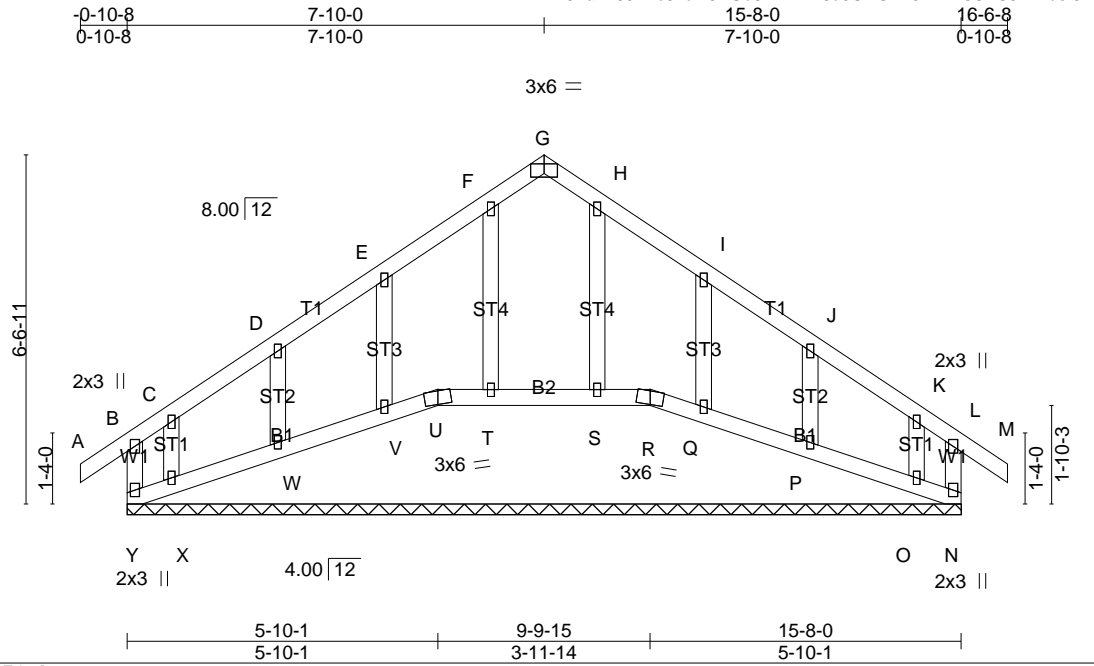
**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=-1473/0, B-C=-898/173, C-D=-8529, D-E=0/776, E-F=-1/530, F-G=-897/172, G-H=-1497/4, H-I=0/43, A-X=-1253/26, H-J=-1316/76  
 BOT CHORD V-X=-533/889, T-V=-232/1785, S-T=0/2712, Q-S=0/2712, O-Q=0/2712, L-O=-159/1622, K-L=-159/1622, J-K=-417/722, U-W=-314/886,  
 R-U=-1313/113, P-R=-1932/0, N-P=-1347/169, M-N=-436/976  
 WEBS V-W=0/753, B-W=0/699, C-F=-1605/206, K-M=0/756, G-M=0/711, A-W=-3/802, H-M=-18/798, W-X=-591/357, J-M=-556/383, P-Q=-55/114,  
 R-S=-58/114, U-V=-1443/0, T-U=0/758, R-T=-768/154, K-N=-1448/0, N-O=0/769, O-P=-781/148

- 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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) All plates are 3x4 MT20 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). B-C, F-G, C-F
  - 8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. U-W, R-U, P-R, N-P, M-N
  - 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 11) Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard

Job 20032323	Truss D1	Truss Type GABLE	Qty 1	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber  
 8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:20 2020 Page 1  
 ID:XTYJZa1n607AuJzbMJwUb8z?rVVV-6d5CwOVx0122xi6CTCJkX4dsf02ZWT9uow7hcVzVWN9



Scale = 1:43.3

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

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.16	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.10	Vert(LL) -0.00 M n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.04	Vert(CT) -0.00 M n/r 90		
BCDL 10.0	Rep Stress Incr YES	Matrix-R	Horz(CT) 0.00 N n/a n/a		
	Code IRC2015/TPI2014			Weight: 86 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 6-0-0 oc bracing.

**REACTIONS.** (lb/size) Y=106/15-8-0, U=9/15-8-0, R=9/15-8-0, N=106/15-8-0, T=158/15-8-0, V=152/15-8-0, W=168/15-8-0, X=84/15-8-0, S=158/15-8-0, Q=152/15-8-0, P=168/15-8-0, O=84/15-8-0  
 Max Horz Y=185(LC 9)  
 Max Uplift Y=199(LC 6), U=20(LC 9), R=22(LC 9), N=117(LC 7), V=95(LC 10), W=53(LC 10), X=189(LC 7), Q=95(LC 11), P=53(LC 11), O=173(LC 11)  
 Max Grav Y=240(LC 18), U=36(LC 6), R=37(LC 6), N=174(LC 17), T=163(LC 20), V=166(LC 17), W=172(LC 17), X=245(LC 8), S=160(LC 19), Q=166(LC 18), P=173(LC 18), O=222(LC 9)

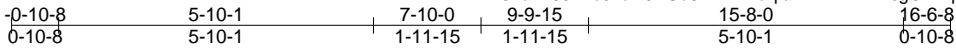
**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=0/34, B-C=-132/123, C-D=-77/80, D-E=-69/106, E-F=-131/184, F-G=-120/153, G-H=-120/153, H-I=-131/184, I-J=-69/106, J-K=-66/68, K-L=-113/102, L-M=0/34, B-Y=-154/102, L-N=-139/84  
 BOT CHORD X-Y=-124/125, W-X=-102/105, V-W=-106/106, U-V=-103/102, T-U=-93/97, S-T=-93/97, R-S=-93/97, Q-R=-103/103, P-Q=-105/105, O-P=-106/107, N-O=-76/80  
 WEBS F-T=-127/1, E-V=-152/118, D-W=-134/83, C-X=-140/126, H-S=-125/0, I-Q=-152/118, J-P=-134/83, K-O=-140/122

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only.
  - All plates are 1.5x3 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 199 lb uplift at joint Y, 20 lb uplift at joint U, 22 lb uplift at joint R, 117 lb uplift at joint N, 95 lb uplift at joint V, 53 lb uplift at joint W, 189 lb uplift at joint X, 95 lb uplift at joint Q, 53 lb uplift at joint P and 173 lb uplift at joint O.
  - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) U, R, T, V, W, X, S, Q, P, O.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job 20032323	Truss D2	Truss Type ROOF SPECIAL	Qty 6	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber ID:XTYJZa1n607AuJzbMJwUb8z?rWV-aqfa7kVZnLAvZsgO1wqz3HAuHQLmFuL11atE8xzWVN8 8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:21 2020 Page 1



Scale = 1:42.7

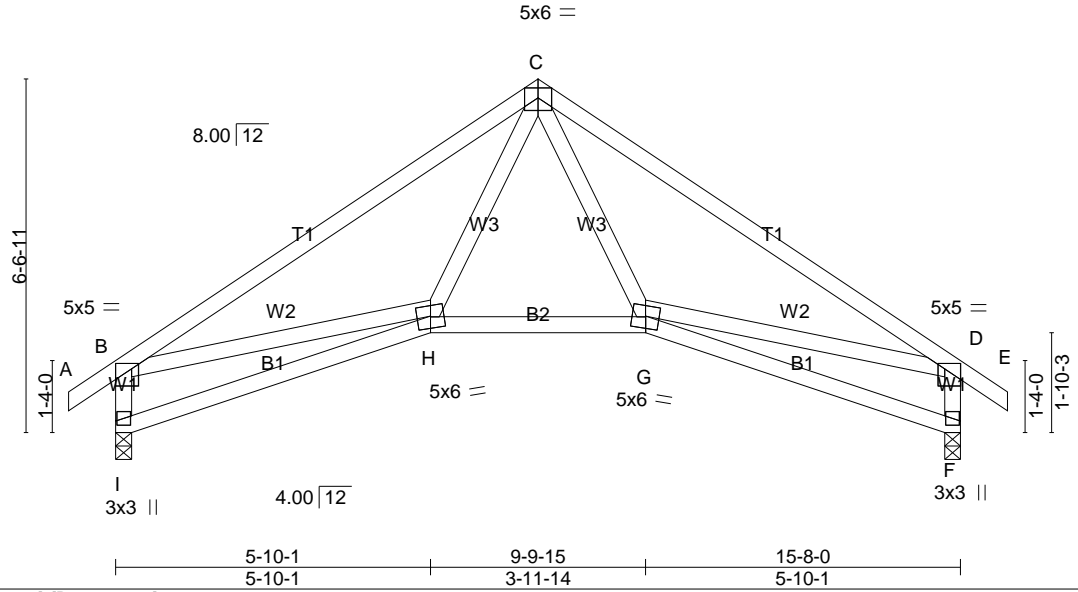


Plate Offsets (X,Y)-- [B:0-1-8,0-1-4], [D:0-1-8,0-1-4]

