

Job 20071754	Truss A1	Truss Type GABLE	Qty 1	Ply 1	288 NC2015
-----------------	-------------	---------------------	----------	----------	------------

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC  
 Job Reference (optional)  
 8,330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:01:11 2020 Page 1  
 ID:wtU0m002CvnP9KkLnVkyW5y7Knd-08ET6H3MxbLZ?NB?QZi5nUqf6QGtF\_OiDuY5mAYoJBM

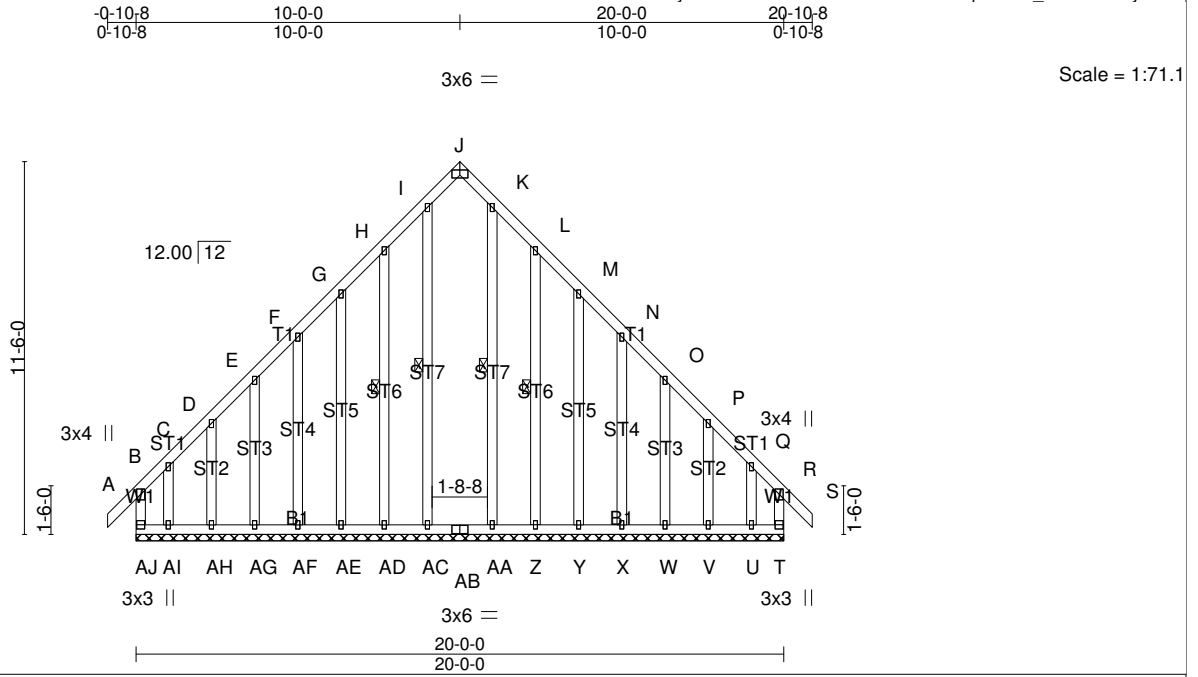


Plate Offsets (X,Y)-- [J:0-3-0,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.35	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.21	Vert(LL) -0.00 S n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.13	Vert(CT) -0.00 S n/r 90		
BCDL 10.0	Rep Stress Incr YES	Matrix-R	Horz(CT) 0.01 T n/a n/a		
	Code IRC2015/TPI2014			Weight: 203 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.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt I-AC, H-AD, K-AA, L-Z
OTHERS 2x4 SP No.3	

**REACTIONS.** (lb/size) AJ=140/20-0-0 (min. 0-2-0), T=140/20-0-0 (min. 0-2-0), AC=136/20-0-0 (min. 0-2-0), AD=98/20-0-0 (min. 0-2-0), AE=107/20-0-0 (min. 0-2-0), AF=107/20-0-0 (min. 0-2-0), AG=105/20-0-0 (min. 0-2-0), AH=114/20-0-0 (min. 0-2-0), AI=42/20-0-0 (min. 0-2-0), AA=136/20-0-0 (min. 0-2-0), Z=98/20-0-0 (min. 0-2-0), Y=107/20-0-0 (min. 0-2-0), X=107/20-0-0 (min. 0-2-0), W=105/20-0-0 (min. 0-2-0), V=114/20-0-0 (min. 0-2-0), U=42/20-0-0 (min. 0-2-0)  
 Max Horz AJ=316(LC 9)  
 Max Uplift AJ=330(LC 8), T=294(LC 9), AD=-134(LC 10), AE=-72(LC 10), AF=-67(LC 10), AG=-80(LC 10), AH=-31(LC 10), AI=-405(LC 10), Z=-136(LC 11), Y=-72(LC 11), X=-67(LC 11), W=-80(LC 11), V=-32(LC 11), U=-394(LC 11)  
 Max Grav AJ=451(LC 7), T=424(LC 11), AC=238(LC 11), AD=116(LC 17), AE=122(LC 17), AF=120(LC 17), AG=126(LC 17), AH=114(LC 1), AI=359(LC 8), AA=230(LC 10), Z=119(LC 18), Y=122(LC 18), X=120(LC 18), W=126(LC 18), V=114(LC 1), U=333(LC 9)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD B-AJ=-280/195, A-B=0/43, B-C=-322/262, C-D=-168/158, D-E=-145/141, E-F=-126/136, F-G=-118/176, G-H=-176/245, H-I=-272/371, I-J=-162/197, J-K=-162/197, K-L=-272/371, L-M=-176/245, M-N=-118/175, N-O=-107/128, O-P=-126/123, P-Q=-151/140, Q-R=-310/235, R-S=0/43, R-T=-257/170  
 BOT CHORD AI-AJ=-160/184, AH-AI=-160/184, AG-AH=-160/184, AF-AG=-160/184, AE-AF=-160/184, AD-AE=-160/184, AC-AD=-160/184, AB-AC=-160/184, AA-AB=-160/184, Z-AA=-160/184, Y-Z=-160/184, X-Y=-160/184, W-X=-160/184, V-W=-160/184, U-V=-160/184, T-U=-160/184  
 WEBS I-AC=-257/130, H-AD=-163/161, G-AE=-109/88, F-AF=-106/85, E-AG=-108/88, D-AH=-103/78, C-AI=-188/222, K-AA=-257/130, L-Z=-163/161, M-Y=-109/88, N-X=-106/85, O-W=-108/88, P-V=-103/79, Q-U=-188/217

- 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 1-4-0 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 330 lb uplift at joint AJ, 294 lb uplift at joint T, 134 lb uplift at joint AD, 72 lb uplift at joint AE, 67 lb uplift at joint AF, 80 lb uplift at joint AG, 31 lb uplift at joint AH, 405 lb uplift at joint AI, 136 lb uplift at joint Y, 67 lb uplift at joint X, 80 lb uplift at joint W, 32 lb uplift at joint V and 394 lb uplift at joint U.
  - 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 20071754	Truss A2	Truss Type COMMON	Qty 3	Ply 1	288 NC2015
-----------------	-------------	----------------------	----------	----------	------------

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC  
 Job Reference (optional)  
 8,330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:01:12 2020 Page 1  
 ID:wtU0m002CvnP9KkLnVkyYw5y7knd-UkKosKd4\_ivTQdXmB\_GOKJhNqTqZ9\_GfrSYflfcoyJBL

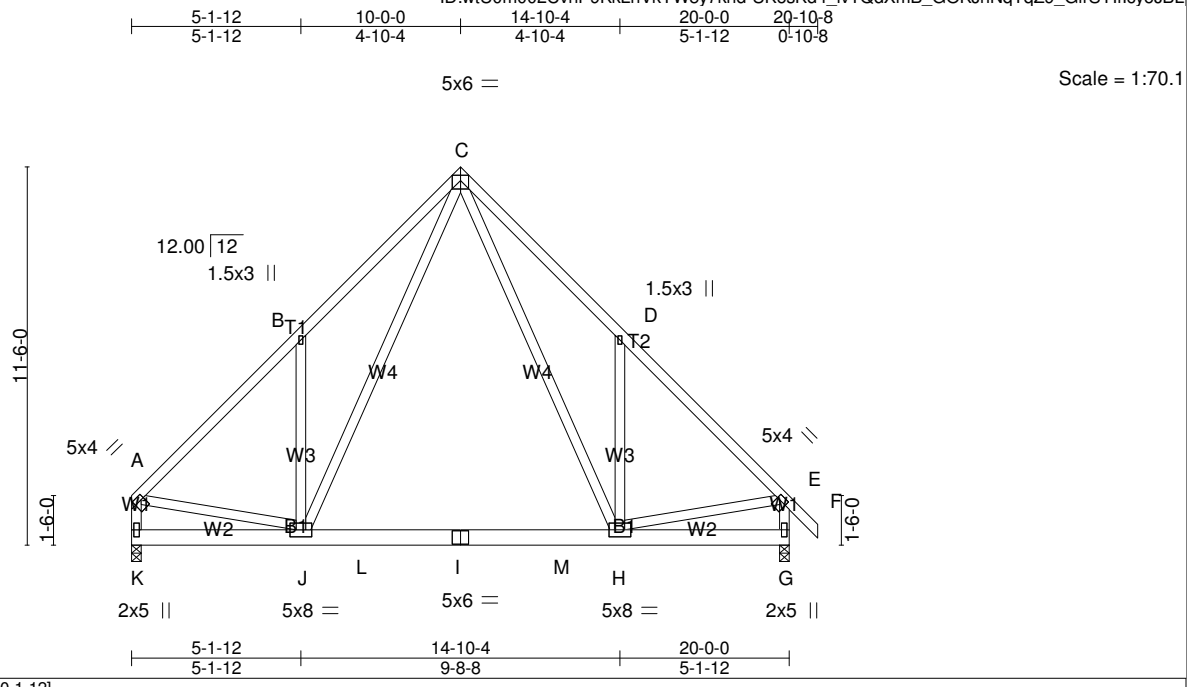


Plate Offsets (X,Y)-- [A:0-1-0,0-1-12], [E:0-1-0,0-1-12]

<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 0.37 BC 0.40 WB 0.84 Matrix-MSH	<b>DEFL.</b> in (loc) l/defl L/d Vert(LL) -0.10 H-J >999 240 Vert(CT) -0.17 H-J >999 180 Horz(CT) 0.01 G n/a n/a	<b>PLATES</b> MT20 <b>GRIP</b> 244/190  Weight: 161 lb FT = 20%
---	---	--	---	--

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-9-12 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) K=787/0-3-8 (min. 0-1-8), G=851/0-3-8 (min. 0-1-8)  
 Max Horz K=304(LC 6)  
 Max Uplift K=72(LC 11), G=75(LC 10)  
 Max Grav K=802(LC 18), G=851(LC 1)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=889/160, B-C=935/433, C-D=929/431, D-E=888/167, E-F=0/43, A-K=800/136, E-G=842/180  
 BOT CHORD J-K=282/330, J-L=32/467, I-L=32/467, I-M=32/467, H-M=32/467, G-H=76/118  
 WEBS C-H=301/606, D-H=423/349, C-J=303/616, B-J=436/363, A-J=0/575, E-H=0/574

- 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
  - 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 72 lb uplift at joint K and 75 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.

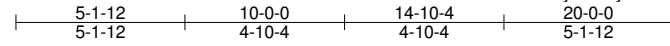
**LOAD CASE(S)** Standard

Job 20071754	Truss A2A	Truss Type Common	Qty 2	Ply 1	288 NC2015
-----------------	--------------	----------------------	----------	----------	------------

Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

ID:wtU0m002CvnP9KkLnVKYw5y7knd-yWMEXz4dTDbHEhLNY\_vZsw08EvOiju?hC1Cq3yoJBK  
8,330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:01:13 2020 Page 1



5x6 =

Scale = 1:70.1

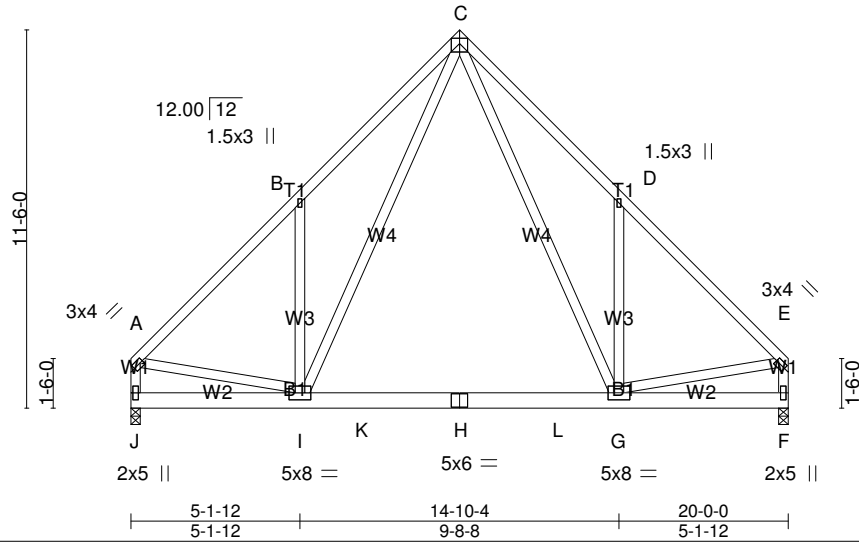


Plate Offsets (X,Y)-- [A:0-1-0,0-1-8], [E:0-1-0,0-1-8]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	I/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.31	Vert(LL)	-0.10	G-I	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.40	Vert(CT)	-0.17	G-I	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.84	Horz(CT)	0.00	F	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MSH						
								Weight: 159 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-9-11 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) J=788/0-3-8 (min. 0-1-8), F=788/0-3-8 (min. 0-1-8)  
Max Horz J=288(LC 6)  
Max Uplift J=71(LC 11), F=-71(LC 10)  
Max Grav J=803(LC 18), F=803(LC 17)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=890/159, B-C=936/432, C-D=936/432, D-E=890/159, A-J=-802/136, E-F=-802/136  
BOT CHORD I-J=-292/314, I-K=-42/456, H-K=-42/456, H-L=-42/456, G-L=-42/456, F-G=-62/67  
WEBS C-G=-304/616, D-G=-436/363, C-I=-304/616, B-I=-436/363, A-I=0/576, E-G=0/579

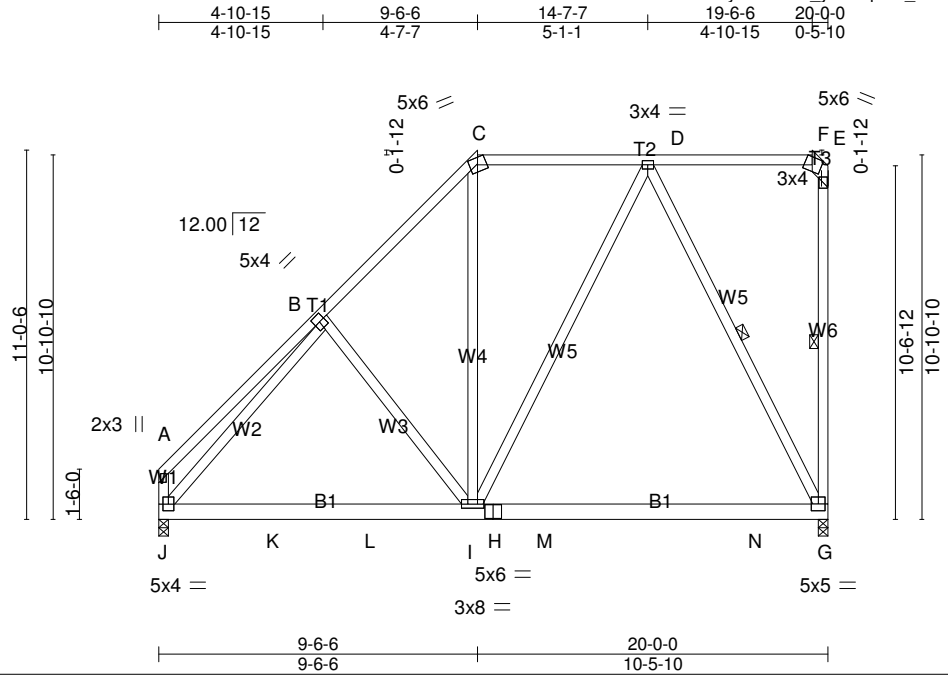
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 71 lb uplift at joint J and 71 lb uplift at joint F.
  - 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.