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.75	Vert(LL) -0.04 F-G >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.29	Vert(CT) -0.09 F-G >999 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.17	Horz(CT) 0.04 F n/a n/a		
BCDL 10.0	Code IRC2015/TP12014	Matrix-MSH		Weight: 89 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
W1: 2x4 SP No.2

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

**REACTIONS.** (lb/size) I=676/0-3-8, F=676/0-3-8  
Max Horz I=-185(LC 8)  
Max Uplift I=-83(LC 10), F=-83(LC 11)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=0/34, B-C=-945/92, C-D=-945/92, D-E=0/34, B-I=-706/217, D-F=-706/217  
BOT CHORD H-I=-260/476, G-H=0/590, F-G=-196/334  
WEBS C-G=0/318, C-H=0/318, B-H=0/426, D-G=-46/511

- 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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) The Fabrication Tolerance at joint C = 4%, joint I = 4%, joint H = 4%, joint G = 4%, joint F = 4%, joint B = 4%, joint D = 4%
  - 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) Bearing at joint(s) I, F considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 83 lb uplift at joint I and 83 lb uplift at joint F.
  - 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job 20032323	Truss D3	Truss Type Roof Special	Qty 3	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber  
 8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:21 2020 Page 1  
 ID:XTYJZa1n607AuJzbMJwUb8z?rWV-aqfa7kWZnLAvZsgO1wqz3HAuPQLmFtu11atE8xzWVN8

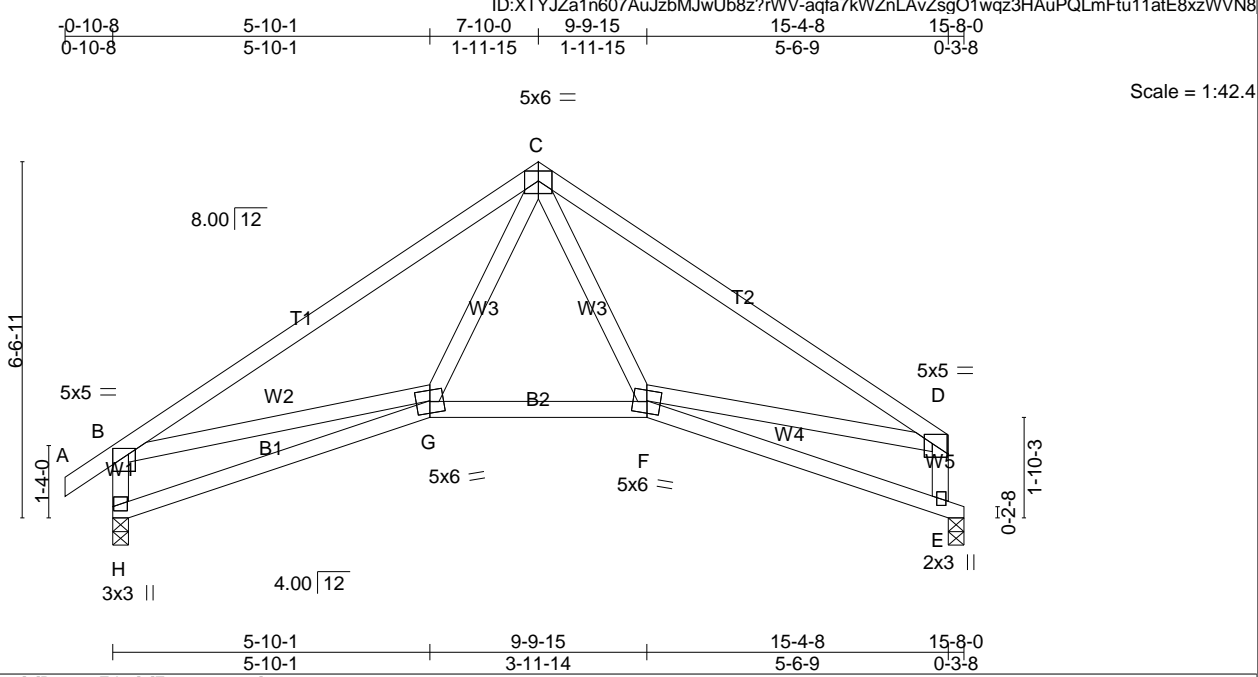


Plate Offsets (X,Y)-- [B:0-1-8,0-1-4], [D:0-3-4,Edge], [E:0-1-8,0-0-12]

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.74	Vert(LL) -0.04 G-H >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.29	Vert(CT) -0.09 G-H >999 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.20	Horz(CT) 0.03 E n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MSH		Weight: 87 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2 \*Except\*  
 T2: 2x4 SP No.1  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3 \*Except\*  
 W1: 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-2-11 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

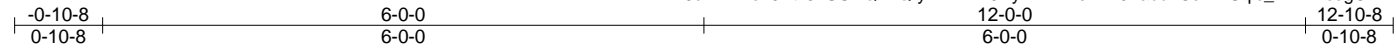
**REACTIONS.** (lb/size) H=667/0-3-8, E=601/0-3-8  
 Max Horz H=181(LC 7)  
 Max Uplift H=-82(LC 10), E=-59(LC 11)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=0/34, B-C=-926/120, C-D=-888/108, B-H=-696/229, D-E=-596/149  
 BOT CHORD G-H=-271/462, F-G=-9/564, E-F=-110/195  
 WEBS C-G=0/317, C-F=0/283, B-G=0/415, D-F=-19/540

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - The Fabrication Tolerance at joint C = 4%, joint D = 4%, joint H = 4%, joint G = 4%, joint F = 4%, joint B = 4%, joint E = 4%
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Bearing at joint(s) H, E considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 82 lb uplift at joint H and 59 lb uplift at joint E.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard





Scale = 1:23.0

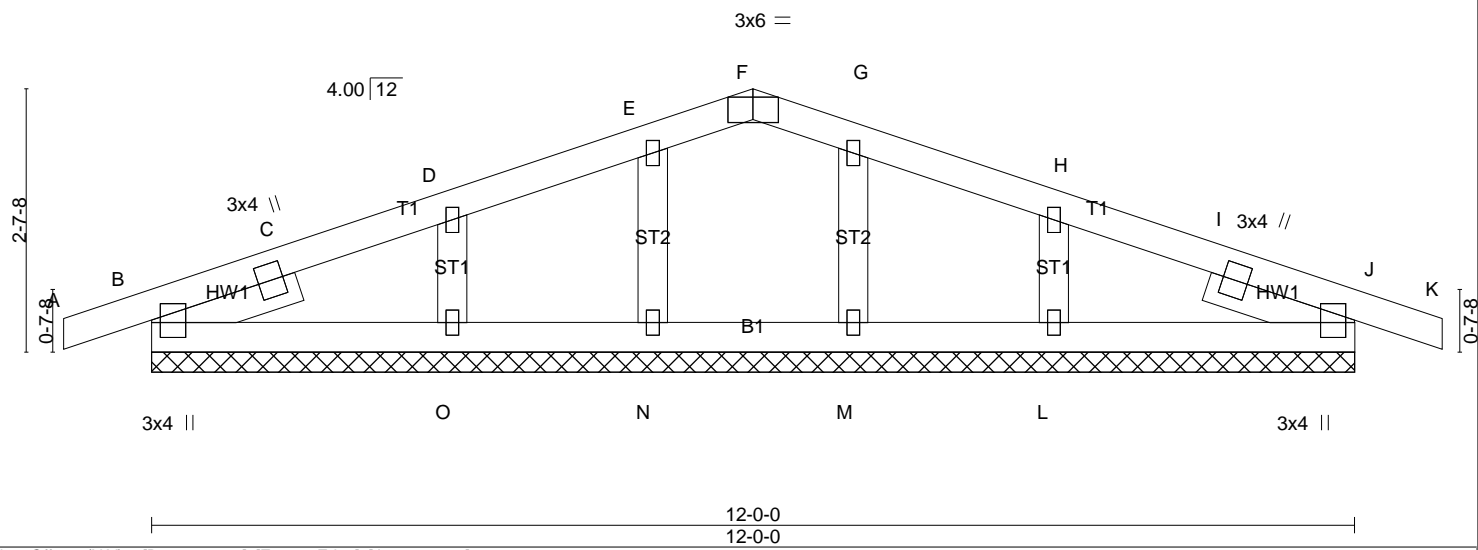


Plate Offsets (X,Y)-- [B:0-2-1,0-1-1], [F:0-3-0,Edge], [J:0-2-1,0-1-1]

<b>LOADING</b> (psf)	<b>SPACING</b> 2-0-0	<b>CSI</b>	<b>DEFL</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.08	Vert(LL) 0.00 J n/r 120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.06	Vert(CT) 0.00 K n/r 90		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.03	Horz(CT) 0.00 J n/a n/a		
BCDL 10.0	Code IRC2015/TP12014	Matrix-SH		Weight: 53 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 OTHERS 2x4 SP No.3  
 SLIDER Left 2x4 SP No.2 - 1-6-2, Right 2x4 SP No.2 - \$ 1-6-2

**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) B=186/12-0-0, J=186/12-0-0, N=124/12-0-0, O=222/12-0-0, M=124/12-0-0, L=222/12-0-0  
 Max Horz B=-38(LC 11)  
 Max Uplift B=-51(LC 6), J=-55(LC 7), N=-10(LC 6), O=-63(LC 10), M=-7(LC 7), L=-62(LC 11)  
 Max Grav B=186(LC 1), J=186(LC 1), N=124(LC 1), O=225(LC 21), M=124(LC 1), L=225(LC 22)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=-2/0, B-C=-100/21, C-D=-56/33, D-E=-79/64, E-F=-70/81, F-G=-70/81, G-H=-79/64, H-I=-56/22, I-J=-100/17, J-K=-2/0  
 BOT CHORD B-O=0/58, N-O=0/58, M-N=0/58, L-M=0/58, J-L=0/58  
 WEBS E-N=-90/42, D-O=-164/111, G-M=-90/42, H-L=-164/111

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only.
  - All plates are 1.5x3 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 51 lb uplift at joint B, 55 lb uplift at joint J, 10 lb uplift at joint N, 63 lb uplift at joint O, 7 lb uplift at joint M and 62 lb uplift at joint L.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TP1.

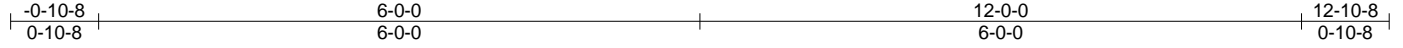
**LOAD CASE(S)** Standard

Job 20032323	Truss E2	Truss Type Common	Qty 5	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber

8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:22 2020 Page 1

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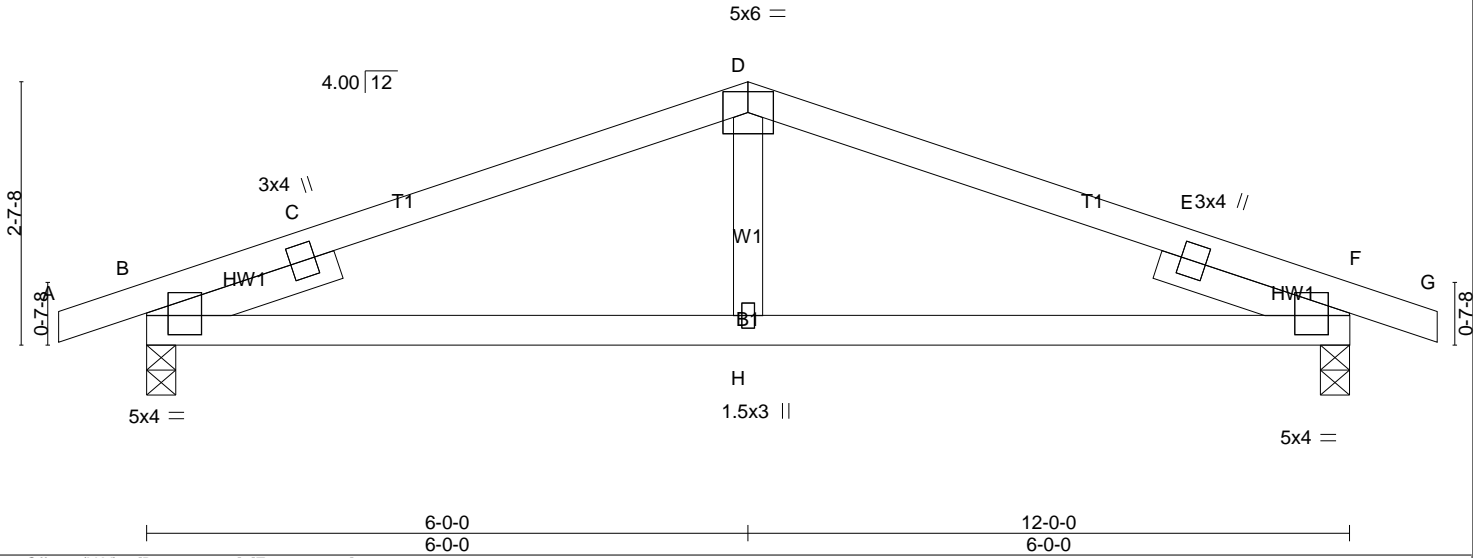


Plate Offsets (X,Y)-- [B:0-2-9,0-2-4], [F:0-2-9,0-2-9]

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.36	Vert(LL) -0.04 H-O >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.36	Vert(CT) -0.07 H-O >999 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.09	Horz(CT) 0.01 B n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MSH		Weight: 49 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
SLIDER Left 2x4 SP No.3 -\$ 1-11-12, Right 2x4 SP No.3 -\$ 1-11-12

**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) B=533/0-3-8, F=532/0-3-8  
Max Horz B=-38(LC 11)  
Max Uplift B=-102(LC 6), F=-102(LC 7)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=0/17, B-C=-405/0, C-D=-724/238, D-E=-724/238, E-F=-405/0, F-G=0/17  
BOT CHORD B-H=-141/687, F-H=-141/687  
WEBS D-H=0/242

- 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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) The Fabrication Tolerance at joint B = 4%, joint F = 4%, joint H = 4%, joint D = 4%, joint B = 4%, joint F = 4%
  - 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 102 lb uplift at joint B and 102 lb uplift at joint F.
  - 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job 20032323	Truss G1	Truss Type GABLE	Qty 1	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber

8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:23 2020 Page 1  
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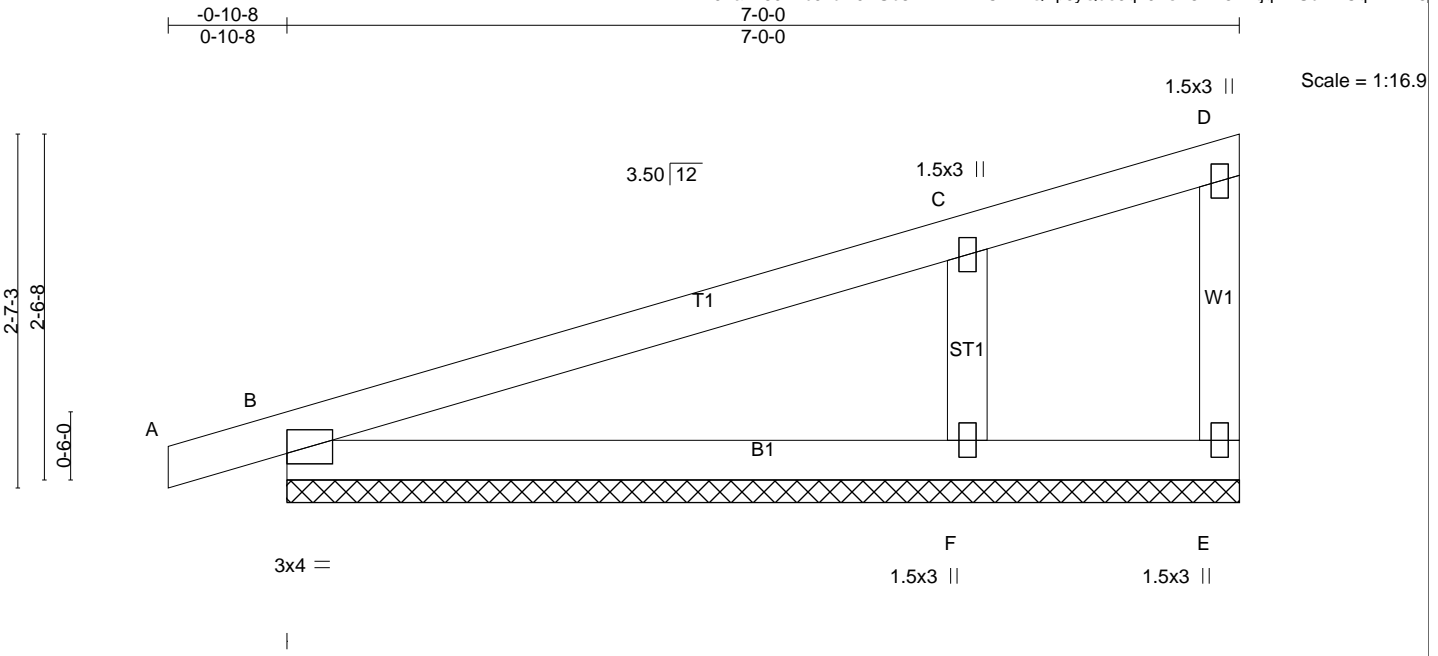


Plate Offsets (X,Y)-- [B:0-0-1,0-0-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.28	Vert(LL) -0.00	A	n/r	120	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.18	Vert(CT) 0.01	A	n/r	90		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.06	Horz(CT) 0.00	E	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-SH					Weight: 28 lb	FT = 20%
	Code IRC2015/TPI2014							