**LOAD CASE(S)** Standard

Job 20071754	Truss A3	Truss Type ROOF TRUSS	Qty 6	Ply 1	288 NC2015
-----------------	-------------	--------------------------	----------	----------	------------

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

Job Reference (optional)  
8.330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:01:15 2020 Page 1  
ID:wtU0m002CvmP9KkLnVkyW5y7knd-vvU\_ye6t?qs?U\_VmfPy1xK?GvZ2ZGBfHH8WWJvxyoJBI



Scale = 1:68.8

Plate Offsets (X,Y)-- [E: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)	-0.17	G-1	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.57	Vert(CT)	-0.26	G-1	>902		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.72	Horz(CT)	0.01	G	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 *Except* T3: 2x6 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-E.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* W6: 2x4 SP No.2	WEBS 1 Row at midpt F-G, D-G

**REACTIONS.** (lb/size) J=788/0-3-8 (min. 0-1-8), G=788/0-3-8 (min. 0-1-8)  
Max Horz J=390(LC 7)  
Max Uplift J=-46(LC 10), G=-197(LC 7)  
Max Grav J=807(LC 2), G=850(LC 2)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=-266/163, B-C=-708/260, C-D=-471/246, D-E=-165/178, E-F=-190/190, A-J=-263/146, F-G=-131/103  
BOT CHORD J-K=-288/623, K-L=-288/623, L-M=-288/623, H-I=-189/313, H-M=-189/313, M-N=-189/313, G-N=-189/313  
WEBS B-I=-255/256, C-I=-45/247, D-I=-72/406, B-J=-695/40, D-G=-644/239

- 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 46 lb uplift at joint J and 197 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 9) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

**LOAD CASE(S)** Standard

Job <b>20071754</b>	Truss <b>B1-Cond1</b>	Truss Type <b>ATTIC</b>	Qty <b>4</b>	Ply <b>1</b>	<b>288 NC2015</b>
------------------------	--------------------------	----------------------------	-----------------	-----------------	-------------------

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC  
 Job Reference (optional)  
 8,330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:01:19 2020 Page 1  
 ID:wtU0m002Cvnp9KkLnVkyYw5y7knd-ngjVo09N33MRzcoXuE0z5AAvRipn7Qzt38UW2iyoJBE

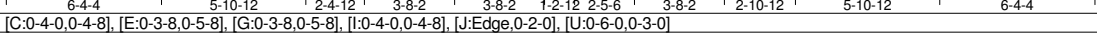
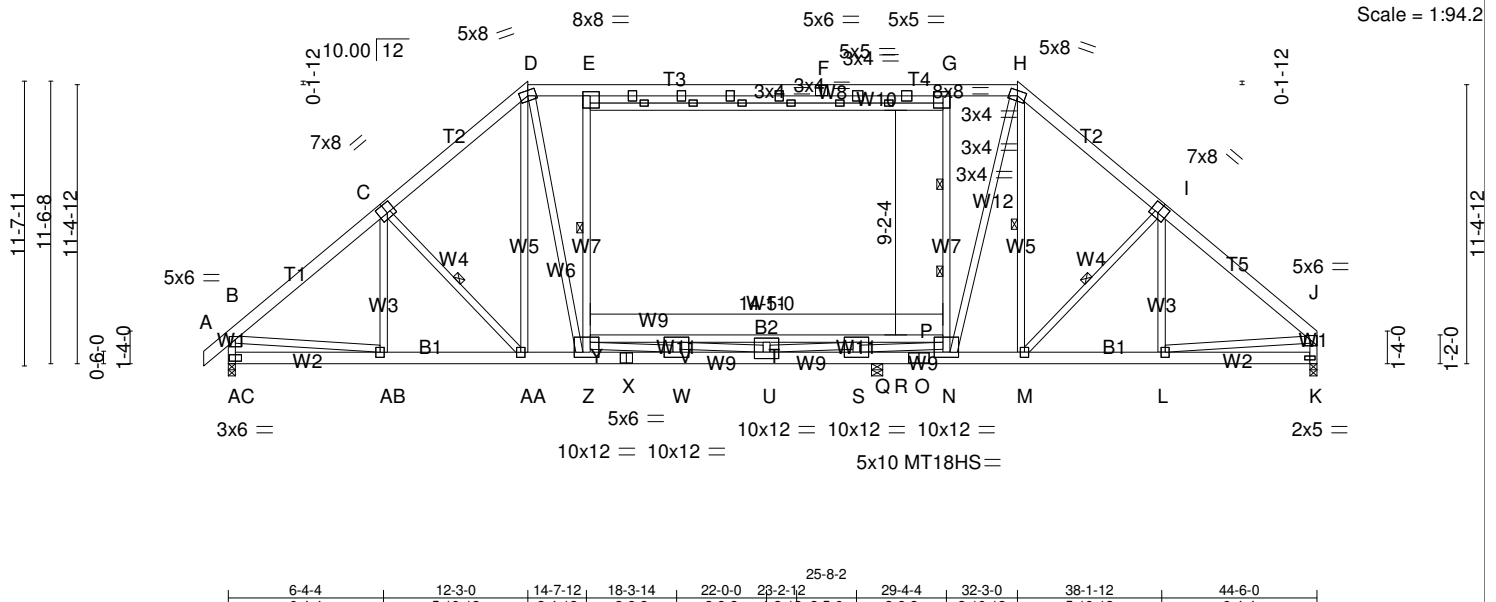
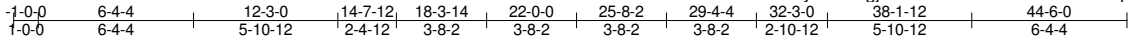


Plate Offsets (X,Y)-- [B:0-3-0,0-1-8], [C:0-4-0,0-4-8], [E:0-3-8,0-5-8], [G:0-3-8,0-5-8], [I:0-4-0,0-4-8], [J:Edge,0-2-0], [U:0-6-0,0-3-0]

<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 0.84	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.98	Vert(LL) -0.29 V-Y >999 240	MT18HS	244/190
BCLL 0.0 *	Lumber DOL 1.15	WB 0.93	Vert(CT) -0.50 V-Y >637 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MSH	Horz(CT) 0.06 K n/a n/a		
	Code IRC2015/TPI2014		Attic -0.22 P-Y 800 360	Weight: 470 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>	[MCT]
TOP CHORD 2x6 SP No.2 *Except* T4: 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 3-7-13 oc purlins, except end verticals.	
BOT CHORD 2x6 SP No.2 *Except* B2: 2x4 SP No.1, B3: 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: N-R. 3-5-0 oc bracing: P-Y	
WEBS 2x4 SP No.3 *Except* W7,W10: 2x4 SP No.2	WEBS 1 Row at midpt C-AA, E-Y, H-M, I-M 2 Rows at 1/3 pts G-P	

**REACTIONS.** (lb/size) AC=1866/0-3-8 (min. 0-3-2), K=1687/0-3-8 (min. 0-2-12), R=541/0-5-8 (min. 0-1-8)  
 Max Horz AC=297(LC 7)  
 Max Uplift AC=-81(LC 10), K=-3(LC 10), R=-109(LC 6)  
 Max Grav AC=1979(LC 24), K=1743(LC 2), R=908(LC 25)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=0/44, B-C=-2382/251, C-D=-2261/336, D-E=-1849/351, E-F=-1858/335, F-G=-1879/339, G-H=-1910/343, H-I=-2005/355, I-J=-2155/263,  
 B-AC=-1902/260, J-K=-1672/221  
 BOT CHORD AB-AC=-294/470, AA-AB=-239/1836, Z-AA=-187/1681, X-Z=-236/2053, W-X=-236/2053, U-W=0/3670, S-U=-294/2125, R-S=-241/1934,  
 O-R=-241/1934, N-O=-241/1934, M-N=-107/1468, L-M=-72/1584, K-L=-47/211, V-Y=-2039/0, T-V=-2174/0, Q-T=-2174/0, P-Q=-443/652  
 WEBS C-AB=-133/88, C-AA=-312/233, D-AA=-137/383, Y-Z=-932/259, E-Y=-758/397, N-P=-1320/289, G-P=-1186/286, H-M=-209/286, I-M=-342/245,  
 I-L=-94/110, T-U=-314/0, V-W=-424/0, Q-S=-830/0, P-S=-788/513, Q-U=0/1827, W-Y=0/1948, U-V=-270/188, B-AB=0/1507, J-L=-32/1395,  
 D-Z=-213/967, H-N=-353/1710

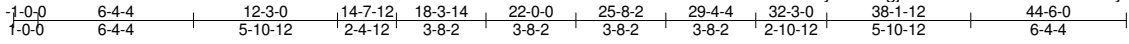
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end 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) All plates are 5x4 MT20 unless otherwise indicated.
  - 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) Ceiling dead load (5.0 psf) on member(s). D-E, E-G, G-H
  - 9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. V-Y, T-V, Q-T, P-Q
  - 10) Bearing at joint(s) AC, K considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 81 lb uplift at joint AC, 3 lb uplift at joint K and 109 lb uplift at joint R.
  - 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/TPI 1.
  - 13) Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard

Job <b>20071754</b>	Truss <b>B1-Cond2</b>	Truss Type <b>ATTIC</b>	Qty <b>4</b>	Ply <b>1</b>	<b>288 NC2015</b>
------------------------	--------------------------	----------------------------	-----------------	-----------------	-------------------

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

Job Reference (optional)  
8.330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:01:19 2020 Page 1  
ID:wtU0m002CvnP9KkLnVkyYw5y7knd-ngjVo09N33MRzcoXuE0z5AAyfttl7Pst38UW2iyoJBE



Scale = 1:94.2

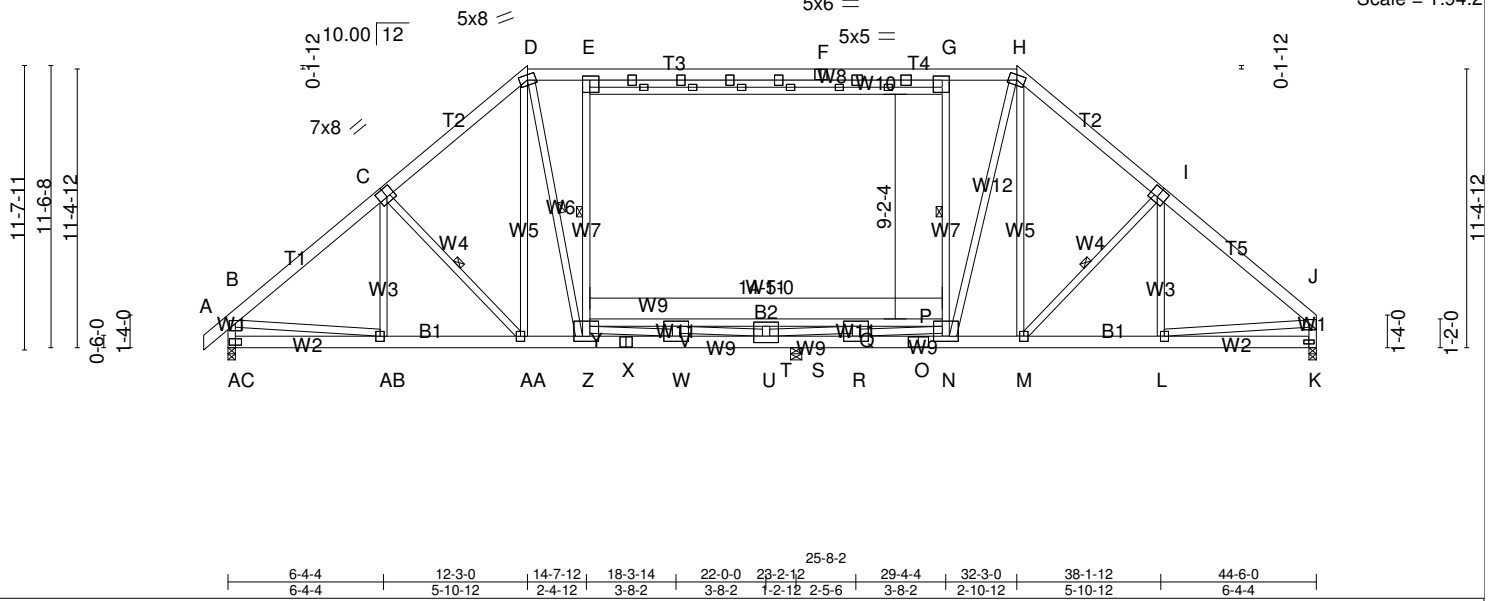


Plate Offsets (X,Y)-- [B:0-3-0,0-1-8], [C:0-4-0,0-4-8], [E:0-3-8,0-5-8], [G:0-3-8,0-5-8], [I:0-4-0,0-4-8], [J:Edge,0-2-0], [U:0-6-0,0-3-0]

<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 0.68	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.75	Vert(LL) -0.19 V-Y >999 240	MT18HS	244/190
BCLL 0.0 *	Lumber DOL 1.15	WB 1.00	Vert(CT) -0.29 V-Y >958 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MSH	Horz(CT) 0.05 K n/a n/a		
	Code IRC2015/TPI2014		Attic -0.14 P-Y 1200 360		
				Weight: 470 lb	FT = 20%

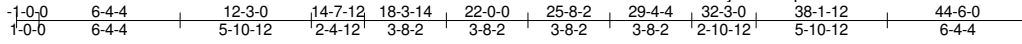
<b>LUMBER-</b>	<b>BRACING-</b>	[MCT]
TOP CHORD 2x6 SP No.2 *Except* T4: 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-9-6 oc purlins, except end verticals.	
BOT CHORD 2x6 SP No.2 *Except* B2: 2x4 SP No.1, B3: 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:	
WEBS 2x4 SP No.3 *Except* W7,W10: 2x4 SP No.2	WEBS 6-0-0 oc bracing: P-Y 1 Row at midpt C-AA, E-Y, G-P, I-M, D-Z	

**REACTIONS.** (lb/size) AC=1732/0-3-8 (min. 0-2-11), K=1626/0-3-8 (min. 0-2-9), S=736/0-5-8 (min. 0-1-8)  
Max Horz AC=297(LC 9)  
Max Uplift AC=98(LC 10), K=-46(LC 11)  
Max Grav AC=1732(LC 1), K=1626(LC 1), S=1233(LC 16)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=0/44, B-C=-2028/306, C-D=-1879/395, D-E=-1573/407, E-F=-1549/392, F-G=-1565/397, G-H=-1586/401, H-I=-1784/409, I-J=-1981/313,  
B-A C=-1658/302, J-K=-1553/258  
BOT CHORD AB-AC=-294/442, AA-AB=-236/1547, Z-AA=-185/1372, X-Z=-214/1727, W-X=-214/1727, U-W=-180/2065, S-U=-122/800, R-S=-122/800,  
O-R=-188/1666, N-O=-188/1666, M-N=-55/1295, L-M=-110/1437, K-L=-54/208, V-Y=-701/259, T-V=-213/1148, Q-T=-213/1148, P-Q=-85/791  
WEBS C-AB=-93/111, C-AA=-332/229, D-AA=-160/412, Y-Z=-1003/369, E-Y=-1051/483, N-P=-940/361, G-P=-1099/395, H-M=-185/383, I-M=-345/231,  
I-L=-85/117, T-U=-402/0, V-W=70/161, Q-R=-370/32, P-R=-957/138, Q-U=-447/260, W-Y=-436/586, U-V=-1416/0, B-AB=-15/1262, J-L=-68/1244,  
D-Z=-441/1064, H-N=-422/1223

- 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
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - All plates are 5x4 MT20 unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Ceiling dead load (5.0 psf) on member(s). D-E, E-G, G-H
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. V-Y, T-V, Q-T, P-Q
  - Bearing at joint(s) AC, K 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 98 lb uplift at joint AC and 46 lb uplift at joint K.
  - 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.
  - Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard