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

**REACTIONS.** (lb/size) E=-32/7-0-0, B=218/7-0-0, F=415/7-0-0  
 Max Horz B=92(LC 7)  
 Max Uplift E=-32(LC 1), B=-56(LC 6), F=-95(LC 10)  
 Max Grav E=13(LC 10), B=218(LC 1), F=415(LC 1)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=0/3, B-C=-69/59, C-D=-48/41, D-E=-13/20  
 BOT CHORD B-F=-45/45, E-F=-45/45  
 WEBS C-F=-289/211

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Truss designed for wind loads in the plane of the truss only.
  - 3) Gable requires continuous bottom chord bearing.
  - 4) Gable studs spaced at 2-0-0 oc.
  - 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 32 lb uplift at joint E, 56 lb uplift at joint B and 95 lb uplift at joint F.
  - 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job 20032323	Truss G2	Truss Type Monopitch	Qty 6	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber

8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:23 2020 Page 1

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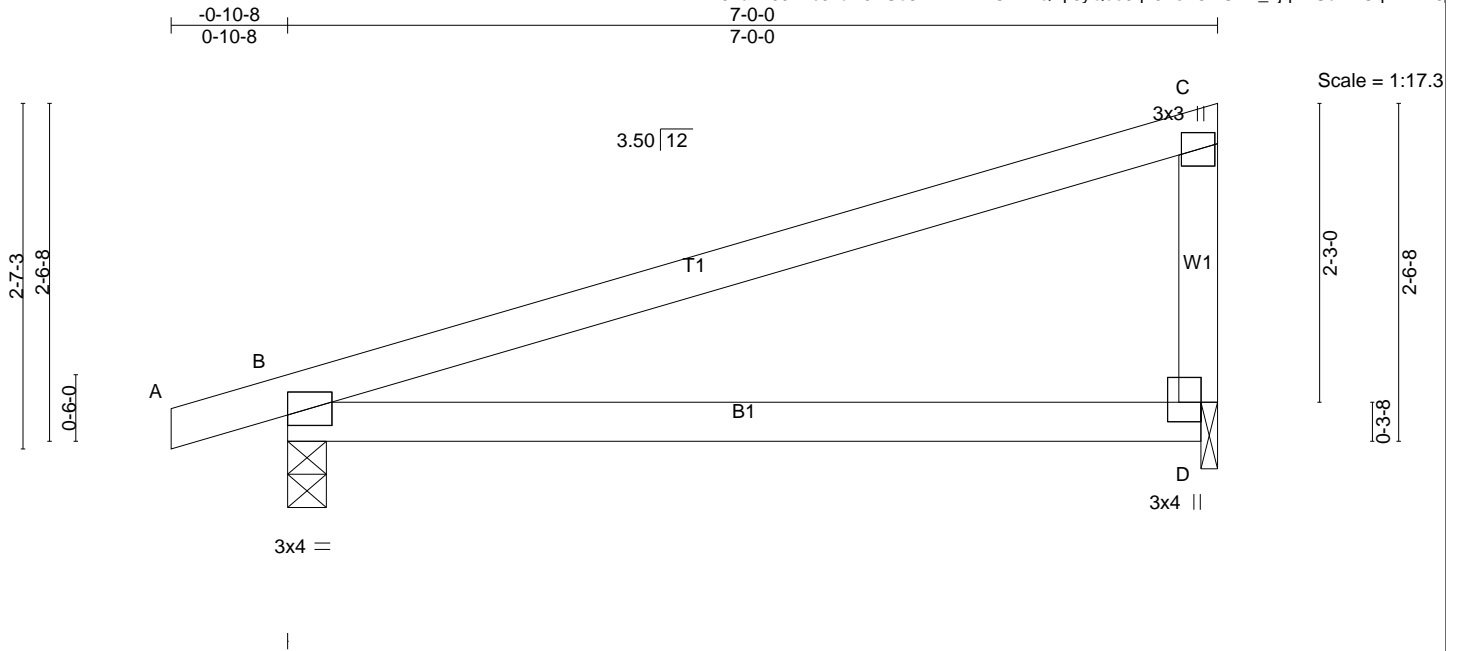


Plate Offsets (X,Y)-- [B:0-0-1,0-0-0], [D:Edge,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.59	Vert(LL) -0.06	D-G	>999	240	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.43	Vert(CT) -0.15	D-G	>534	180		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT) 0.02	B	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MSH					Weight: 25 lb	FT = 20%
	Code IRC2015/TPI2014							

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

**REACTIONS.** (lb/size) B=330/0-3-8, D=271/0-1-8  
Max Horz B=93(LC 9)  
Max Uplift B=-80(LC 6), D=-56(LC 10)

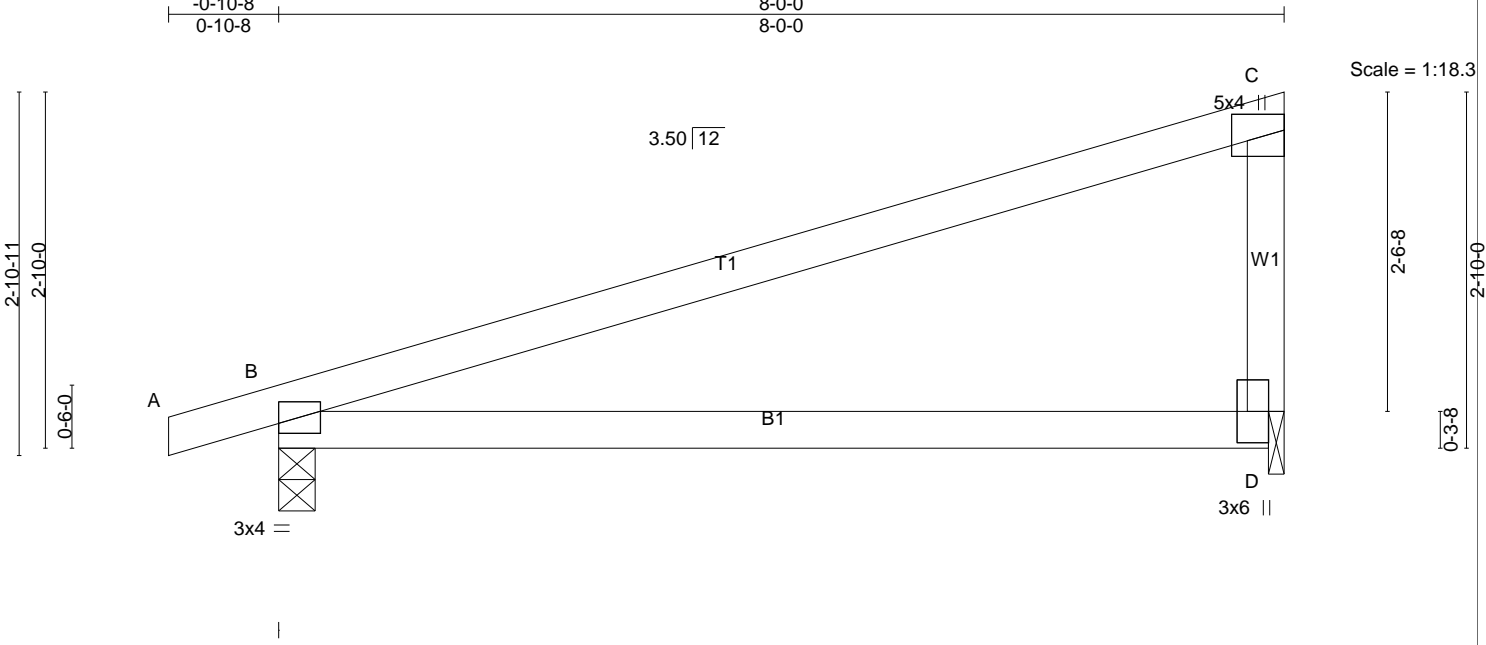
**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=0/15, B-C=-157/50, C-D=-175/123  
BOT CHORD B-D=-24/101

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 4) Bearing at joint(s) D 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) D.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 80 lb uplift at joint B and 56 lb uplift at joint D.
  - 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job 20032323	Truss G3	Truss Type Monopitch	Qty 4	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber  
 ID:XTYJZa1n607AuJzbMJwUb8z?rWV-WCnLYQYpJyQdo9qn9KsR8iFDqEymjqTKUuMLCqzWVW6  
 8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:23 2020 Page 1



Scale = 1:18.3

Plate Offsets (X,Y)-- [B:0-0-1,0-0-0], [D:Edge,0-2-0]

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.81	Vert(LL) -0.11 D-G >841 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.58	Vert(CT) -0.27 D-G >351 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.03 B n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MSH		Weight: 29 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-9-13 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	

**REACTIONS.** (lb/size) B=370/0-3-8, D=311/0-1-8  
 Max Horz B=105(LC 9)  
 Max Uplift B=87(LC 6), D=64(LC 10)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=0/15, B-C=-183/55, C-D=-201/136  
 BOT CHORD B-D=-27/117

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 4) Bearing at joint(s) D 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) D.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 87 lb uplift at joint B and 64 lb uplift at joint D.
  - 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job 20032323	Truss PB1	Truss Type Piggyback	Qty 12	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber

8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:24 2020 Page 1  
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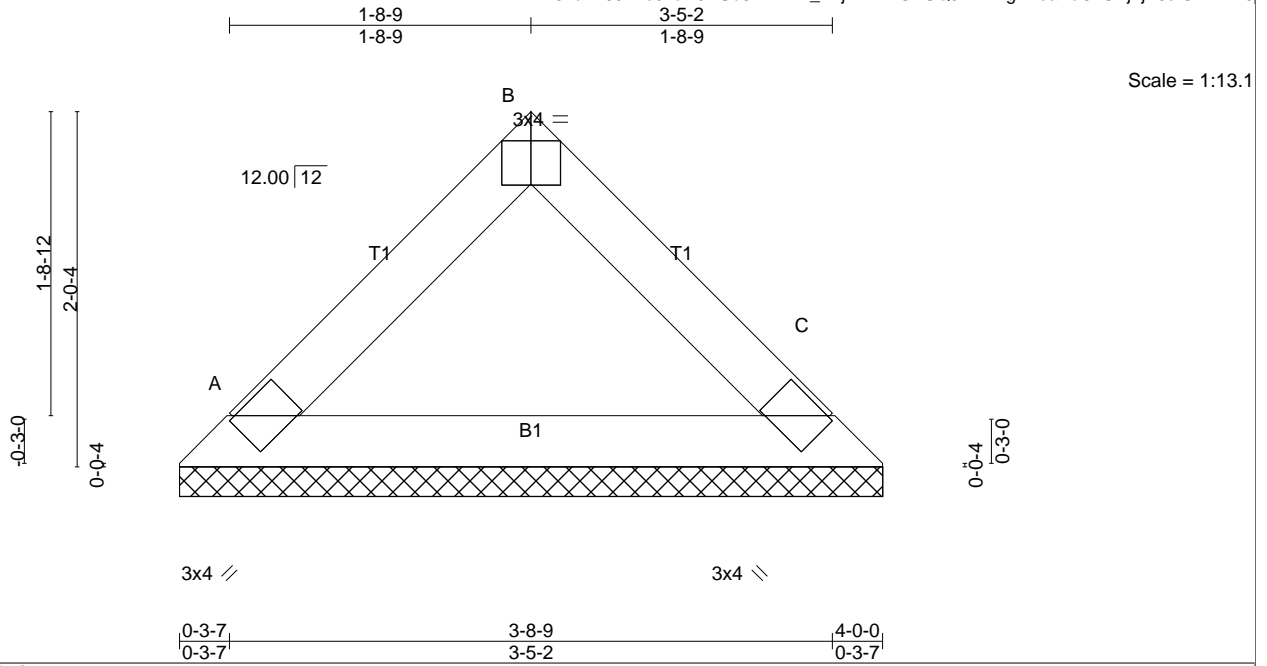


Plate Offsets (X,Y)-- [B:0-2-0,Edge]

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.05	Vert(LL) n/a - n/a 999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.13	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00 C n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P		Weight: 13 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) A=134/4-0-0, C=134/4-0-0  
 Max Horz A=-41(LC 6)  
 Max Uplift A=-11(LC 10), C=-11(LC 11)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=-99/42, B-C=-99/42  
 BOT CHORD A-C=-11/57

- NOTES-** (7)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) 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) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 7) Piggyback cap bottom chord to be attached to 2x4 purlins located at each end of cap bottom chord and at 24" oc max spacing with two 16d nails each.

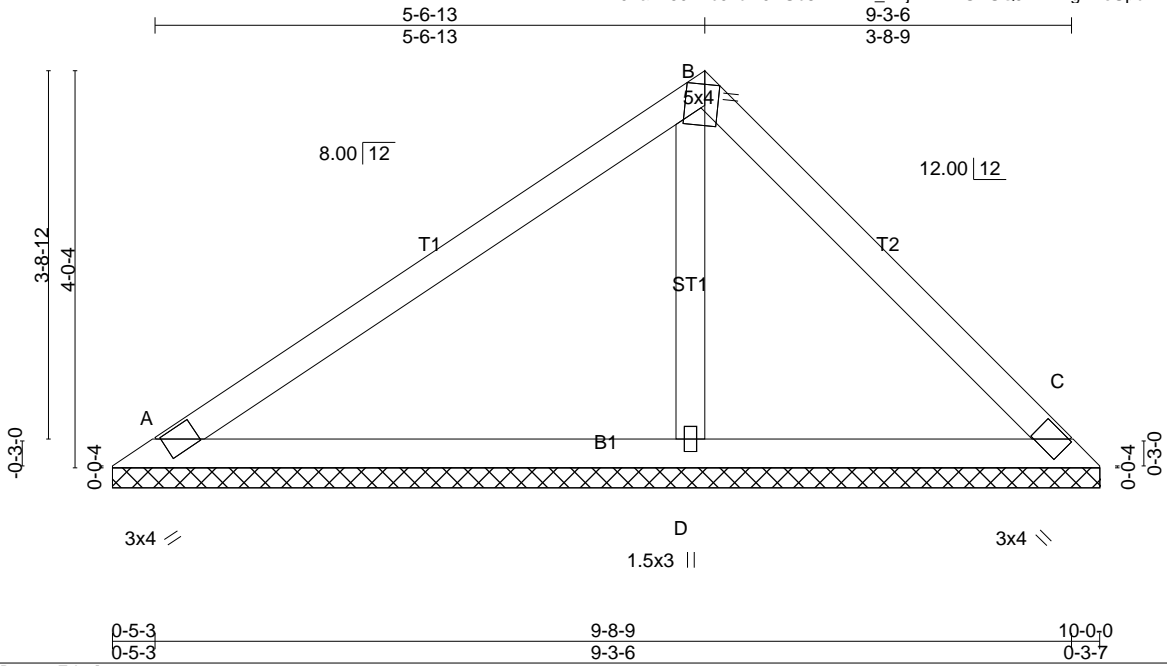
**LOAD CASE(S)** Standard

Job 20032323	Truss PB2	Truss Type Piggyback	Qty 11	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber

8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:24 2020 Page 1

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Scale = 1:23.3

Plate Offsets (X,Y)-- [B:0-1-9,Edge]

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.41	Vert(LL) n/a - n/a 999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.30	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.06	Horz(CT) 0.00 C n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-SH		Weight: 38 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) A=217/10-0-0, C=154/10-0-0, D=366/10-0-0  
 Max Horz A=-91(LC 6)  
 Max Uplift A=-34(LC 10), C=-35(LC 11), D=-21(LC 10)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=-150/75, B-C=-144/67  
 BOT CHORD A-D=-22/65, C-D=-20/71  
 WEBS B-D=-204/60

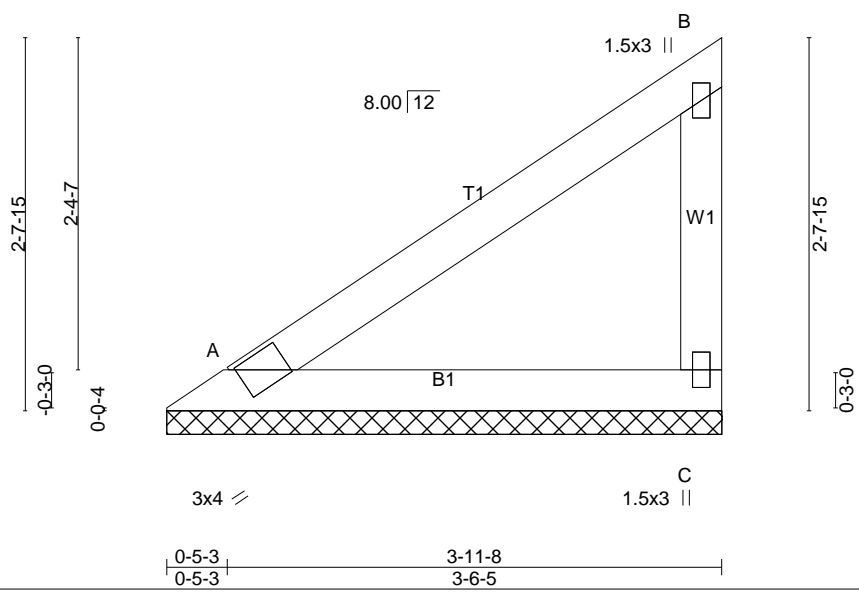
- NOTES-** (7)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) 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) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 7) Piggyback cap bottom chord to be attached to 2x4 purlins located at each end of cap bottom chord and at 24" oc max spacing with two 16d nails each.