Scale = 1:103.6

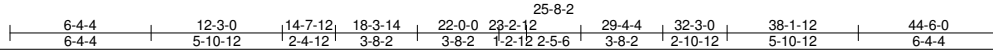
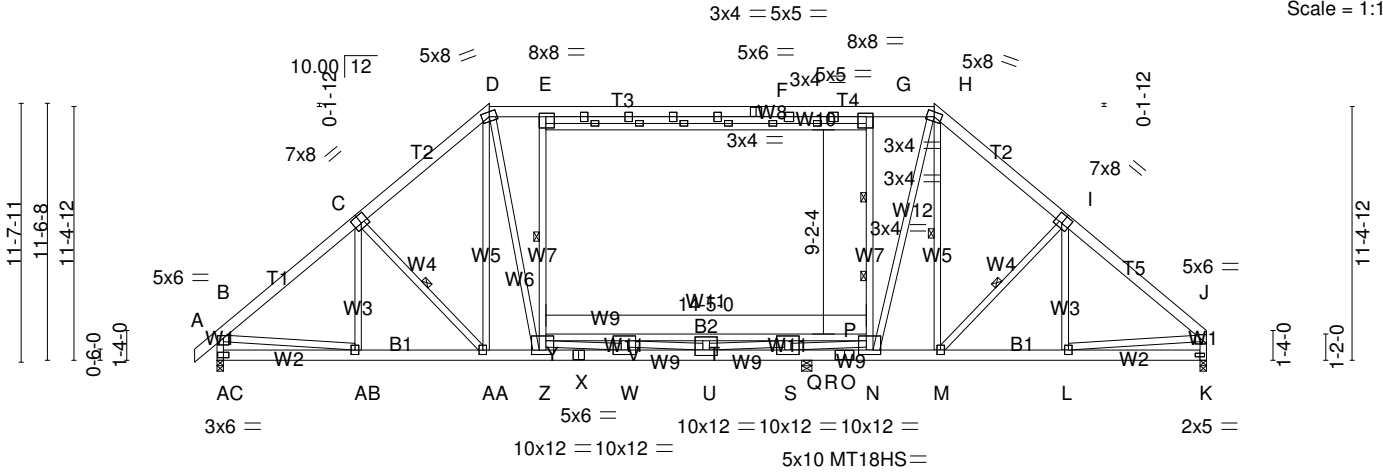


Plate Offsets (X,Y)-- [B:0-3-0,0-1-8], [C:0-4-0,0-4-8], [E:0-3-8,0-5-8], [G:0-3-8,0-5-8], [I:0-4-0,0-4-8], [J:Edge,0-2-0], [U:0-6-0,0-3-0]

<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 0.84	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.98	Vert(LL) -0.29 V-Y >999 240	MT18HS	244/190
BCLL 0.0 *	Lumber DOL 1.15	WB 0.93	Vert(CT) -0.50 V-Y >637 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MSH	Horz(CT) 0.06 K n/a n/a		
	Code IRC2015/TPI2014		Attic -0.22 P-Y 800 360	Weight: 470 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>	[MCT]
TOP CHORD 2x6 SP No.2 *Except* T4: 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 3-7-13 oc purlins, except end verticals.	
BOT CHORD 2x6 SP No.2 *Except* B2: 2x4 SP No.1, B3: 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: N-R.	
WEBS 2x4 SP No.3 *Except* W7,W10: 2x4 SP No.2	WEBS 3-5-0 oc bracing: P-Y 1 Row at midpt C-AA, E-Y, H-M, I-M 2 Rows at 1/3 pts G-P	

**REACTIONS.** (lb/size) AC=1866/0-3-8 (min. 0-3-2), K=1687/0-3-8 (min. 0-2-12), R=541/0-5-8 (min. 0-1-8)  
 Max Horz AC=297(LC 7)  
 Max Uplift AC=-81(LC 10), K=-3(LC 10), R=-109(LC 6)  
 Max Grav AC=1979(LC 24), K=1743(LC 2), R=908(LC 25)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=0/44, B-C=-2382/251, C-D=-2261/336, D-E=-1849/351, E-F=-1858/335, F-G=-1879/339, G-H=-1910/343, H-I=-2005/355, I-J=-2155/263,  
 B-AC=-1902/260, J-K=-1672/221  
 BOT CHORD AB-AC=-294/470, AA-AB=-239/1836, Z-AA=-187/1681, X-Z=-236/2053, W-X=-236/2053, U-W=0/3670, S-U=-294/2125, R-S=-241/1934,  
 O-R=-241/1934, N-O=-241/1934, M-N=-107/1468, L-M=-72/1584, K-L=-47/211, V-Y=-2039/0, T-V=-2174/0, Q-T=-2174/0, P-Q=-443/652  
 WEBS C-AB=-133/88, C-AA=-312/233, D-AA=-137/383, Y-Z=-932/259, E-Y=-758/397, N-P=-1320/289, G-P=-1186/286, H-M=-209/286, I-M=-342/245,  
 I-L=-94/110, T-U=-314/0, V-W=-424/0, Q-S=-830/0, P-S=-788/513, Q-U=0/1827, W-Y=0/1948, U-V=-270/188, B-AB=0/1507, J-L=-32/1395,  
 D-Z=-213/967, H-N=-353/1710

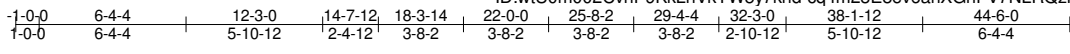
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end 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) All plates are 5x4 MT20 unless otherwise indicated.
  - 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) Ceiling dead load (5.0 psf) on member(s). D-E, E-G, G-H
  - 9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. V-Y, T-V, Q-T, P-Q
  - 10) Bearing at joint(s) AC, K considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 81 lb uplift at joint AC, 3 lb uplift at joint K and 109 lb uplift at joint R.
  - 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/TPI 1.
  - 13) Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard

Job 20071754	Truss B2-Cond2	Truss Type ATTIC	Qty 2	Ply 1	288 NC2015
-----------------	-------------------	---------------------	----------	----------	------------

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC  
 Job Reference (optional)  
 8,330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:01:25 2020 Page 1

ID:wtU0m002CvnP9KkLnVkyW5y7knd-cq4m23E8ev6ahXGhFV7NLRQzM4wiX6LmR3xrFMyoJB8



Scale = 1:99.5

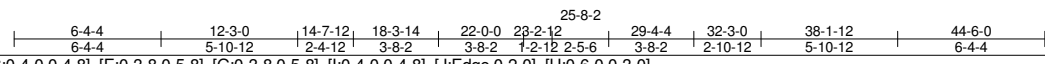
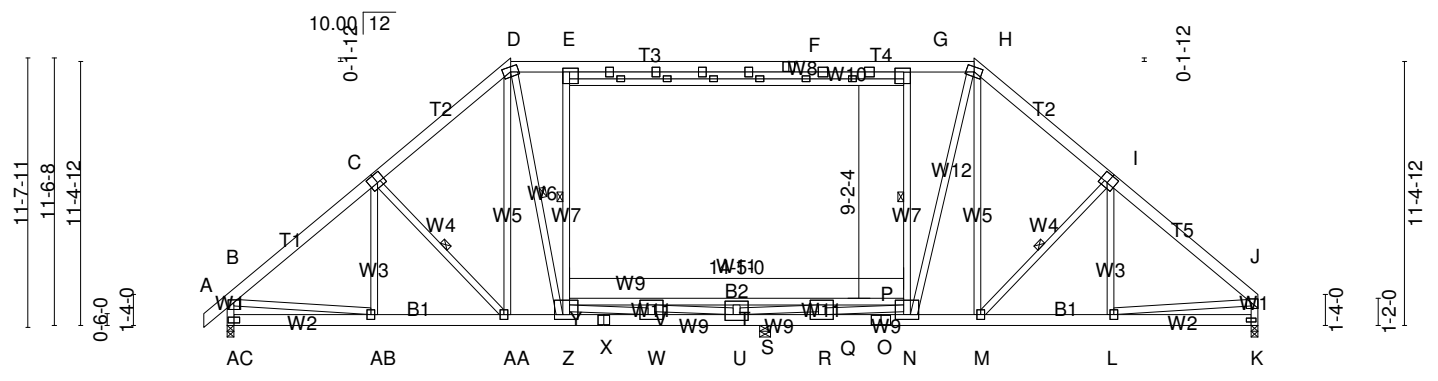


Plate Offsets (X,Y)-- [B:0-3-0,0-1-8], [C:0-4-0,0-4-8], [E:0-3-8,0-5-8], [G:0-3-8,0-5-8], [I:0-4-0,0-4-8], [J:Edge,0-2-0], [U:0-6-0,0-3-0]

<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 0.68	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.75	Vert(LL) -0.19 V-Y >999 240	MT18HS	244/190
BCLL 0.0 *	Lumber DOL 1.15	WB 1.00	Vert(CT) -0.29 V-Y >958 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MSH	Horz(CT) 0.05 K n/a n/a		
	Code IRC2015/TPI2014		Attic -0.14 P-Y 1200 360	Weight: 470 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>	[MCT]
TOP CHORD 2x6 SP No.2 *Except* T4: 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-9-6 oc purlins, except end verticals.	
BOT CHORD 2x6 SP No.2 *Except* B2: 2x4 SP No.1, B3: 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 6-0-0 oc bracing: P-Y	
WEBS 2x4 SP No.3 *Except* W7,W10: 2x4 SP No.2	WEBS 1 Row at midpt C-AA, E-Y, G-P, I-M, D-Z	

**REACTIONS.** (lb/size) AC=1732/0-3-8 (min. 0-2-11), K=1626/0-3-8 (min. 0-2-9), S=736/0-5-8 (min. 0-1-8)  
 Max Horz AC=297(LC 9)  
 Max Uplift AC=98(LC 10), K=-46(LC 11)  
 Max Grav AC=1732(LC 1), K=1626(LC 1), S=1233(LC 16)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=0/44, B-C=-2028/306, C-D=-1879/395, D-E=-1573/407, E-F=-1549/392, F-G=-1565/397, G-H=-1586/401, H-I=-1784/409, I-J=-1981/313,  
 B-AC=-1658/302, J-K=-1553/258  
 BOT CHORD AB-AC=-294/442, AA-AB=-236/1547, Z-AA=-185/1372, X-Z=-214/1727, W-X=-214/1727, U-W=-180/2065, S-U=-122/800, R-S=-122/800,  
 O-R=-188/1666, N-O=-188/1666, M-N=-55/1295, L-M=-110/1437, K-L=-54/208, V-Y=-701/259, T-V=-213/1148, Q-T=-213/1148, P-Q=-85/791  
 WEBS C-AB=-93/111, C-AA=-332/229, D-AA=-160/412, Y-Z=-1003/369, E-Y=-1051/483, N-P=-940/361, G-P=-1099/395, H-M=-185/383, I-M=-345/231,  
 I-L=-85/117, T-U=-402/0, V-W=-70/161, Q-R=-370/32, P-R=-957/138, Q-U=-447/260, W-Y=-436/586, U-V=-1416/0, B-AB=-15/1262, J-L=-68/1244,  
 D-Z=-441/1064, H-N=-422/1223

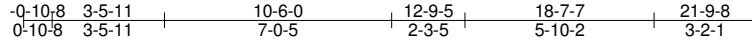
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end 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) All plates are 5x4 MT20 unless otherwise indicated.
  - 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) Ceiling dead load (5.0 psf) on member(s). D-E, E-G, G-H
  - 9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. V-Y, T-V, Q-T, P-Q
  - 10) Bearing at joint(s) AC, K considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 98 lb uplift at joint AC and 46 lb uplift at joint K.
  - 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/TPI 1.
  - 13) Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard



Job 20071754	Truss B4	Truss Type Piggyback Base	Qty 1	Ply 1	288 NC2015
-----------------	-------------	------------------------------	----------	----------	------------

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC  
 8,330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:01:26 2020 Page 1  
 ID:wtU0m002CvnP9KkLnVKYw5y7knd-41e8GPEnPcERlhqtpDectey8OTCSGmXvgjhOnoyoJB7



Scale = 1:71.2

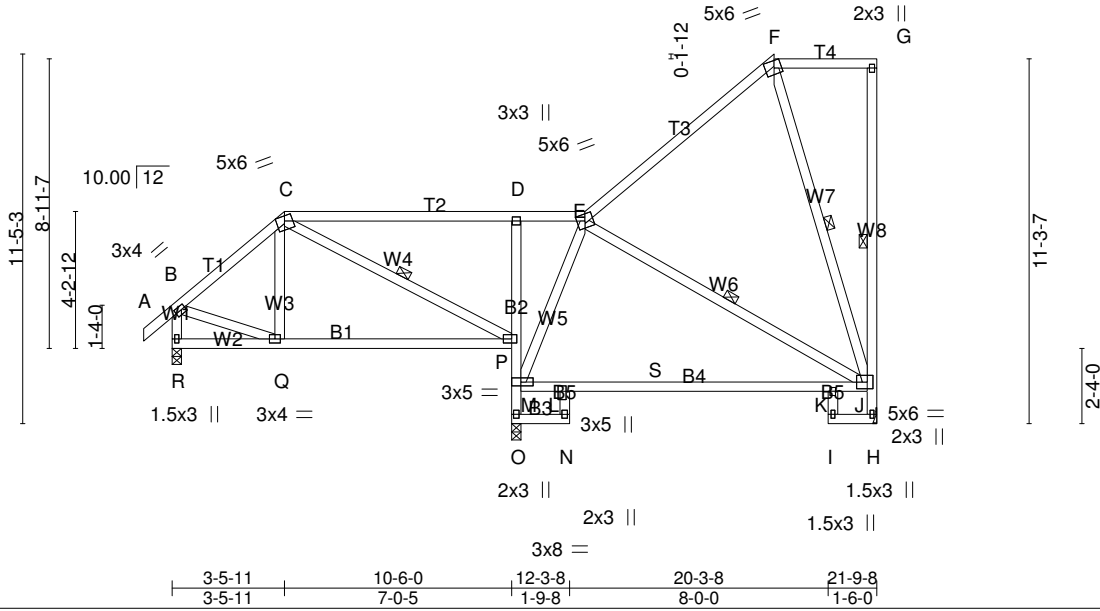


Plate Offsets (X,Y)-- [B:0-1-8,0-1-8], [F:0-2-8,Edge], [L:0-2-0,0-12], [M:0-4-8,0-1-8], [P:0-3-0,0-1-8]

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.66	in (loc) l/def L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.98	Vert(LL) -0.29 K-L >457 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.17	Vert(CT) -0.58 K-L >229 180		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MSH	Horz(CT) 0.14 H n/a n/a		
				Weight: 163 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-E, F-G.
BOT CHORD 2x4 SP No.2 *Except* B5: 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x4 SP No.3 *Except* W8: 2x4 SP No.2	WEBS 1 Row at midpt G-H, C-P, E-J, F-J

**REACTIONS.** (lb/size) H=488/Mechanical, R=534/0-3-8 (min. 0-1-8), O=760/0-3-8 (min. 0-1-8)  
 Max Horz R=305(LC 10)  
 Max UpliftH=46(LC 10), O=268(LC 10)  
 Max Grav H=493(LC 2), R=534(LC 1), O=760(LC 1)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=0/39, B-C=475/0, C-D=381/0, D-E=365/0, E-F=214/29, F-G=-26/0, H-J=-456/102, G-J=-88/43, B-R=-528/0  
 BOT CHORD Q-R=-338/268, P-Q=-192/398, M-O=710/302, M-P=-485/238, D-P=-357/200, N-O=-252/0, L-N=-44/0, L-M=0/564, L-S=0/325, K-S=0/325, J-K=0/395, I-K=-15/0, H-I=-83/0  
 WEBS C-Q=0/158, C-P=-210/290, E-J=-315/0, B-Q=0/357, E-M=-164/119, F-J=-235/184

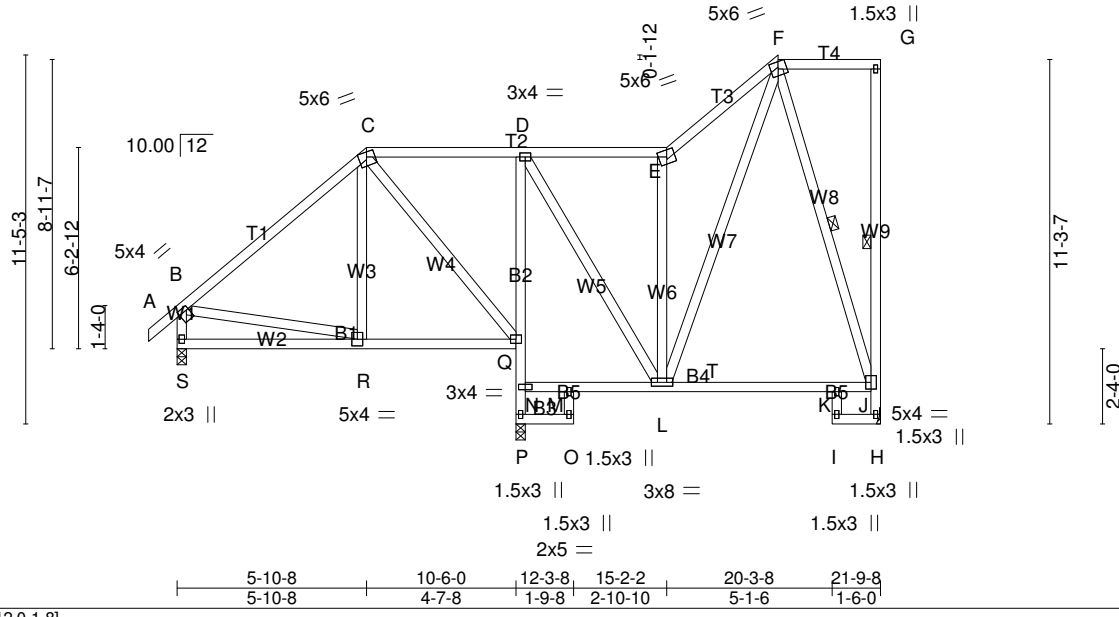
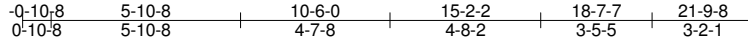
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical 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.
  - 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 46 lb uplift at joint H and 268 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/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 20071754	Truss B4A	Truss Type Piggyback Base	Qty 1	Ply 1	288 NC2015
-----------------	--------------	------------------------------	----------	----------	------------