**LOAD CASE(S)** Standard

Job 20032323	Truss PB3	Truss Type Piggyback	Qty 3	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber  
 8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:24 2020 Page 1  
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Scale = 1:16.4



<b>LOADING</b> (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	<b>SPACING-</b> 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2015/TPI2014	<b>CSI.</b> TC 0.21 BC 0.13 WB 0.00 Matrix-P	<b>DEFL.</b> in (loc) l/defl L/d Vert(LL) n/a - n/a 999 Vert(CT) n/a - n/a 999 Horz(CT) 0.00 C n/a n/a	<b>PLATES GRIP</b> MT20 244/190  Weight: 15 lb FT = 20%
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<b>LUMBER-</b> TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3	<b>BRACING-</b> TOP CHORD Structural wood sheathing directly applied or 3-11-8 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
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**REACTIONS.** (lb/size) A=134/3-11-8, C=134/3-11-8  
 Max Horz A=85(LC 7)  
 Max Uplift A=-10(LC 10), C=-39(LC 10)  
 Max Grav A=134(LC 1), C=148(LC 17)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=-75/61, B-C=-115/60  
 BOT CHORD A-C=-41/44

- NOTES-** (6)
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Gable requires continuous bottom chord bearing.
  - 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) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 6) Piggyback cap bottom chord to be attached to 2x4 purlins located at each end of cap bottom chord and at 24" oc max spacing with two 16d nails each.

**LOAD CASE(S)** Standard

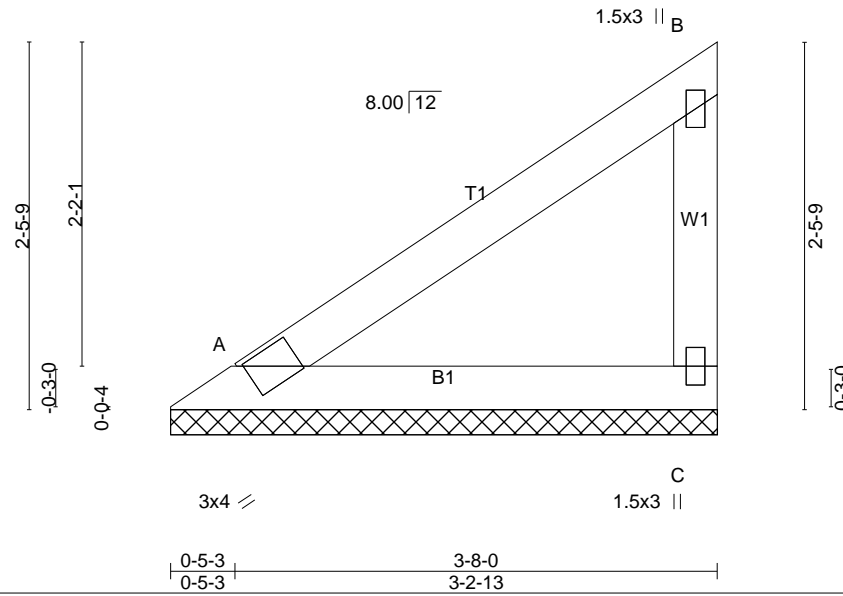


Job 20032323	Truss PB4	Truss Type Piggyback	Qty 1	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber

8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:25 2020 Page 1

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Scale = 1:15.5

<b>LOADING</b> (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	<b>SPACING-</b> 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2015/TPI2014	<b>CSI.</b> TC 0.17 BC 0.11 WB 0.00 Matrix-P	<b>DEFL.</b> in (loc) l/defl L/d Vert(LL) n/a - n/a 999 Vert(CT) n/a - n/a 999 Horz(CT) 0.00 C n/a n/a	<b>PLATES GRIP</b> MT20 244/190  Weight: 14 lb FT = 20%
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<b>LUMBER-</b> TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3	<b>BRACING-</b> 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.
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**REACTIONS.** (lb/size) A=123/3-8-0, C=123/3-8-0  
Max Horz A=77(LC 7)  
Max Uplift A=-9(LC 10), C=-36(LC 10)  
Max Grav A=123(LC 1), C=135(LC 17)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=-69/55, B-C=-105/54  
BOT CHORD A-C=-37/41

- NOTES-** (6)
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Gable requires continuous bottom chord bearing.
  - 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) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 6) Piggyback cap bottom chord to be attached to 2x4 purlins located at each end of cap bottom chord and at 24" oc max spacing with two 16d nails each.

**LOAD CASE(S)** Standard

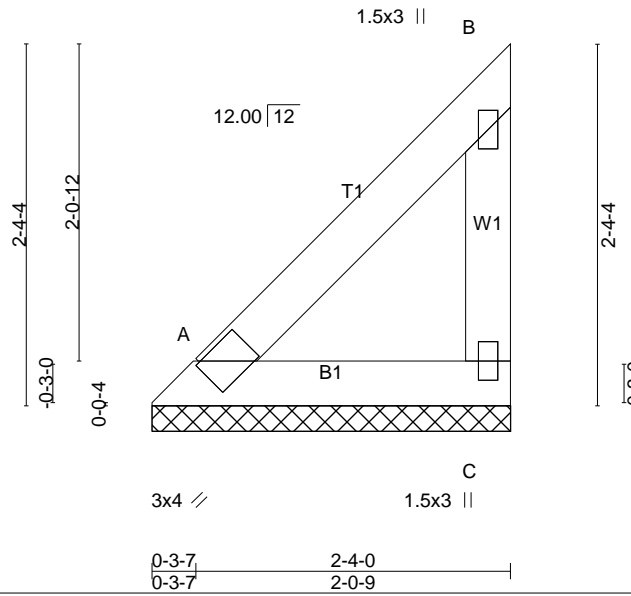
Job 20032323	Truss PB5	Truss Type Piggyback	Qty 4	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber

8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:25 2020 Page 1

ID:XTYJZa1n607AuJzbMJwUb8z?rWV-Sbv5z6Z4rZgL1T\_9GluvD7Kly1mBkzdxCrSHjzWVN4

Scale = 1:15.0



<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.06	Vert(LL) n/a - n/a 999	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(CT) n/a - n/a 999	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00 C n/a n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P		Weight: 10 lb FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-4-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	

**REACTIONS.** (lb/size) A=74/2-4-0, C=74/2-4-0  
 Max Horz A=70(LC 7)  
 Max Uplift C=-33(LC 7)  
 Max Grav A=84(LC 18), C=91(LC 17)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=-63/49, B-C=-72/44  
 BOT CHORD A-C=-34/37

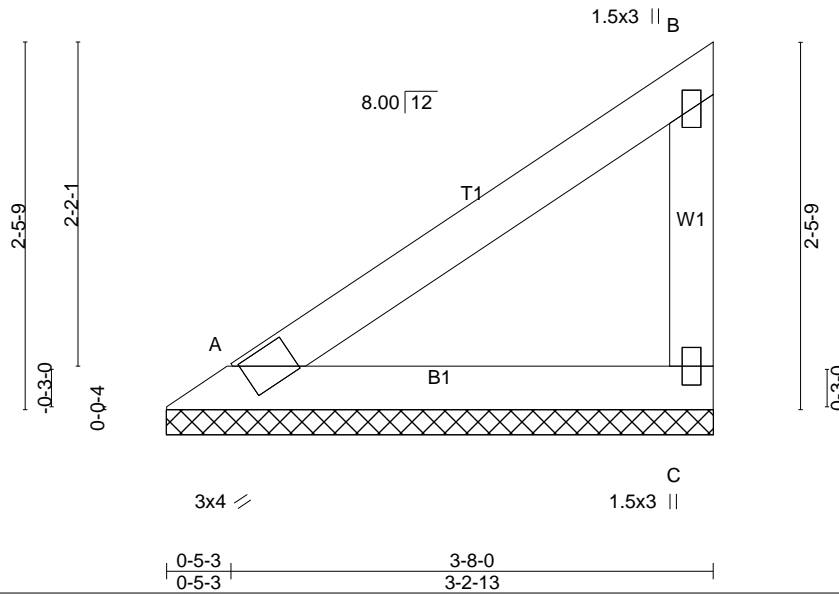
- NOTES-** (6)
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Gable requires continuous bottom chord bearing.
  - 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) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 6) Piggyback cap bottom chord to be attached to 2x4 purlins located at each end of cap bottom chord and at 24" oc max spacing with two 16d nails each.

**LOAD CASE(S)** Standard

Job 20032323	Truss PB6	Truss Type Piggyback	Qty 1	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber

8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:25 2020 Page 1  
ID:XYTJZa1n607AuJzbMJwUb8z?rWV-Sbv5z6Z4rZgL1T\_9GluvD7KjC1IXBkzdxCrSHjzWVN4



Scale = 1:15.5

<b>LOADING</b> (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	<b>SPACING-</b> 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2015/TPI2014	<b>CSI.</b> TC 0.17 BC 0.11 WB 0.00 Matrix-P	<b>DEFL.</b> in (loc) l/defl L/d Vert(LL) n/a - n/a 999 Vert(CT) n/a - n/a 999 Horz(CT) 0.00 C n/a n/a	<b>PLATES GRIP</b> MT20 244/190  Weight: 14 lb FT = 20%
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<b>LUMBER-</b> TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3	<b>BRACING-</b> 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.
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**REACTIONS.** (lb/size) A=123/3-8-0, C=123/3-8-0  
Max Horz A=77(LC 9)  
Max Uplift A=-9(LC 10), C=-36(LC 10)  
Max Grav A=123(LC 1), C=135(LC 17)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=-69/55, B-C=-105/54  
BOT CHORD A-C=-37/41

- NOTES-** (8)
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Truss designed for wind loads in the plane of the truss only.
  - 3) Gable requires continuous bottom chord bearing.
  - 4) Gable studs spaced at 4-0-0 oc.
  - 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) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 8) Piggyback cap bottom chord to be attached to 2x4 purlins located at each end of cap bottom chord and at 24" oc max spacing with two 16d nails each.