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC 8,330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:01:28 2020 Page 1

ID:wtU0m002CvnP9KkLnVkyYw5y7knd-0PmVh5G1xqU9Y\_Gwdh4z32WYrH0JkclC71AVshyoJB5



Scale = 1:71.4

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

<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 0.53	in (loc) l/def L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.44	Vert(LL) -0.10 K-L >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.41	Vert(CT) -0.15 K-L >872 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MSH	Horz(CT) 0.07 H n/a n/a		
	Code IRC2015/TPI2014			Weight: 187 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 \*Except\*  
              B2,B5: 2x4 SP No.3  
WEBS 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): C-E, F-G.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt G-H, F-J

**REACTIONS.** (lb/size) H=423/Mechanical, S=467/0-3-8 (min. 0-1-8), P=891/0-3-8 (min. 0-1-8)  
Max Horz S=305(LC 10)  
Max Uplift H=61(LC 10), P=237(LC 10)  
Max Grav H=442(LC 2), S=467(LC 1), P=891(LC 1)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=0/39, B-C=367/0, C-D=79/75, D-E=-176/0, E-F=-274/0, F-G=-11/0, H-J=-411/113, G-J=-88/41, B-S=-415/37  
BOT CHORD R-S=-413/429, Q-R=-149/240, N-P=-871/249, N-Q=-860/253, D-Q=-580/134, O-P=-3/16, M-O=0/25, M-N=-54/10, L-M=-37/7, L-T=-30/89, K-T=-30/89, J-K=-29/98, I-K=-8/8, H-I=-14/0  
WEBS C-R=0/226, C-Q=-370/195, B-R=-189/276, F-J=-291/109, E-L=-348/84, D-L=-2/354, F-L=-0/231

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=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) 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 61 lb uplift at joint H and 237 lb uplift at joint P.
  - 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 20071754	Truss B5	Truss Type Piggyback Base	Qty 1	Ply 1	288 NC2015
-----------------	-------------	------------------------------	----------	----------	------------

Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

8,330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:01:29 2020 Page 1  
ID:wtU0m002CvnP9KkLnVKyW5y7knd-UbKHuRHf7c098ZSULCJVHac8hJAT4xLMhv2O7yoJB4

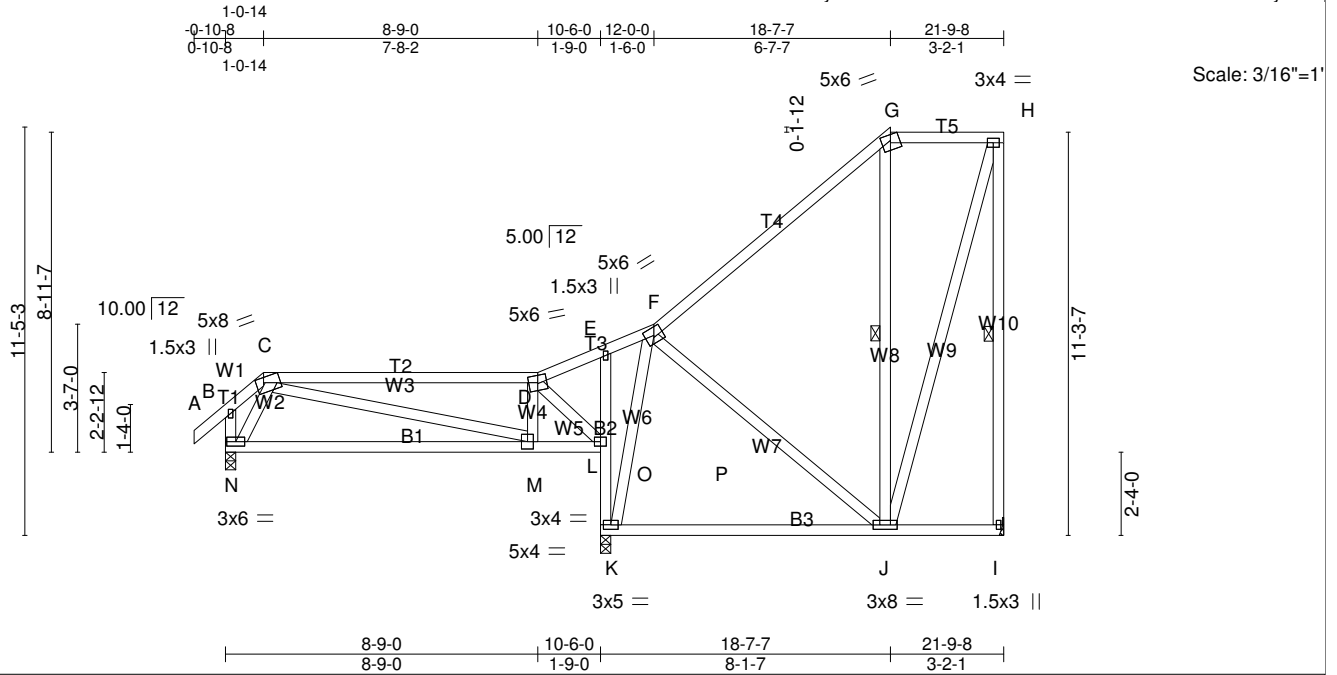


Plate Offsets (X,Y)-- [C:0-1-4,Edge]

<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 0.89	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.59	Vert(LL) -0.12 M-N >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.32	Vert(CT) -0.25 M-N >506 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MSH	Horz(CT) -0.01 K n/a n/a		
	Code IRC2015/TPI2014			Weight: 168 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 (3-4-5 max.): C-D, G-H.
BOT CHORD 2x4 SP No.2 *Except* B2: 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 H-I, G-J

**REACTIONS.** (lb/size) I=423/Mechanical, N=479/0-3-8 (min. 0-1-8), K=877/0-3-8 (min. 0-1-8)  
Max Horz N=305(LC 10)  
Max UpliftI=-100(LC 10), N=-30(LC 10), K=-158(LC 10)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=0/39, B-C=-145/74, C-D=-452/0, D-E=-246/172, E-F=-288/221, F-G=-261/10, G-H=-112/36, H-I=-420/134, B-N=-162/44  
BOT CHORD M-N=-333/352, L-M=-60/443, K-L=-361/93, E-L=-119/116, K-O=-47/109, O-P=-47/109, J-P=-47/109, I-J=-1/1  
WEBS C-M=-17/306, D-M=0/290, D-L=-679/87, F-J=-12/39, G-J=-240/204, H-J=-128/405, C-N=-492/235, F-K=-457/245

- 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) -0-10-8 to 21-7-12 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint I, 30 lb uplift at joint N and 158 lb uplift at joint K.
  - 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.

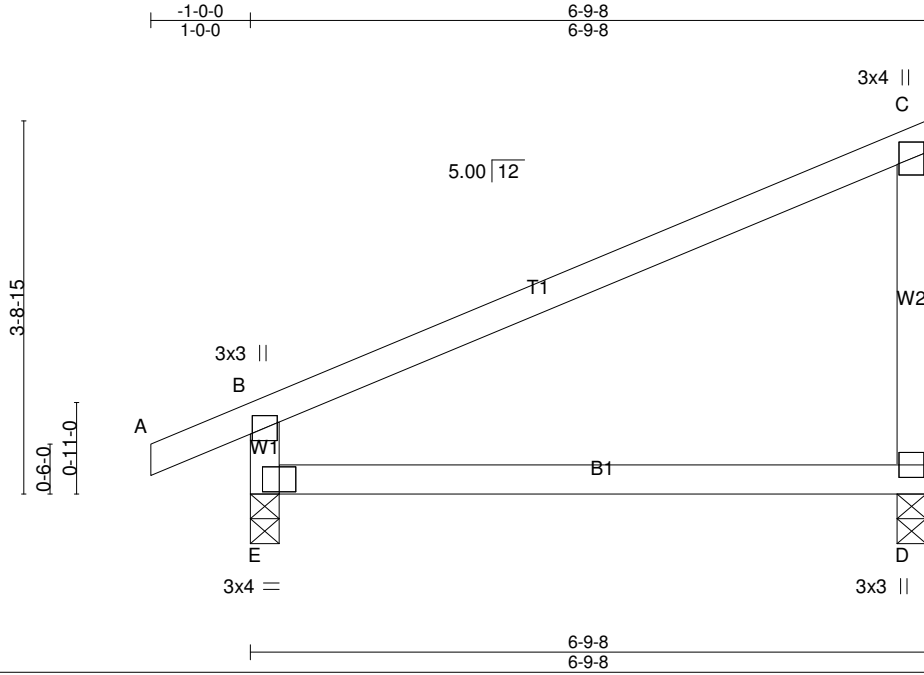
**LOAD CASE(S)** Standard

Job 20071754	Truss B6	Truss Type Monopitch	Qty 5	Ply 1	288 NC2015
-----------------	-------------	-------------------------	----------	----------	------------

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

Job Reference (optional)

8.330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:01:30 2020 Page 1  
ID:wtU0m002CvnP9KkLnVkyYW5y7knd-youf6nHHTRltnl8e22jY2U7sx5iPCcBVbLfcxayoJB3



<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 0.56 BC 0.40 WB 0.00 Matrix-MR	<b>DEFL.</b> in (loc) l/defl L/d Vert(LL) -0.07 D-E >999 240 Vert(CT) -0.14 D-E >558 180 Horz(CT) -0.00 D n/a n/a	<b>PLATES</b> MT20 <b>GRIP</b> 244/190  Weight: 28 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. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
--	--

**REACTIONS.** (lb/size) D=254/0-3-8 (min. 0-1-8), E=335/0-3-8 (min. 0-1-8)  
Max Horz E=146(LC 7)  
Max Uplift D=62(LC 10), E=-57(LC 10)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=0/26, B-C=-153/40, C-D=-173/134, B-E=-286/211  
BOT CHORD D-E=-38/54

- 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) E considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 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.

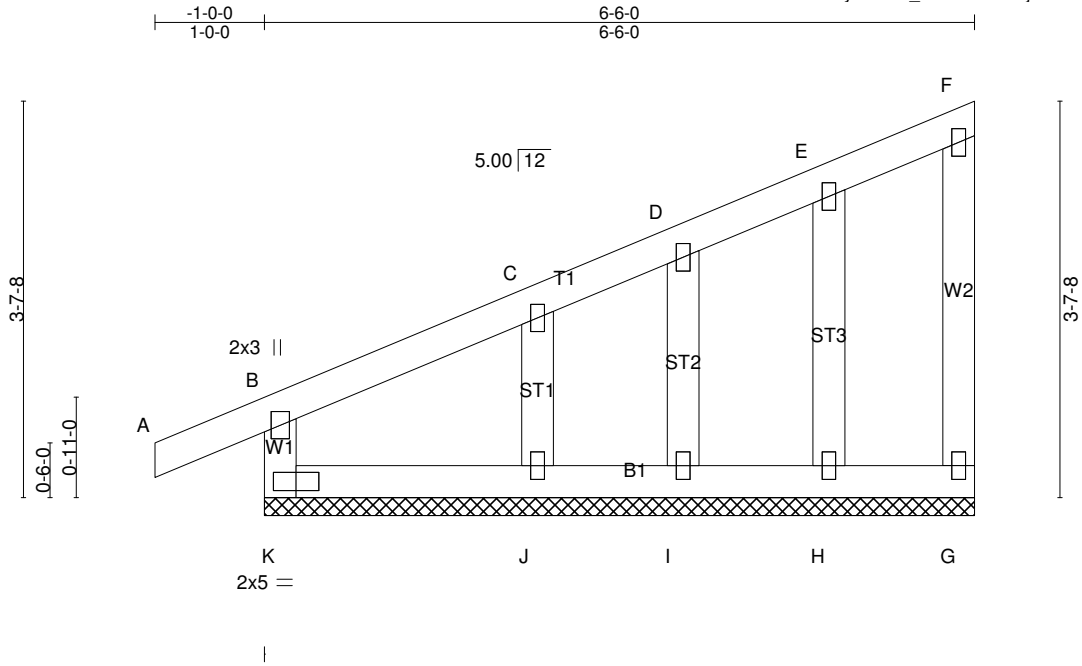
**LOAD CASE(S)** Standard

Job 20071754	Truss B7	Truss Type GABLE	Qty 1	Ply 1	288 NC2015
-----------------	-------------	---------------------	----------	----------	------------

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

Job Reference (optional)

8.330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:01:31 2020 Page 1  
ID:wtU0m002CvnP9KkLnVkyW5y7knd-R\_S1J7lvEltkPSjrbmEnaif73U7sx3qep?O9T0yoJB2



Scale = 1:21.1

<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 0.16 BC 0.07 WB 0.04 Matrix-R	<b>DEFL.</b> Vert(LL) -0.00 A n/r 120 Vert(CT) -0.00 A n/r 90 Horz(CT) -0.00 G n/a n/a	<b>PLATES</b> MT20 <b>GRIP</b> 244/190  Weight: 36 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) K=168/6-6-0 (min. 0-1-8), G=39/6-6-0 (min. 0-1-8), H=112/6-6-0 (min. 0-1-8), I=90/6-6-0 (min. 0-1-8), J=156/6-6-0 (min. 0-1-8)  
Max Horz K=141(LC 7)  
Max Uplift K=-19(LC 6), G=-22(LC 7), H=-25(LC 10), I=-9(LC 10), J=-80(LC 10)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD B-K=-147/80, A-B=0/26, B-C=-97/24, C-D=-68/12, D-E=-64/28, E-F=-58/53, F-G=-29/21  
BOT CHORD J-K=-57/60, I-J=-57/60, H-I=-57/60, G-H=-57/60  
WEBS E-H=-82/49, D-I=-71/55, C-J=-112/131

- 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) Truss designed for wind loads in the plane of the truss only.
  - 3) All plates are 1.5x3 MT20 unless otherwise indicated.
  - 4) Gable requires continuous bottom chord bearing.
  - 5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 6) Gable studs spaced at 1-4-0 oc.
  - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 9) Bearing at joint(s) K considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 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.

**LOAD CASE(S)** Standard

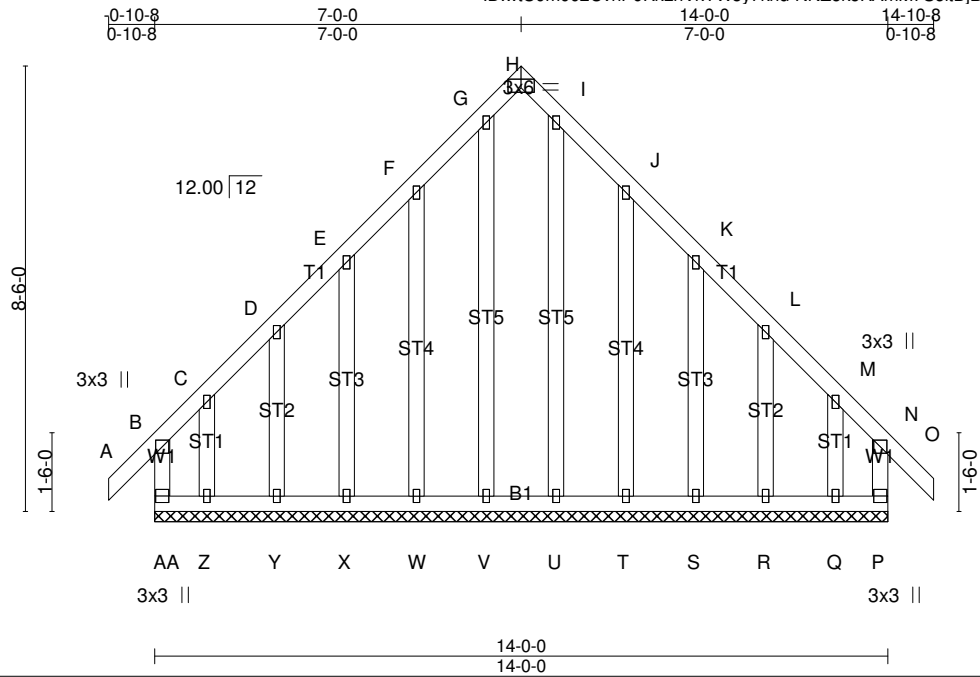
Job 20071754	Truss D1	Truss Type GABLE	Qty 1	Ply 1	288 NC2015
-----------------	-------------	---------------------	----------	----------	------------

Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

8,330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:01:33 2020 Page 1

ID:wtU0m002CvnP9KLnVkyW5y7knd-NNZokoKAmM7SeltDjBGg7ISMloEPwNxBHtGXuyoJB0



Scale = 1:44.0

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

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.23	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.14	Vert(LL) -0.00 O n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.23	Vert(CT) -0.00 O n/r 90		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-R	Horz(CT) 0.00 P n/a n/a		
				Weight: 127 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) AA=118/14-0-0 (min. 0-1-15), P=118/14-0-0 (min. 0-1-15), V=110/14-0-0 (min. 0-1-15), W=106/14-0-0 (min. 0-1-15), X=106/14-0-0 (min. 0-1-15), Y=112/14-0-0 (min. 0-1-15), Z=57/14-0-0 (min. 0-1-15), U=110/14-0-0 (min. 0-1-15), T=106/14-0-0 (min. 0-1-15), S=106/14-0-0 (min. 0-1-15), R=112/14-0-0 (min. 0-1-15), Q=57/14-0-0 (min. 0-1-15)  
 Max Horz AA=-242(LC 8)  
 Max Uplift AA=-230(LC 6), P=-207(LC 7), W=-103(LC 10), X=-76(LC 10), Y=-50(LC 10), Z=-249(LC 7), T=-103(LC 11), S=-76(LC 11), R=-51(LC 11), Q=-233(LC 6)  
 Max Grav AA=286(LC 9), P=263(LC 17), V=184(LC 11), W=122(LC 17), X=125(LC 17), Y=112(LC 21), Z=281(LC 8), U=180(LC 10), T=124(LC 18), S=124(LC 18), R=112(LC 22), Q=263(LC 9)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD B-AA=198/153, A-B=0/43, B-C=-189/182, C-D=-108/116, D-E=-90/154, E-F=-142/226, F-G=-221/328, G-H=-134/181, H-I=-134/181, I-J=-221/328, J-K=-142/226, K-L=-83/154, L-M=-95/105, M-N=-172/163, N-O=0/43, N-P=-185/137  
 BOT CHORD Z-AA=-124/128, Y-Z=-124/128, X-Y=-124/128, W-X=-124/128, V-W=-124/128, U-V=-124/128, T-U=-124/128, S-T=-124/128, R-S=-124/128, Q-R=-124/128, P-Q=-124/128  
 WEBS G-V=-215/97, F-W=-139/128, E-X=-109/88, D-Y=-108/84, C-Z=-141/143, I-U=-215/97, J-T=-139/128, K-S=-109/88, L-R=-108/84, M-Q=-141/140

- 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 1-4-0 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 230 lb uplift at joint AA, 207 lb uplift at joint P, 103 lb uplift at joint W, 76 lb uplift at joint X, 50 lb uplift at joint Y, 249 lb uplift at joint Z, 103 lb uplift at joint T, 76 lb uplift at joint S, 51 lb uplift at joint R and 233 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.

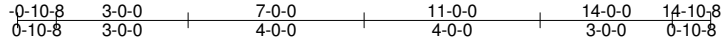
**LOAD CASE(S)** Standard

Job 20071754	Truss D2	Truss Type Common	Qty 1	Ply 1	288 NC2015
-----------------	-------------	----------------------	----------	----------	------------

Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

8,330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:01:34 2020 Page 1  
ID:wtU0m002CvnP9KkLnVkyW5y7knd-rZ7Ax8LoXgFJGvSPHuoVCKHTKi5x8OR4Wzdp4LyoJB?



5x6 =

Scale = 1:52.3

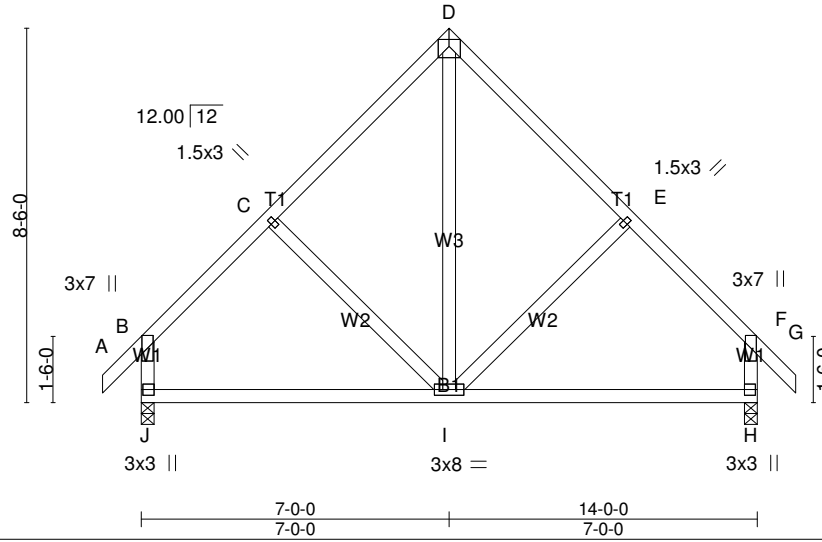


Plate Offsets (X,Y)-- [H:0-1-8,0-0-0], [J:0-1-8,0-0-8]

<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 0.86 BC 0.36 WB 0.18 Matrix-MSH	<b>DEFL.</b> in (loc) l/defl L/d Vert(LL) -0.05 I >999 240 Vert(CT) -0.11 I-J >999 180 Horz(CT) 0.01 H n/a n/a	<b>PLATES</b> MT20 <b>GRIP</b> 244/190  Weight: 86 lb FT = 20%
---	---	--	---	---

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

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

**REACTIONS.** (lb/size) J=610/0-3-8 (min. 0-1-8), H=610/0-3-8 (min. 0-1-8)  
Max Horz J=-242(LC 8)  
Max Uplift J=-57(LC 11), H=-57(LC 10)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=0/43, B-C=-526/153, C-D=-417/186, D-E=-417/186, E-F=-526/153, F-G=0/43, B-J=-526/174, F-H=-526/174  
BOT CHORD I-J=-112/381, H-I=0/284  
WEBS D-I=-139/326, C-I=-148/184, E-I=-148/184

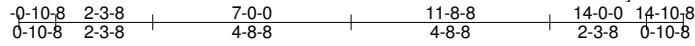
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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 57 lb uplift at joint J and 57 lb uplift at joint H.
  - 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 20071754	Truss D3	Truss Type Roof Special	Qty 1	Ply 1	288 NC2015
-----------------	-------------	----------------------------	----------	----------	------------

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC 8.330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:01:35 2020 Page 1

ID:wtU0m002CvnP9KkLnVkyW5y7knd-JlhY9ULQIzNAt30ccqJkiYqnD6Jstr?EkdMNCnyoJB\_



5x6 =

Scale = 1:54.6

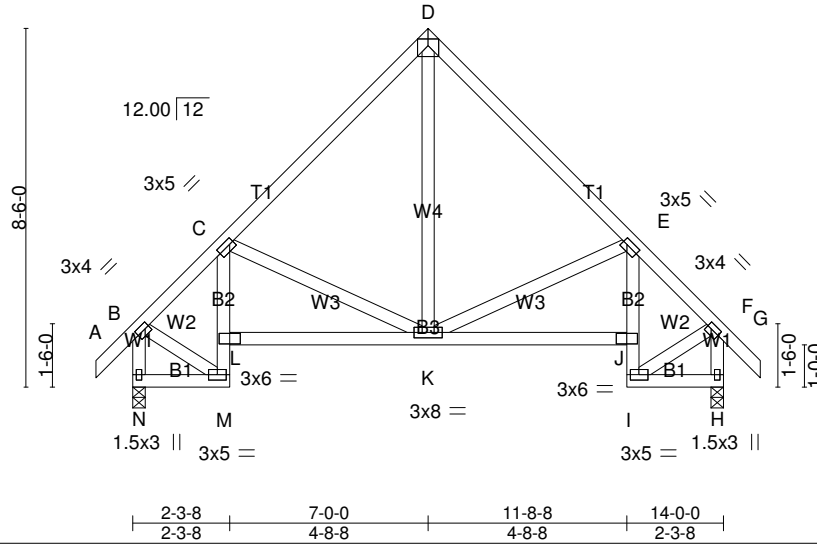


Plate Offsets (X,Y)-- [B:0-1-4.0-1-8], [C:0-1-4.0-1-8], [E:0-1-4.0-1-8], [F:0-1-4.0-1-8]

<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 0.27 BC 0.83 WB 0.16 Matrix-MSH	<b>DEFL.</b> in (loc) l/defl L/d Vert(LL) 0.03 K-L >999 240 Vert(CT) -0.06 K-L >999 180 Horz(CT) 0.09 H n/a n/a	<b>PLATES</b> MT20 <b>GRIP</b> 244/190  Weight: 98 lb FT = 20%
---	---	--	--	---

<b>LUMBER-</b> TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 *Except* B2: 2x4 SP No.3 WEBS 2x4 SP No.3	<b>BRACING-</b> 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) N=610/0-3-8 (min. 0-1-8), H=610/0-3-8 (min. 0-1-8)  
Max Horz N=242(LC 8)  
Max UpliftN=57(LC 11), H=57(LC 10)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=0/43, B-C=481/126, C-D=502/149, D-E=502/149, E-F=-481/126, F-G=0/43, B-N=639/144, F-H=639/144  
BOT CHORD M-N=221/213, L-M=-151/38, C-L=-115/59, K-L=-171/583, J-K=-19/429, I-J=-135/27, E-J=-108/50, H-I=-25/52  
WEBS D-K=-68/358, E-K=-262/196, C-K=-266/216, B-M=-20/376, F-I=-20/376

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 57 lb uplift at joint N and 57 lb uplift at joint H.
  - 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.

**LOAD CASE(S)** Standard



Job 20071754	Truss D4	Truss Type Roof Special	Qty 3	Ply 1	288 NC2015
-----------------	-------------	----------------------------	----------	----------	------------

Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

8,330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:01:36 2020 Page 1  
ID:wtU0m002CvnP9KkLnVkyW5y7knd-nyFwMqM22HV0VDboOJqzHINyyVelclENzH6w7DyoJAZ

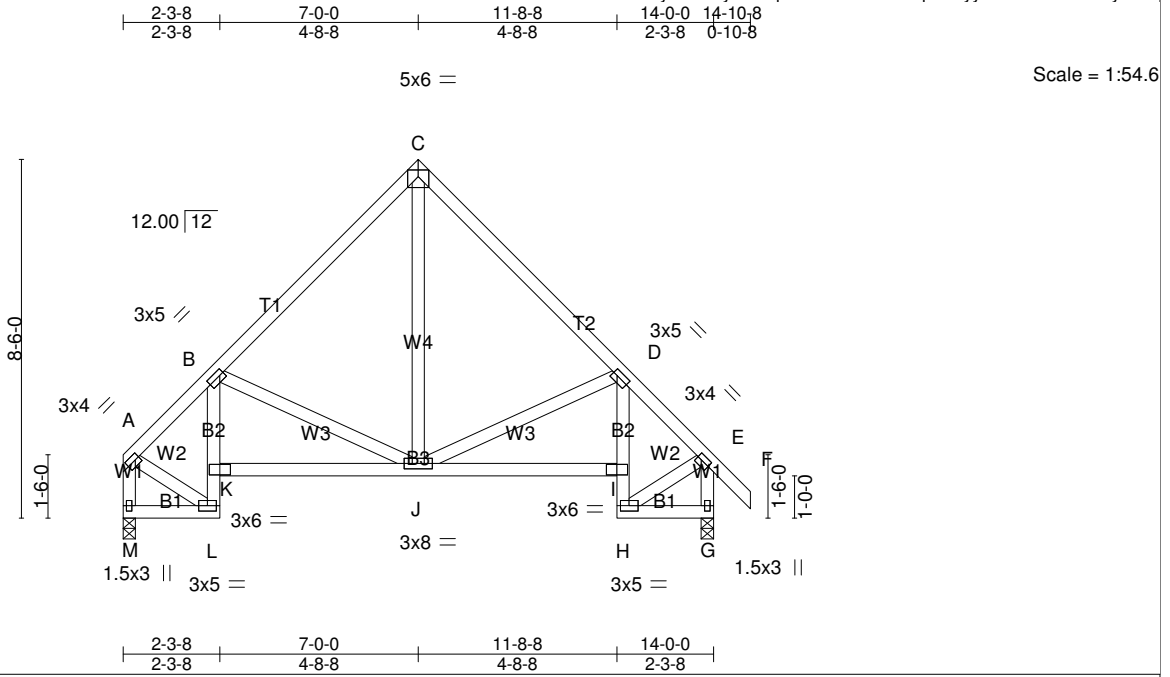


Plate Offsets (X,Y)-- [A:0-1-4.0-1-8], [B:0-1-4.0-1-8], [D:0-1-4.0-1-8], [E:0-1-4.0-1-8]

<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 0.27 BC 0.85 WB 0.16 Matrix-MSH	<b>DEFL.</b> in (loc) l/defl L/d Vert(LL) 0.03 J-K >999 240 Vert(CT) -0.06 J-K >999 180 Horz(CT) 0.10 G n/a n/a	<b>PLATES</b> MT20 <b>GRIP</b> 244/190 Weight: 96 lb FT = 20%
---	---	--	--	---

<b>LUMBER-</b> TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 *Except* B2: 2x4 SP No.3 WEBS 2x4 SP No.3	<b>BRACING-</b> 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) M=546/0-3-8 (min. 0-1-8), G=612/0-3-8 (min. 0-1-8)  
Max Horz M=233(LC 6)  
Max UpliftM=53(LC 11), G=-56(LC 10)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=488/109, B-C=506/147, C-D=505/147, D-E=483/124, E-F=0/43, A-M=576/97, E-G=641/142  
BOT CHORD L-M=209/218, K-L=145/48, B-K=-109/70, J-K=-167/592, I-J=-18/431, H-I=-136/27, D-I=-108/49, G-H=-25/52  
WEBS C-J=-66/361, D-J=-262/196, B-J=-274/211, A-L=-48/376, E-H=-20/378

- 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 53 lb uplift at joint M and 56 lb uplift at joint G.
  - 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.

**LOAD CASE(S)** Standard

Job 20071754	Truss D5	Truss Type Roof Special	Qty 1	Ply 1	288 NC2015
-----------------	-------------	----------------------------	----------	----------	------------

Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

ID:wtU0m002CvnP9KkLnVkyW5y7knd-jkNnnWOlaukkXIBWksRNASHRJK44CjgQbb1C6yoJAX  
8.330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:01:38 2020 Page 1

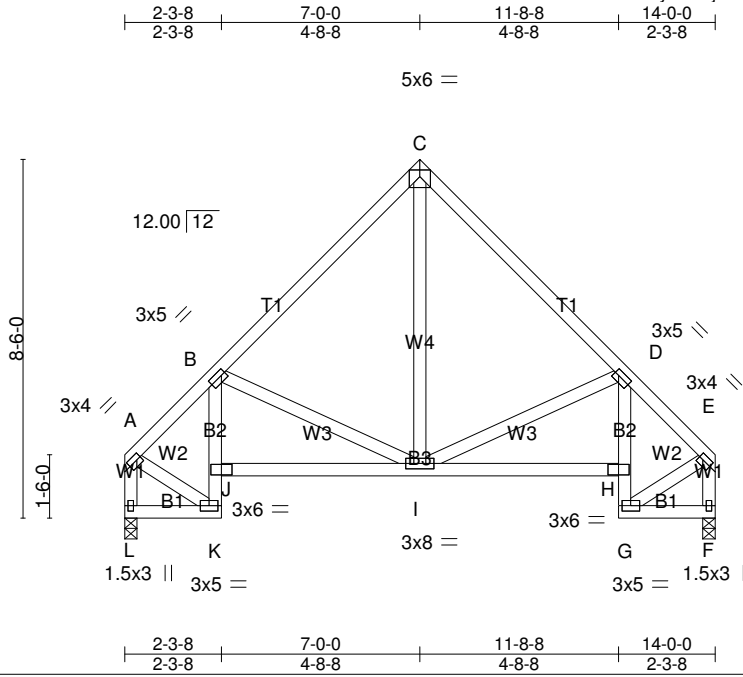


Plate Offsets (X,Y)-- [A:0-1-4.0-1-8], [B:0-1-4.0-1-8], [D:0-1-4.0-1-8], [E:0-1-4.0-1-8]

<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 0.27 BC 0.85 WB 0.16 Matrix-MSH	<b>DEFL.</b> in (loc) l/defl L/d Vert(LL) 0.03 I-J >999 240 Vert(CT) -0.06 I-J >999 180 Horz(CT) 0.10 F n/a n/a	<b>PLATES</b> MT20 Weight: 95 lb	<b>GRIP</b> 244/190 FT = 20%
---	---	--	---	--	------------------------------------

<b>LUMBER-</b> TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 *Except* B2: 2x4 SP No.3 WEBS 2x4 SP No.3	<b>BRACING-</b> 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.
<b>REACTIONS.</b> (lb/size) L=548/0-3-8 (min. 0-1-8), F=548/0-3-8 (min. 0-1-8) Max Horz L=-216(LC 6) Max Uplift L=-52(LC 11), F=-52(LC 10)	
<b>FORCES.</b> (lb) - Maximum Compression/Maximum Tension TOP CHORD A-B=490/115, B-C=509/157, C-D=509/157, D-E=490/115, A-L=579/106, E-F=579/106 BOT CHORD K-L=201/201, J-K=-144/39, B-J=-110/64, I-J=-180/577, H-I=-59/443, G-H=-135/39, D-H=-108/64, F-G=-21/27 WEBS C-I=-80/355, D-I=-262/199, B-I=-271/215, A-K=-51/378, E-G=-51/378	

- 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
  - 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 52 lb uplift at joint L and 52 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.