**LOAD CASE(S)** Standard

Job 20032323	Truss PB7	Truss Type Piggyback	Qty 1	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber

8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:26 2020 Page 1  
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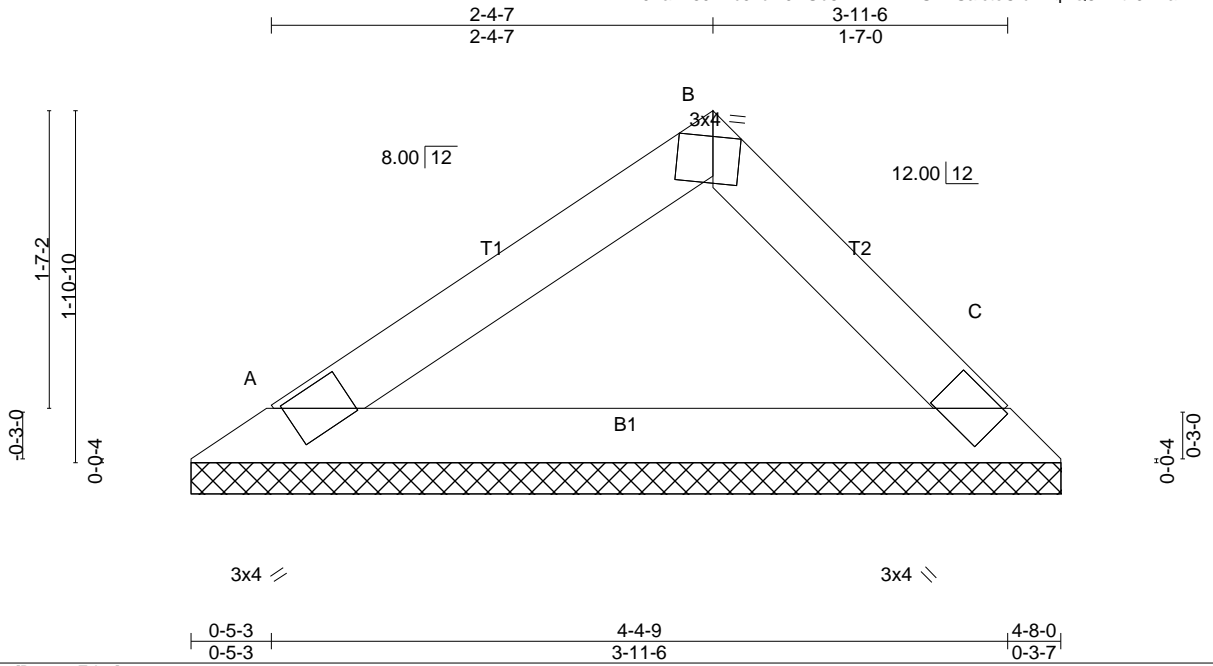


Plate Offsets (X,Y)-- [B:0-1-9,Edge]

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
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 0.18	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00 C n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P		Weight: 14 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 4-8-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) A=155/4-8-0, C=155/4-8-0  
 Max Horz A=-39(LC 8)  
 Max Uplift A=-18(LC 10), C=-13(LC 10)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=-114/49, B-C=-125/56  
 BOT CHORD A-C=-11/73

- NOTES-** (7)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) 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) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 7) Piggyback cap bottom chord to be attached to 2x4 purlins located at each end of cap bottom chord and at 24" oc max spacing with two 16d nails each.

**LOAD CASE(S)** Standard

Job 20032323	Truss PB8	Truss Type Piggyback	Qty 4	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber  
 8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:26 2020 Page 1  
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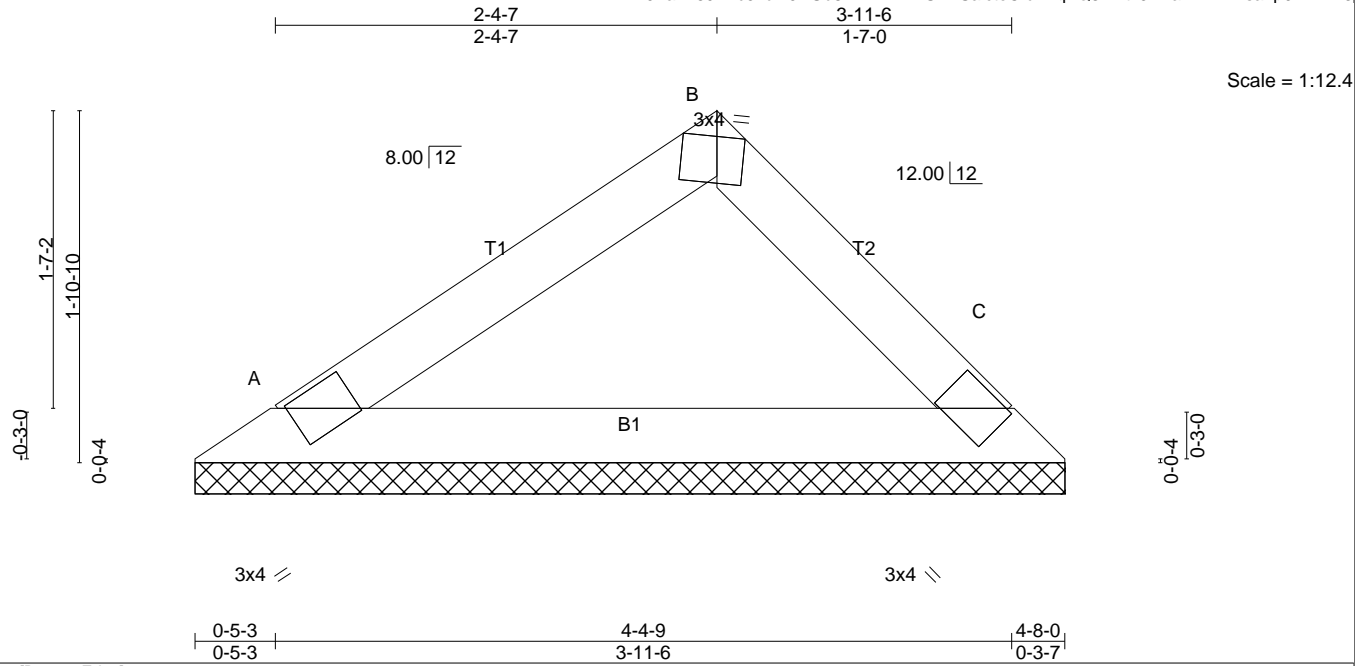


Plate Offsets (X,Y)-- [B:0-1-9,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.10	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.18	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 C n/a n/a		
	Code IRC2015/TPI2014			Weight: 14 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 4-8-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) A=155/4-8-0, C=155/4-8-0  
 Max Horz A=-39(LC 8)  
 Max Uplift A=-18(LC 10), C=-13(LC 10)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=-114/49, B-C=-125/56  
 BOT CHORD A-C=-11/73

- NOTES-** (7)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) 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) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 7) Piggyback cap bottom chord to be attached to 2x4 purlins located at each end of cap bottom chord and at 24" oc max spacing with two 16d nails each.