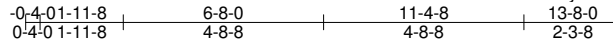
**LOAD CASE(S)** Standard

Job 20071754	Truss D6	Truss Type Roof Special	Qty 1	Ply 1	288 NC2015
-----------------	-------------	----------------------------	----------	----------	------------

Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

8.330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:01:39 2020 Page 1  
ID:wtU0m002Cvnp9KkLnVkyW5y7knd-CXx3\_sOwLctbMgkN3RNngvO?SAjghpfzqfFKakYyoJAW



5x6 =

Scale = 1:54.1

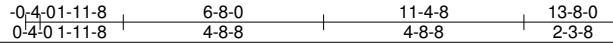
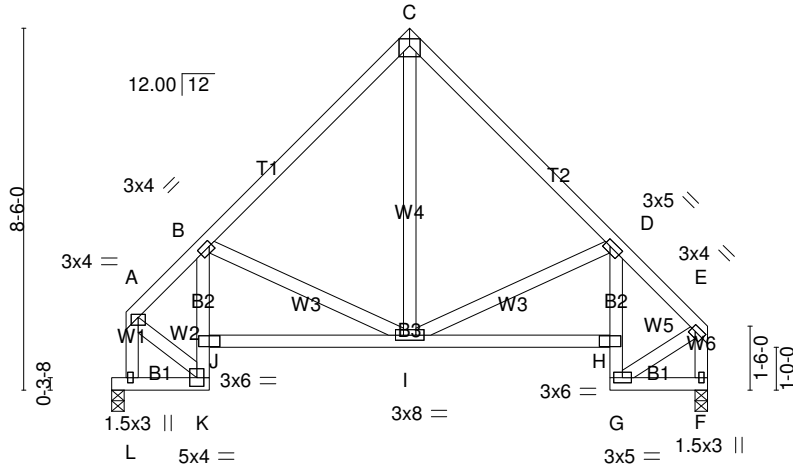


Plate Offsets (X,Y)-- [A:0-2-0,0-0-12], [B:0-0-12,0-1-8], [D:0-1-8,0-1-8], [E:0-1-4,0-1-8], [L:0-1-8,0-0-8]

<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 0.28 BC 0.84 WB 0.16 Matrix-MSH	<b>DEFL.</b> in (loc) l/defl L/d Vert(LL) -0.02 H-1 >999 240 Vert(CT) -0.06 H-1 >999 180 Horz(CT) 0.09 F n/a n/a	<b>PLATES</b> MT20 <b>GRIP</b> 244/190  Weight: 94 lb FT = 20%
---	---	--	---	---

<b>LUMBER-</b> TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 *Except* B2: 2x4 SP No.3 WEBS 2x4 SP No.3	<b>BRACING-</b> 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) F=535/0-3-8 (min. 0-1-8), L=535/0-3-8 (min. 0-1-8)  
Max Horz L=-221(LC 6)  
Max Uplift F=-49(LC 10), L=-54(LC 11)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=409/104, B-C=490/155, C-D=490/155, D-E=477/114, A-L=-571/102, E-F=-564/104  
BOT CHORD K-L=201/204, J-K=-203/51, B-J=-166/75, I-J=-194/524, H-I=-58/432, G-H=-131/39, D-H=-103/63, F-G=-21/28  
WEBS B-I=-224/204, C-I=-76/333, D-I=-264/199, A-K=-59/378, E-G=-50/368

- 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 49 lb uplift at joint F and 54 lb uplift at joint L.
  - 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.

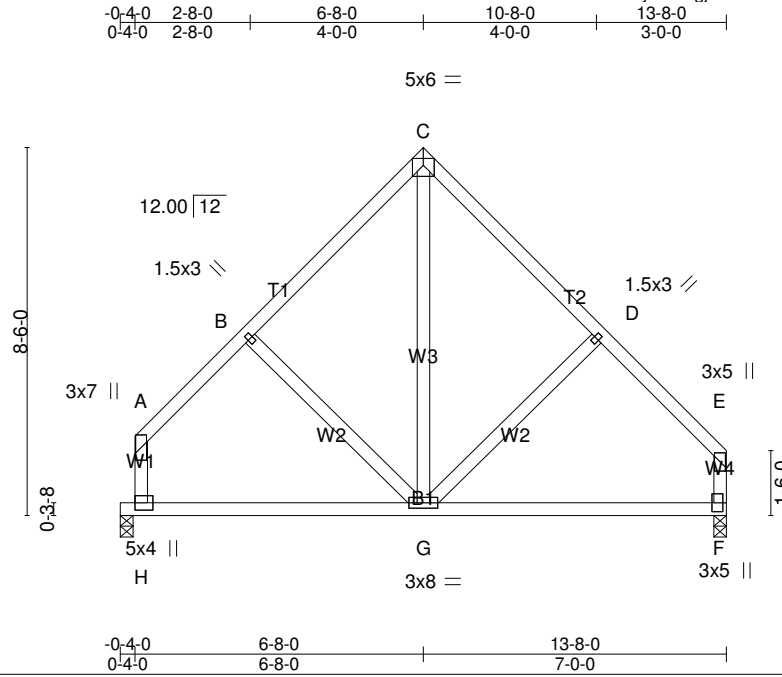
**LOAD CASE(S)** Standard

Job 20071754	Truss D7	Truss Type Common	Qty 1	Ply 1	288 NC2015
-----------------	-------------	----------------------	----------	----------	------------

Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

8,330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:01:40 2020 Page 1  
ID:wtU0m002CvnP9KkLnVkYW5y7knd-gjURCCPZ6W?S\_qvZd9uvSbXTZ77nY6Gzuv48G\_yoJAv



Scale = 1:53.2

Plate Offsets (X,Y)-- [F:0-2-8,0-0-8], [H:0-2-0,0-0-0]

<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 0.94	Vert(LL) -0.07 G >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.40	Vert(CT) -0.13 F-G >999 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.15	Horz(CT) 0.01 F n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MSH		Weight: 82 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.
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) F=535/0-3-8 (min. 0-1-8), H=535/0-3-8 (min. 0-1-8)  
Max Horz H=-221(LC 8)  
Max Uplift F=-49(LC 10), H=-54(LC 11)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=-489/143, B-C=-391/176, C-D=-402/178, D-E=-510/144, A-H=-445/120, E-F=-444/123  
BOT CHORD G-H=-127/342, F-G=-16/278  
WEBS B-G=-118/171, C-G=-122/297, D-G=-156/182

- 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 49 lb uplift at joint F and 54 lb uplift at joint H.
  - 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.

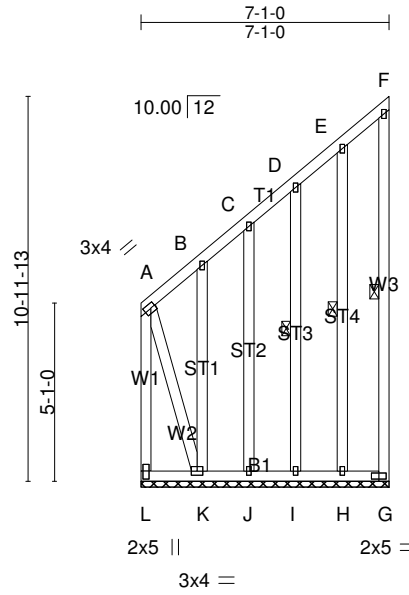
**LOAD CASE(S)** Standard

Job 20071754	Truss E1	Truss Type GABLE	Qty 1	Ply 1	288 NC2015
-----------------	-------------	---------------------	----------	----------	------------

Job Reference (optional)  
8,330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:01:41 2020 Page 1

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

ID:wtU0m002CvnP9KkLnVkyW5y7knd-8v2pPXQBtp7Jb\_UmBsQ8\_p4pQWYXGWH67ZphoRyoJAU



Scale = 1:65.8

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

<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 0.23 BC 0.04 WB 0.30 Matrix-SH	<b>DEFL.</b> in (loc) l/def L/d Vert(LL) n/a - n/a 999 Vert(CT) n/a - n/a 999 Horz(CT) -0.00 G n/a n/a	<b>PLATES</b> MT20 <b>GRIP</b> 244/190  Weight: 100 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.  
WEBS 1 Row at midpt F-G, E-H, D-I

**REACTIONS.** (lb/size) L=54/7-1-0 (min. 0-1-8), G=40/7-1-0 (min. 0-1-8), H=106/7-1-0 (min. 0-1-8), I=109/7-1-0 (min. 0-1-8), J=102/7-1-0 (min. 0-1-8), K=131/7-1-0 (min. 0-1-8)  
Max Horz L=219(LC 10)  
Max Uplift L=-258(LC 8), G=-29(LC 10), H=-44(LC 10), I=-58(LC 10), J=-63(LC 10), K=-714(LC 10)  
Max Grav L=808(LC 10), G=46(LC 17), H=114(LC 17), I=120(LC 17), J=114(LC 17), K=338(LC 8)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-L=-846/651, A-B=-272/222, B-C=-211/172, C-D=-146/120, D-E=-86/72, E-F=-34/26, F-G=-41/33  
BOT CHORD K-L=-231/183, J-K=-1/1, I-J=-1/1, H-I=-1/1, G-H=-1/1  
WEBS E-H=-96/72, D-I=-102/78, C-J=-108/88, B-K=-107/76, A-K=-584/735

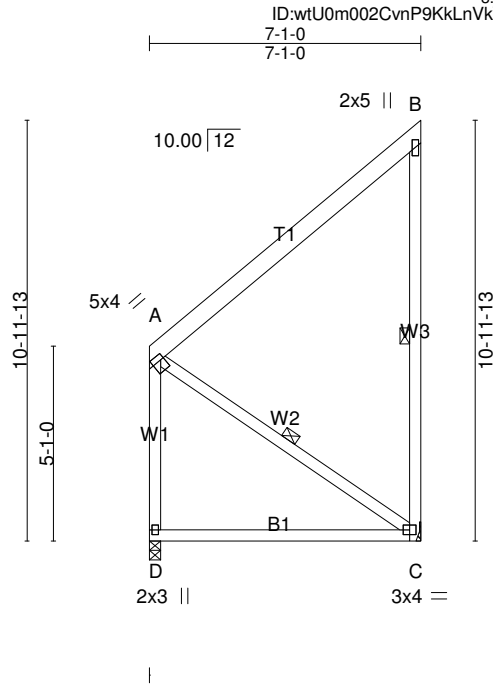
- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Truss designed for wind loads in the plane of the truss only.
  - 3) All plates are 1.5x3 MT20 unless otherwise indicated.
  - 4) Gable requires continuous bottom chord bearing.
  - 5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 6) Gable studs spaced at 1-4-0 oc.
  - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 9) Bearing at joint(s) G considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 258 lb uplift at joint L, 29 lb uplift at joint G, 44 lb uplift at joint H, 58 lb uplift at joint I, 63 lb uplift at joint J and 714 lb uplift at joint K.
  - 11) 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 20071754	Truss E2	Truss Type MONOPITCH	Qty 6	Ply 1	288 NC2015
-----------------	-------------	-------------------------	----------	----------	------------

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

Job Reference (optional)  
8.330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:01:42 2020 Page 1  
ID:wtU0m002CvnP9KkLnVkyW5y7knd-c6cBdtRpe7FAD83ylaxNX0dy7wnK?0CGLDZELtyoJA



Scale = 1:60.2

Plate Offsets (X,Y)-- [A:0-1-0,0-1-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.36	in (loc) l/def L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.46	Vert(LL) -0.09 C-D >906 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.13	Vert(CT) -0.18 C-D >459 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MSH	Horz(CT) -0.00 C n/a n/a		
	Code IRC2015/TPI2014			Weight: 66 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 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 9-10-12 oc bracing.  
WEBS 1 Row at midpt B-C, A-C

**REACTIONS.** (lb/size) D=272/0-3-8 (min. 0-1-8), C=272/Mechanical  
Max Horz D=221(LC 7)  
Max Uplift C=272(LC 10)  
Max Grav D=273(LC 18), C=373(LC 17)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=-192/139, B-C=-240/186, A-D=-221/85  
BOT CHORD C-D=-336/298  
WEBS A-C=-355/407

- 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 exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 272 lb uplift at joint C.
  - 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.

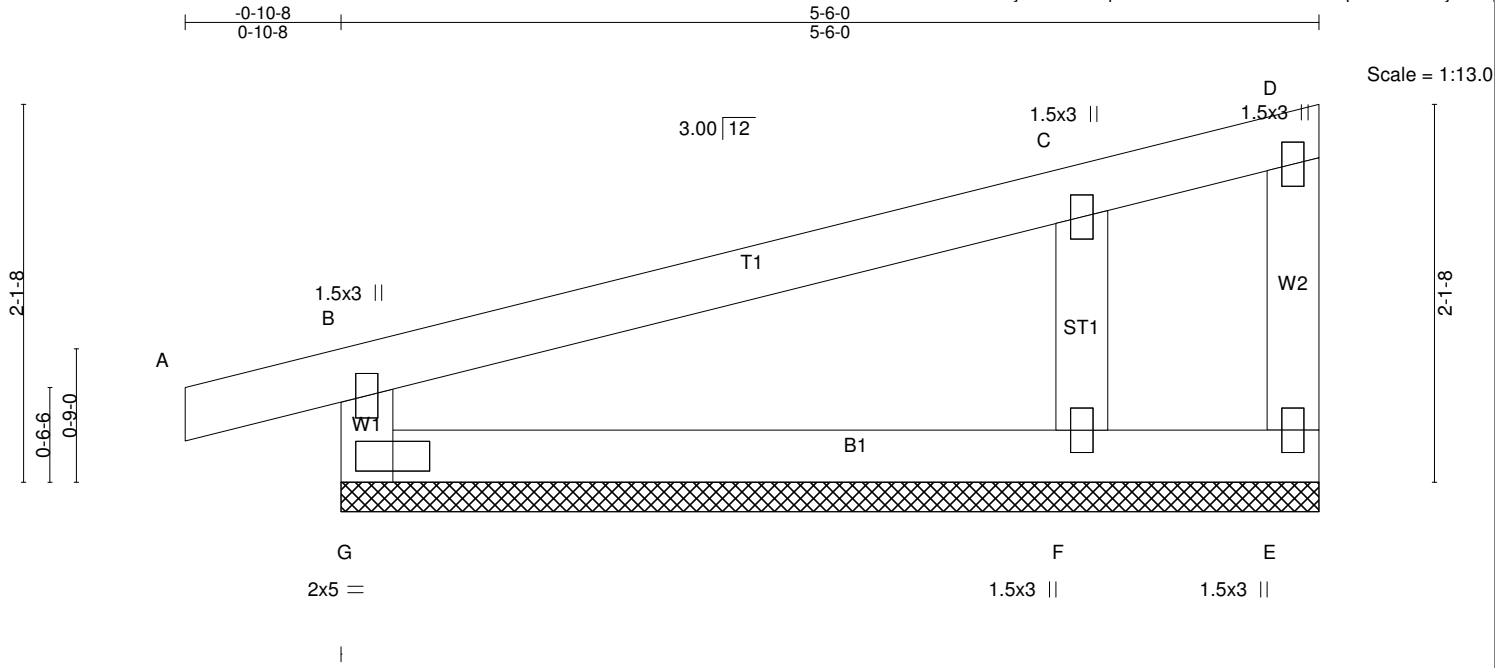
**LOAD CASE(S)** Standard

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

Job Reference (optional)

8.330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:01:43 2020 Page 1

ID:wtU0m002CvnP9KkLnVkYW5y7knd-4IAaqDSRPRN1rie8IHSc4E9AwKDpkUYPatlotJyoJAs



<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 0.16	Vert(LL) -0.00 A n/r 120	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.12	Vert(CT) 0.00 A n/r 90	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.05	Horz(CT) -0.00 E n/a n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-R		Weight: 23 lb FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-6-0 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	
OTHERS 2x4 SP No.3	

**REACTIONS.** (lb/size) G=204/5-6-0 (min. 0-1-8), E=-41/5-6-0 (min. 0-1-8), F=315/5-6-0 (min. 0-1-8)  
 Max Horz G=76(LC 7)  
 Max Uplift G=63(LC 6), E=-41(LC 1), F=-68(LC 10)  
 Max Grav G=204(LC 1), E=11(LC 10), F=315(LC 1)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD B-G=-174/140, A-B=0/15, B-C=-52/26, C-D=-50/48, D-E=-28/28  
 BOT CHORD F-G=-26/28, E-F=-26/28  
 WEBS C-F=-228/182

- 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) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 5) Gable studs spaced at 1-4-0 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) Bearing at joint(s) G considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 63 lb uplift at joint G, 41 lb uplift at joint E and 68 lb uplift at joint F.
  - 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.

**LOAD CASE(S)** Standard

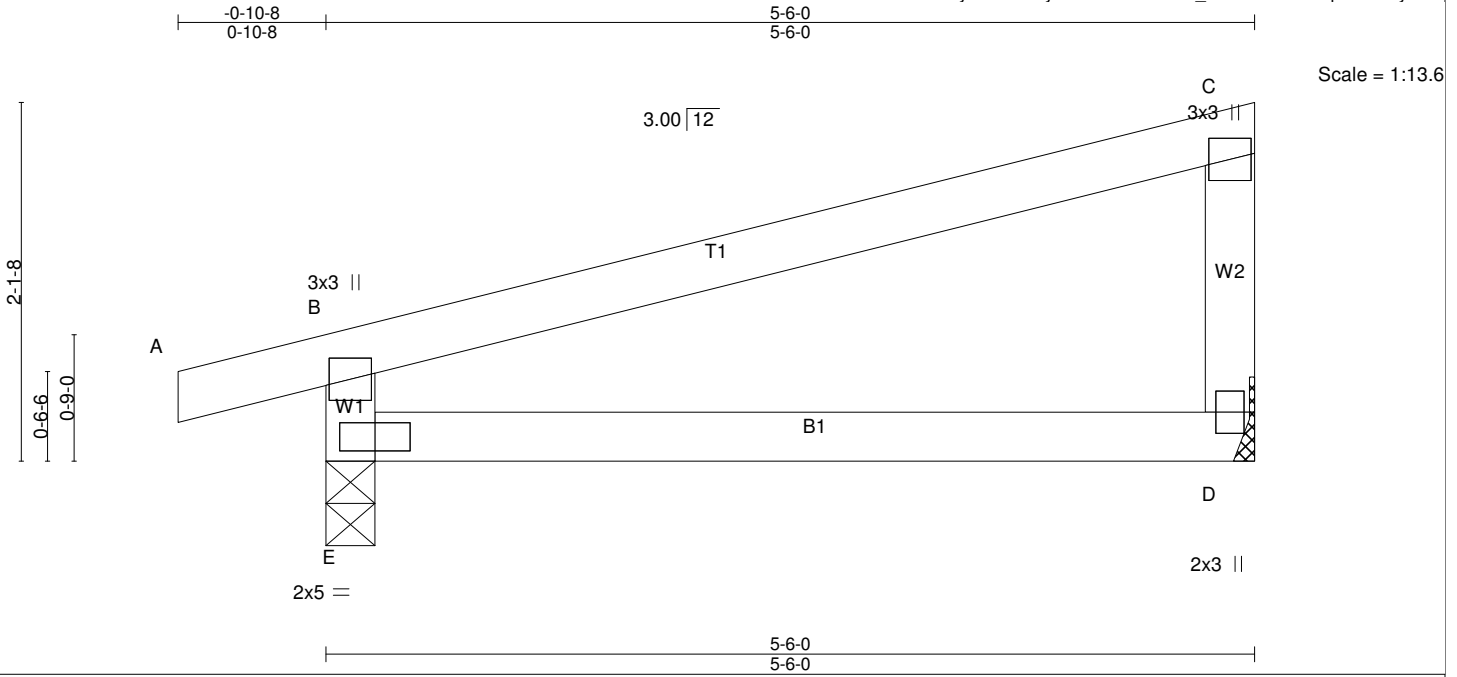
Job 20071754	Truss G2	Truss Type Monopitch	Qty 6	Ply 1	288 NC2015
-----------------	-------------	-------------------------	----------	----------	------------

Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

8,330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:01:44 2020 Page 1

ID:wtU0m002CvnP9KkLnVkyYW5y7knd-YUky2ZS3AkVuSSDKs\_zrcRii7kX9TxeZpX2LPmyoJAf



Scale = 1:13.6

<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 0.33	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.24	Vert(LL) -0.03 D-E >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.05 D-E >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MR	Horz(CT) 0.00 D n/a n/a		
	Code IRC2015/TPI2014			Weight: 21 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-6-0 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) D=202/Mechanical, E=276/0-3-8 (min. 0-1-8)  
 Max Horz E=76(LC 7)  
 Max Uplift D=42(LC 10), E=77(LC 6)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=0/15, B-C=-110/44, C-D=-139/109, B-E=-235/185  
 BOT CHORD D-E=-22/70

- 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) E 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 capable of withstanding 42 lb uplift at joint D and 77 lb uplift at joint E.
  - 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.

**LOAD CASE(S)** Standard



Job 20071754	Truss H6	Truss Type COMMON	Qty 9	Ply 1	288 NC2015
-----------------	-------------	----------------------	----------	----------	------------

Job Reference (optional)  
8,330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:01:45 2020 Page 1  
ID:wtU0m002CvnP9KkLnVkyW5y7knd-0gIKFvThx2el4bnXQiU49fFM78hxCCji1BnuxCyoJAq

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

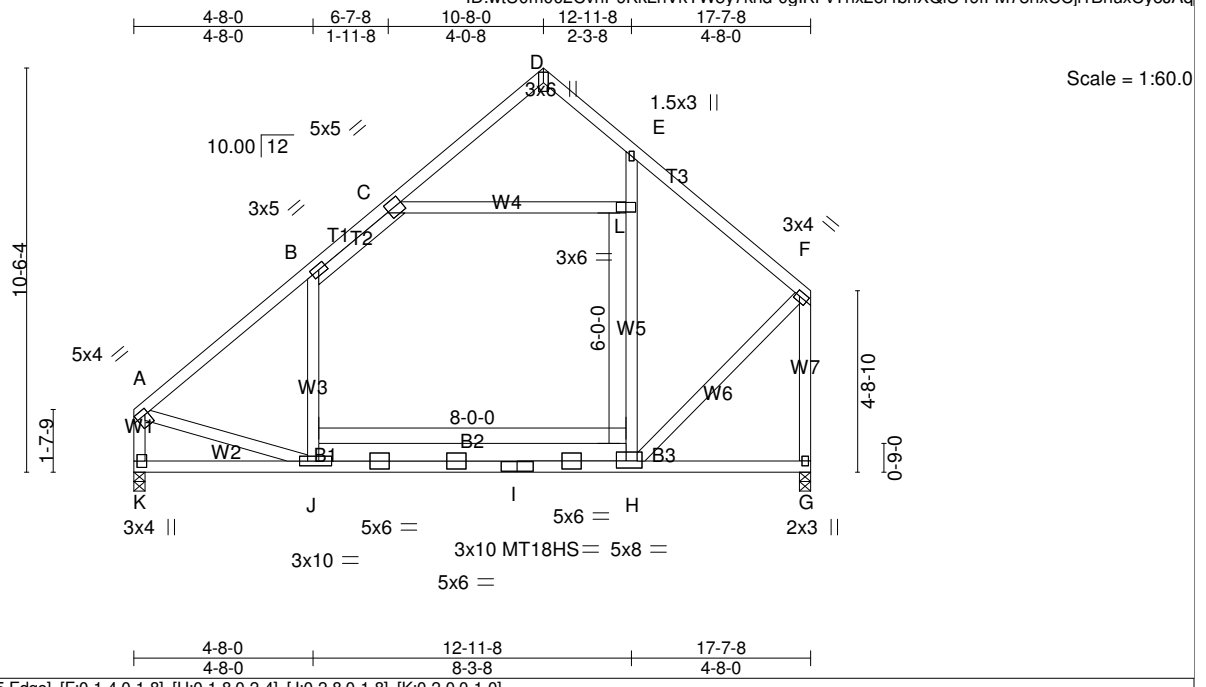


Plate Offsets (X,Y)-- [A:0-1-0-0-1-12], [D:0-3-5,Edge], [F:0-1-4-0-1-8], [H:0-1-8-0-2-4], [J:0-2-8-0-1-8], [K:0-2-0-0-1-0]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	I/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.82	Vert(LL)	0.33	J-K	>637	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.97	Vert(CT)	-0.47	J-K	>444	MT18HS	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.78	Horz(CT)	0.00	G	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MSH	Attic	-0.17	H-J	573		
								Weight: 136 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2 \*Except\*  
T1: 2x4 SP No.1  
BOT CHORD 2x4 SP No.1 \*Except\*  
B1: 2x4 SP No.2, B2: 2x6 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
W3,W4: 2x4 SP No.2, W5: 2x4 SP SS

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 3-8-11 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

**REACTIONS.** (lb/size) K=735/0-3-8 (min. 0-1-8), G=735/0-3-8 (min. 0-1-8)  
Max Horz K=308(LC 9)  
Max Uplift K=31(LC 10), G=59(LC 10)  
Max Grav K=913(LC 19), G=941(LC 18)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=900/74, B-C=659/164, C-D=272/76, D-E=214/99, E-F=690/171, A-K=831/68, F-G=1022/127  
BOT CHORD J-K=337/390, I-J=75/634, H-I=75/634, G-H=66/72  
WEBS B-J=120/246, C-L=446/174, H-L=94/216, E-L=62/248, A-J=74/518, F-H=75/774

- 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) All plates are MT20 plates unless otherwise indicated.
  - 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). B-C, C-L
  - 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. H-J
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint K and 59 lb uplift at joint G.
  - 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) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

**LOAD CASE(S)** Standard

Job 20071754	Truss H7	Truss Type ROOF SPECIAL	Qty 2	Ply 1	288 NC2015
-----------------	-------------	----------------------------	----------	----------	------------

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

Job Reference (optional)

8.330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:01:46 2020 Page 1  
ID:wtU0m002CvnP9KkLnVkyW5y7knd-UtsiSFUjiMmcilMj\_P?JhsnYDX3cxgMsGrXSUeyoJAp

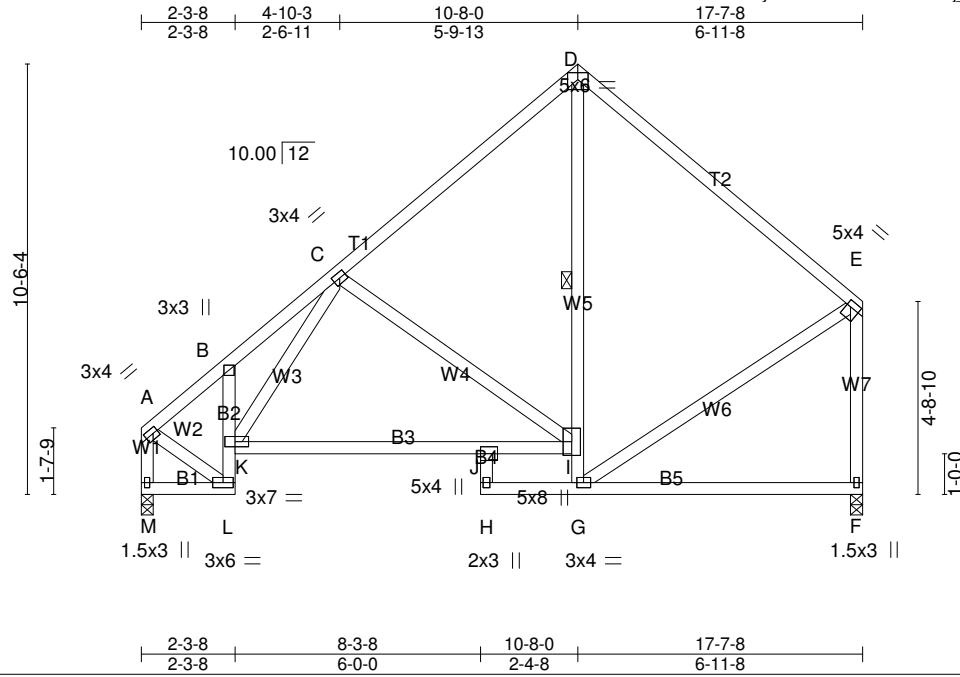


Plate Offsets (X,Y)-- [A:0-1-8,0-1-8], [E:0-1-4,0-1-12], [J:0-2-0,0-0-0], [K:0-4-0,0-1-8]

<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 0.74	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.88	Vert(LL) -0.16 J-K >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.75	Vert(CT) -0.37 J-K >555 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MSH	Horz(CT) 0.17 F n/a n/a		
	Code IRC2015/TPI2014			Weight: 125 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-4-14 oc purlins, except end verticals.
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-G
WEBS 2x4 SP No.3	

**REACTIONS.** (lb/size) M=693/0-3-8 (min. 0-1-8), F=693/0-3-8 (min. 0-1-8)  
Max Horz M=308(LC 7)  
Max Uplift M=56(LC 10), F=84(LC 10)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=609/122, B-C=820/156, C-D=534/201, D-E=533/191, A-M=742/117, E-F=646/140  
BOT CHORD L-M=292/256, K-L=207/36, B-K=183/71, J-K=195/670, I-J=165/438, H-J=81/0, G-H=65/232, F-G=64/58  
WEBS C-K=109/244, A-L=39/469, G-I=47/193, D-I=64/291, E-G=50/390, C-I=371/242

- 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 56 lb uplift at joint M and 84 lb uplift at joint F.
  - 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.