**LOAD CASE(S)** Standard

Job 20032323	Truss PB9	Truss Type Piggyback	Qty 3	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber

Job Reference (optional)  
8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:26 2020 Page 1

ID:XYTJZa1n607AuJzbMJwUb8z?rWV-wnSTASaictoCfdZLqTQ8mLtw5R60wBDmAsa?p9zWVN3

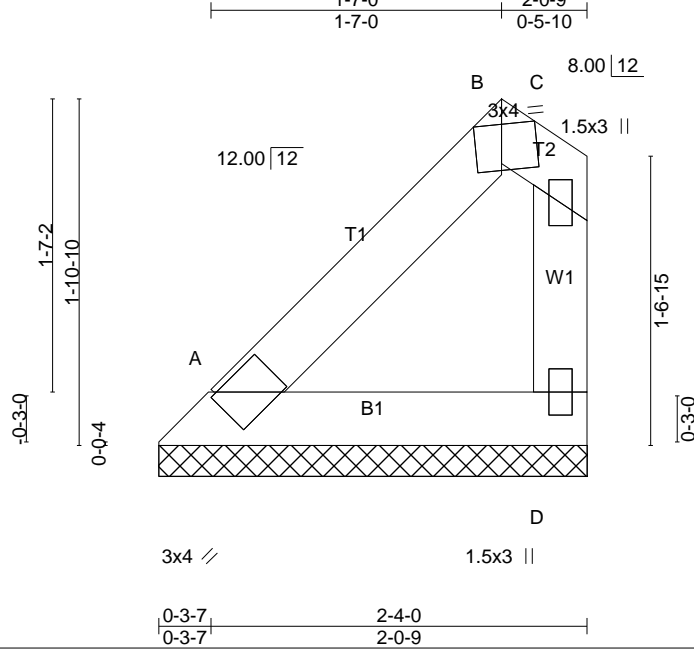


Plate Offsets (X,Y)-- [B:0-1-9,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.04	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT)	-0.00	D	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-R					Weight: 10 lb	FT = 20%
	Code IRC2015/TPI2014							

**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 2-4-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) A=74/2-4-0, D=74/2-4-0  
 Max Horz A=56(LC 7)  
 Max Uplift A=-1(LC 10), D=-21(LC 10)  
 Max Grav A=75(LC 18), D=81(LC 17)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=-60/21, B-C=-51/40, C-D=-52/25  
 BOT CHORD A-D=-21/24

- NOTES-** (7)
- 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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) 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) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 7) Piggyback cap bottom chord to be attached to 2x4 purlins located at each end of cap bottom chord and at 24" oc max spacing with two 16d nails each.

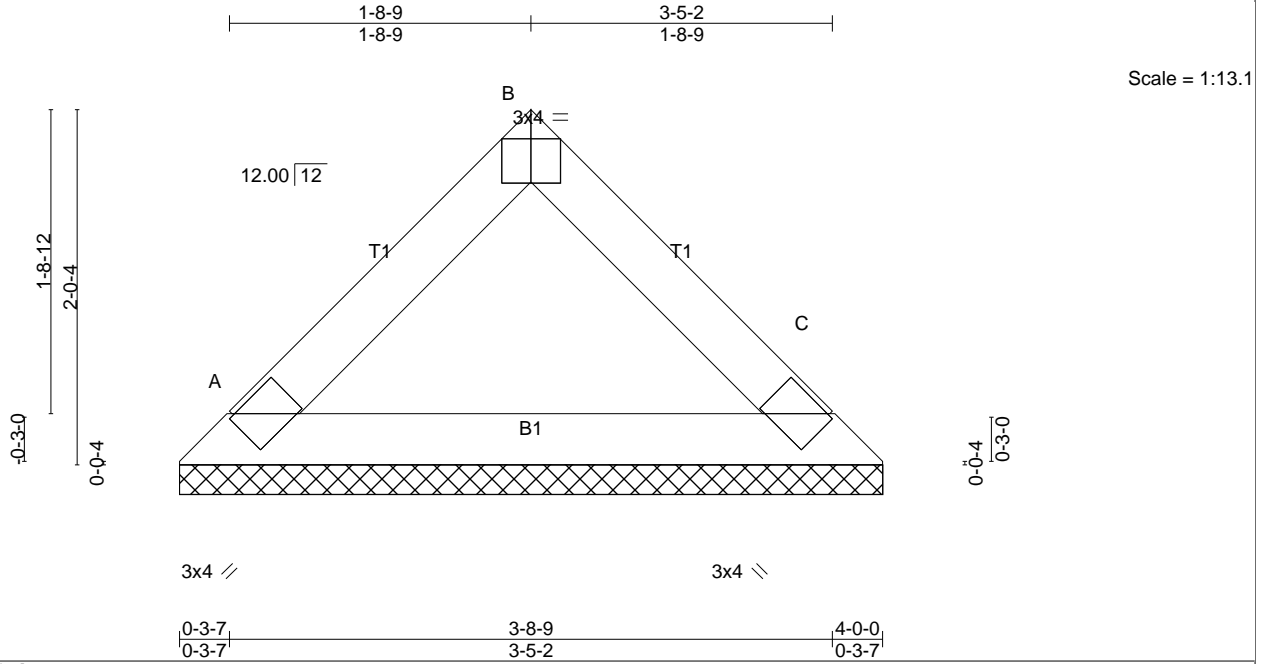
**LOAD CASE(S)** Standard

Job 20032323	Truss PB10	Truss Type Piggyback	Qty 1	Ply 1	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber

8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:27 2020 Page 1

ID:XTYJZa1n607AuJzbMjwUb8z?rVVV-Pz0rOobKNBw3Hn8YOAxNjYQ5frQcfeTvPWKYLbzWVN2



Scale = 1:13.1

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

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.05	Vert(LL) n/a - n/a 999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.13	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00 C n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P		Weight: 13 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) A=134/4-0-0, C=134/4-0-0  
 Max Horz A=-41(LC 6)  
 Max Uplift A=-11(LC 10), C=-11(LC 11)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=-99/42, B-C=-99/42  
 BOT CHORD A-C=-11/57

- NOTES-** (9)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Truss designed for wind loads in the plane of the truss only.
  - 4) Gable requires continuous bottom chord bearing.
  - 5) Gable studs spaced at 4-0-0 oc.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 9) Piggyback cap bottom chord to be attached to 2x4 purlins located at each end of cap bottom chord and at 24" oc max spacing with two 16d nails each.

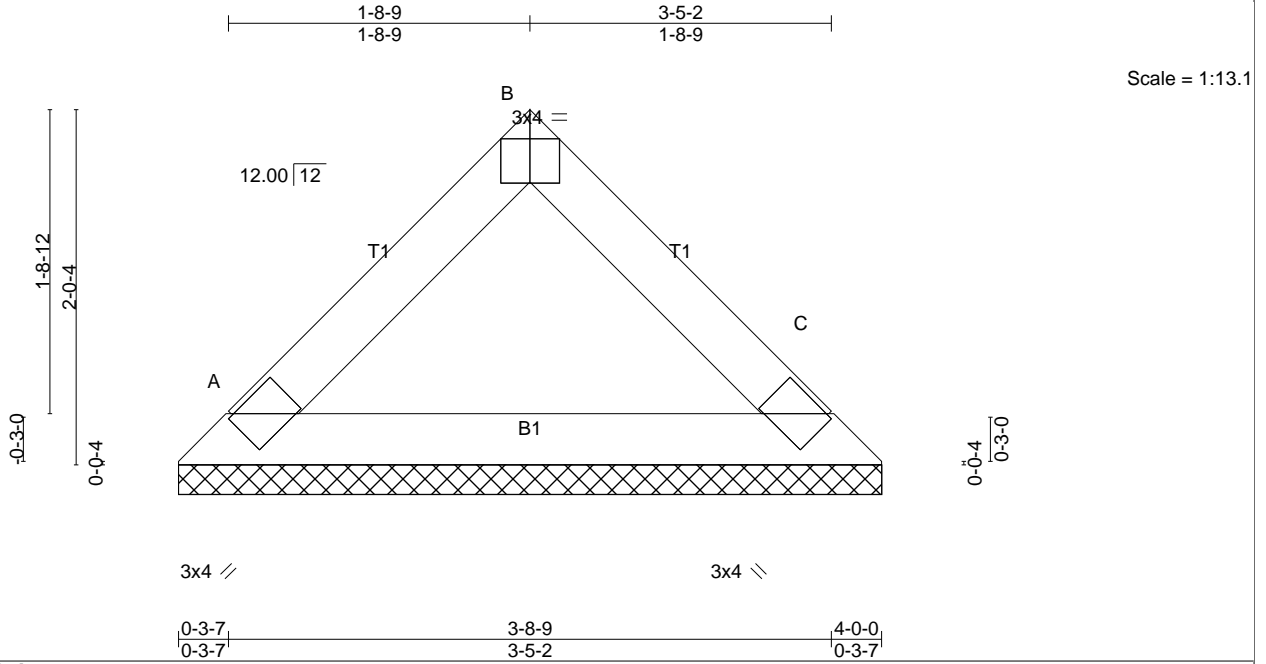
**LOAD CASE(S)** Standard

Job 20032323	Truss PB11	Truss Type PIGGYBACK	Qty 1	Ply 2	288 NC2015
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Rob Ferber

8.320 s Nov 19 2019 MiTek Industries, Inc. Sat Mar 28 06:32:27 2020 Page 1

ID:XTYJZa1n607AuJzbMJwUb8z7rVVV-Pz0rOobKNBw3Hn8YOAxNJVQ52rRifeTvPWKYLbzWVN2



Scale = 1:13.1

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

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.02	Vert(LL) n/a - n/a 999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.07	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00 C n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P		Weight: 26 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) A=134/4-0-0, C=134/4-0-0  
 Max Horz A=41(LC 7)  
 Max Uplift A=-11(LC 10), C=-11(LC 10)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=-99/42, B-C=-99/42  
 BOT CHORD A-C=-11/57

- NOTES-** (9)
- 2-ply truss to be connected together as follows:  
 Top chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Piggyback cap bottom chord to be attached to 2x4 purlins located at each end of cap bottom chord and at 24" oc max spacing with two 16d nails each.

**LOAD CASE(S)** Standard