**LOAD CASE(S)** Standard

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

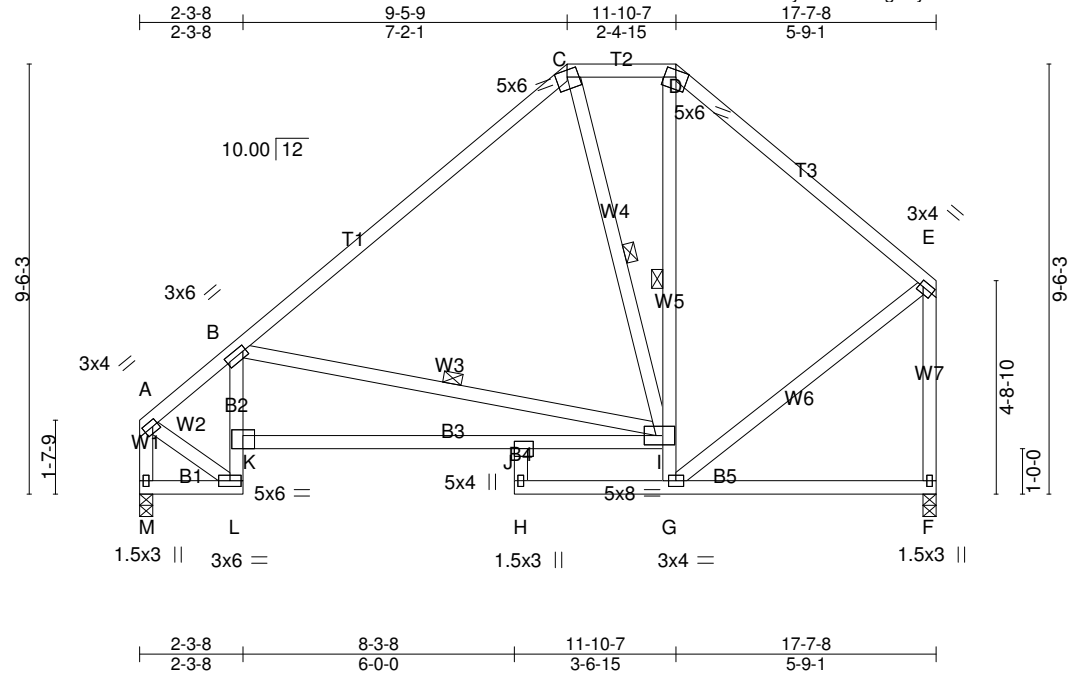


Plate Offsets (X,Y)-- [A:0-1-8,0-1-8], [B:0-0-12,0-1-8], [E:0-1-0,0-1-8], [J:0-2-0,0-0-0]

<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 0.67	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.81	Vert(LL) -0.24 J-K >883 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.79	Vert(CT) -0.52 J-K >397 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MSH	Horz(CT) 0.18 F n/a n/a		
	Code IRC2015/TPI2014			Weight: 131 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-11-3 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.); C-D.
BOT CHORD 2x4 SP No.2 *Except* B2: 2x4 SP No.1, 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 B-I, C-I, D-G

**REACTIONS.** (lb/size) M=693/0-3-8 (min. 0-1-8), F=693/0-3-8 (min. 0-1-8)  
Max Horz M=284(LC 7)  
Max UpliftM=-56(LC 10), F=-64(LC 10)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=-612/132, B-C=-590/174, C-D=-414/207, D-E=-517/187, A-M=-746/123, E-F=-661/137  
BOT CHORD L-M=-269/223, K-L=-238/80, B-K=-128/142, J-K=-316/932, I-J=-275/733, H-J=-31/0, G-H=-88/199, F-G=-61/64  
WEBS B-I=-589/309, C-I=-65/151, G-I=-55/161, D-I=-61/159, A-L=-121/573, E-G=-50/375

- 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
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 56 lb uplift at joint M and 64 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

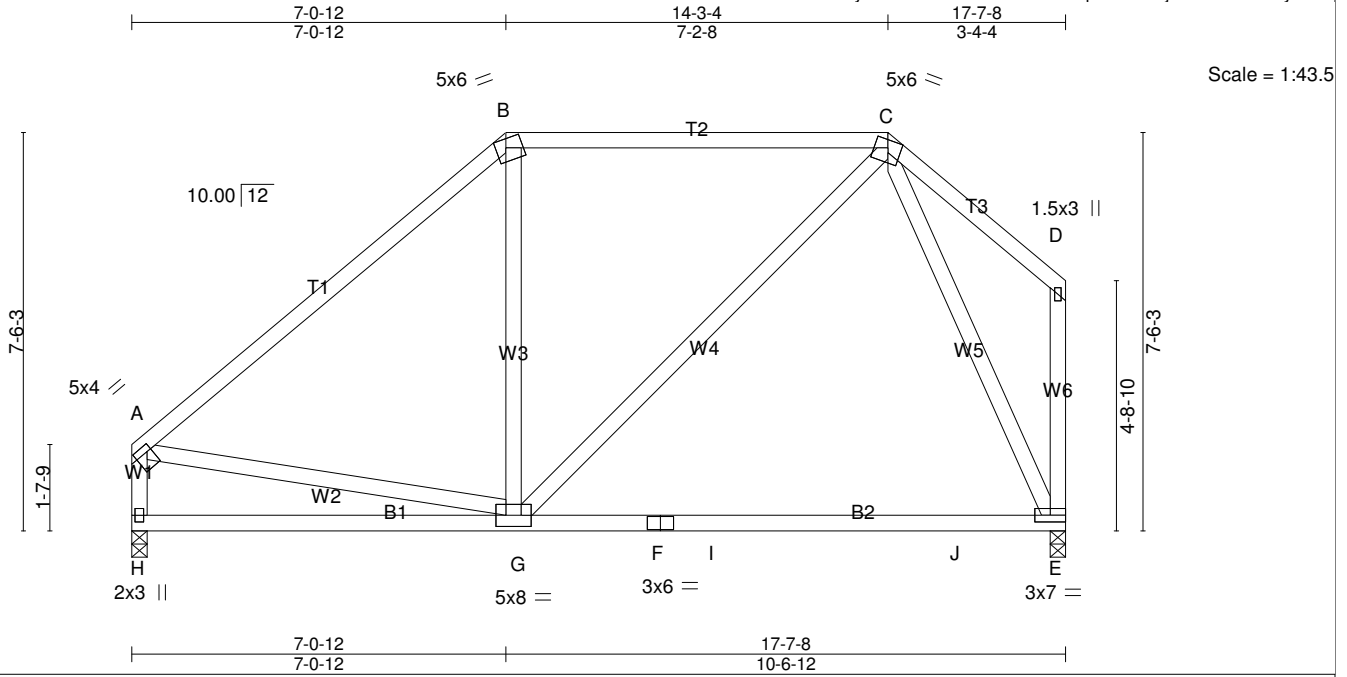


Plate Offsets (X,Y)-- [A:0-1-0,0-1-8], [B:0-2-4,0-2-0]

<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 0.84	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.91	Vert(LL) -0.39 E-G >527 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.67	Vert(CT) -0.65 E-G >319 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MSH	Horz(CT) -0.01 E n/a n/a		
	Code IRC2015/TPI2014			Weight: 112 lb	FT = 20%

<b>LUMBER-</b> TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 *Except* B2: 2x4 SP No.1 WEBS 2x4 SP No.3	<b>BRACING-</b> TOP CHORD Structural wood sheathing directly applied or 4-2-11 oc purlins, except end verticals, and 2-0-0 oc purlins (5-0-8 max.); B-C. BOT CHORD Rigid ceiling directly applied or 7-6-8 oc bracing.
--	--

**REACTIONS.** (lb/size) H=693/0-3-8 (min. 0-1-8), E=693/0-3-8 (min. 0-1-8)  
 Max Horz H=235(LC 7)  
 Max Uplift H=51(LC 10), E=36(LC 11)  
 Max Grav H=693(LC 1), E=711(LC 2)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=712/155, B-C=453/200, C-D=193/165, A-H=641/146, D-E=190/133  
 BOT CHORD G-H=250/268, F-G=99/251, F-I=99/251, I-J=99/251, E-J=99/251  
 WEBS B-G=74/149, C-G=52/336, A-G=73/408, C-E=571/189

- 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, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 51 lb uplift at joint H and 36 lb uplift at joint E.
  - 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 20071754	Truss H10	Truss Type GABLE	Qty 1	Ply 1	288 NC2015
-----------------	--------------	---------------------	----------	----------	------------

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC  
 8,330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:01:50 2020 Page 1  
 ID:wtU0m002CvnP9KkLnVkyW5y7knd-Ne5DlcXqlaG1BNgUDF4FsiyLX9bvtfLRBSVfdPyoJAl

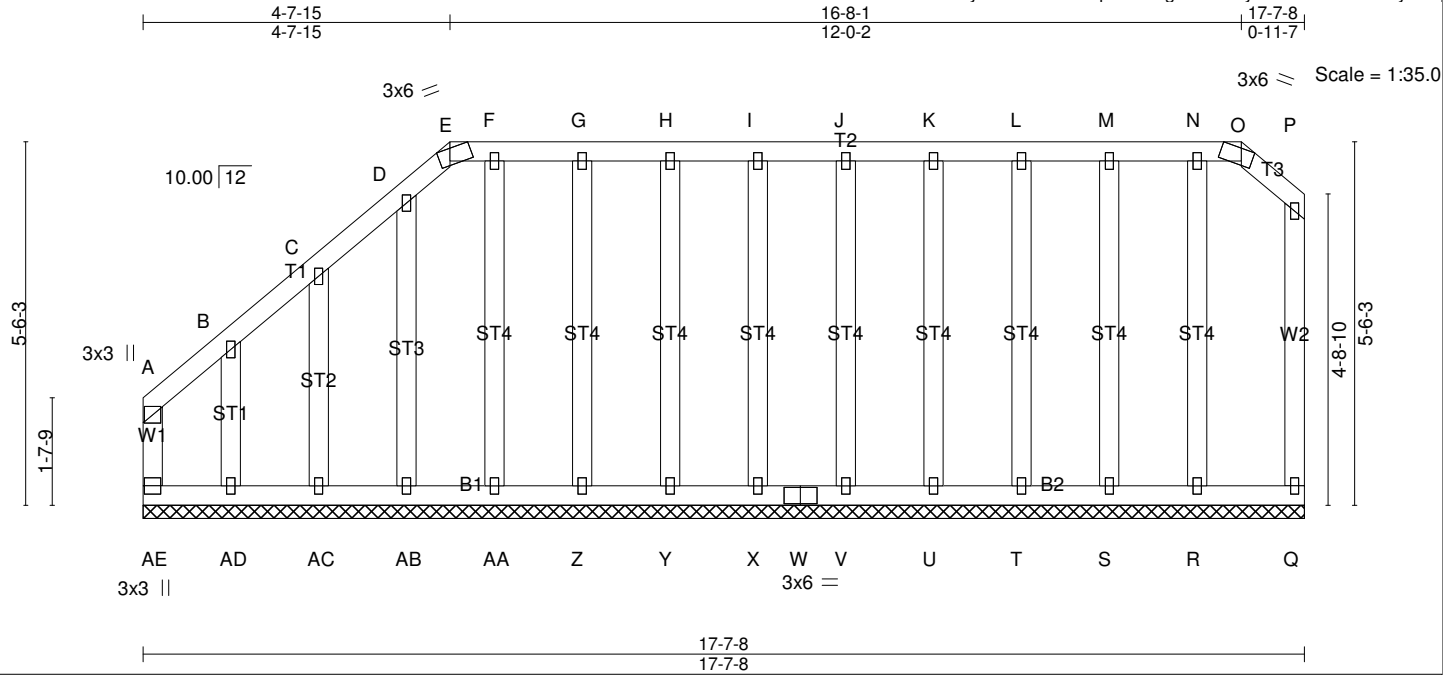


Plate Offsets (X,Y)-- [E:0-1-13,Edge], [O:0-1-13,Edge]

<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 0.27 BC 0.15 WB 0.05 Matrix-R	<b>DEFL.</b> in (loc) l/def L/d Vert(LL) n/a - n/a 999 Vert(CT) n/a - n/a 999 Horz(CT) -0.00 Q n/a n/a	<b>PLATES</b> MT20 <b>GRIP</b> 244/190 Weight: 145 lb FT = 20%
---	---	--	--	--

<b>LUMBER-</b> TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3 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.): E-O. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
--	--

**REACTIONS.** (lb/size) AE=40/17-7-8 (min. 0-1-10), Q=52/17-7-8 (min. 0-1-10), AD=110/17-7-8 (min. 0-1-10), AC=106/17-7-8 (min. 0-1-10), AB=106/17-7-8 (min. 0-1-10), AA=107/17-7-8 (min. 0-1-10), Z=106/17-7-8 (min. 0-1-10), Y=107/17-7-8 (min. 0-1-10), X=107/17-7-8 (min. 0-1-10), V=107/17-7-8 (min. 0-1-10), U=107/17-7-8 (min. 0-1-10), T=107/17-7-8 (min. 0-1-10), S=103/17-7-8 (min. 0-1-10), R=123/17-7-8 (min. 0-1-10)  
 Max Horz AE=186(LC 7)  
 Max Uplift AE=173(LC 8), Q=40(LC 10), AD=243(LC 7), AC=36(LC 10), AB=43(LC 7), AA=34(LC 7), Z=26(LC 6), Y=20(LC 6), X=20(LC 7), V=20(LC 6), U=20(LC 7), T=22(LC 6), S=30(LC 7), R=9(LC 6)  
 Max Grav AE=276(LC 7), Q=54(LC 18), AD=255(LC 8), AC=109(LC 18), AB=124(LC 17), AA=107(LC 21), Z=108(LC 22), Y=107(LC 1), X=107(LC 21), V=107(LC 21), U=107(LC 1), T=107(LC 22), S=106(LC 21), R=123(LC 22)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-AE=-166/104, A-B=-194/140, B-C=-116/82, C-D=-113/90, D-E=-101/106, E-F=92/104, F-G=92/104, G-H=92/104, H-I=92/104, I-J=92/104, J-K=92/104, K-L=92/104, L-M=92/104, M-N=92/104, N-O=92/104, O-P=-120/128, P-Q=-101/95  
 BOT CHORD AD-AE=-69/76, AC-AD=-69/76, AB-AC=-69/76, AA-AB=-69/76, Z-AA=-69/76, Y-Z=-69/76, X-Y=-69/76, W-X=-69/76, V-W=-69/76, U-V=-69/76, T-U=-69/76, S-T=-69/76, R-S=-69/76, Q-R=-69/76  
 WEBS B-AD=-146/132, C-AC=-100/70, D-AB=-93/51, F-AA=-80/52, G-Z=-81/44, H-Y=-80/37, I-X=-80/37, J-V=-80/37, K-U=-80/36, L-T=-80/37, M-S=-80/53, N-R=-93/48

- 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; 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) Truss designed for wind loads in the plane of the truss only.
  - 4) Provide adequate drainage to prevent water ponding.
  - 5) All plates are 1.5x3 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 1-4-0 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 173 lb uplift at joint AE, 40 lb uplift at joint Q, 243 lb uplift at joint AD, 36 lb uplift at joint AC, 43 lb uplift at joint AB, 34 lb uplift at joint AA, 26 lb uplift at joint Z, 20 lb uplift at joint Y, 20 lb uplift at joint X, 20 lb uplift at joint V, 20 lb uplift at joint U, 22 lb uplift at joint T, 30 lb uplift at joint S and 9 lb uplift at joint R.
  - 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/TPI 1.
  - 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 20071754	Truss K1	Truss Type GABLE	Qty 1	Ply 1	288 NC2015
-----------------	-------------	---------------------	----------	----------	------------

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

Job Reference (optional)  
8,330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:01:51 2020 Page 1

ID:wtU0m002CvnP9KkLnVkyW5y7knd-rqfbWYYSWuOuoWFhmzbUOwVXHfYfc4abQ6ED9syoJAK

0-10-8 6-3-8 12-7-0 13-5-8  
0-10-8 6-3-8 6-3-8 0-10-8

3x6 =

Scale = 1:48.8

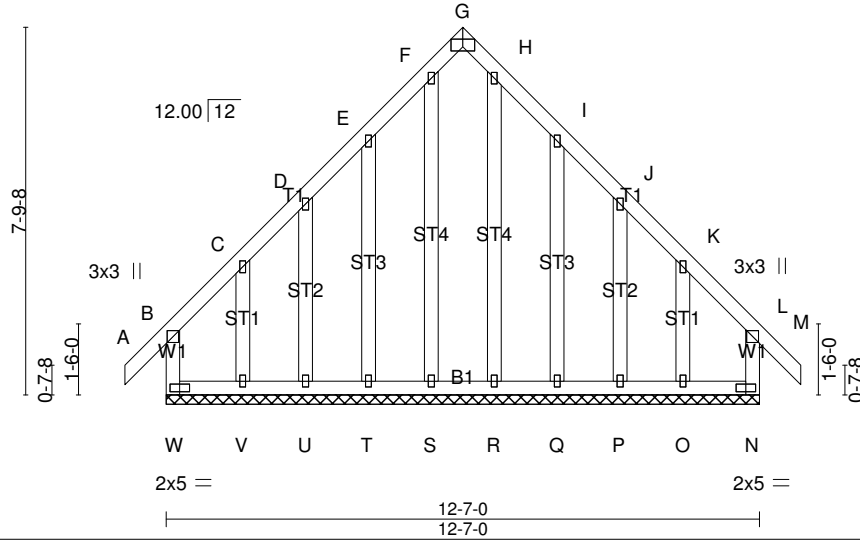


Plate Offsets (X,Y)-- [G:0-3-0,Edge]

<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 0.20 BC 0.12 WB 0.18 Matrix-R	<b>DEFL.</b> in (loc) l/defl L/d Vert(LL) -0.00 M n/r 120 Vert(CT) -0.00 M n/r 90 Horz(CT) 0.00 N n/a n/a	<b>PLATES</b> MT20 <b>GRIP</b> 244/190 Weight: 107 lb FT = 20%
---	---	--	--	--

<b>LUMBER-</b> TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3 OTHERS 2x4 SP No.3	<b>BRACING-</b> 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) W=131/12-7-0 (min. 0-1-12), N=131/12-7-0 (min. 0-1-12), S=109/12-7-0 (min. 0-1-12), T=106/12-7-0 (min. 0-1-12), U=108/12-7-0 (min. 0-1-12), V=99/12-7-0 (min. 0-1-12), R=109/12-7-0 (min. 0-1-12), Q=106/12-7-0 (min. 0-1-12), P=108/12-7-0 (min. 0-1-12), O=99/12-7-0 (min. 0-1-12)  
Max Horz W=-224(LC 8)  
Max Uplift W=-149(LC 6), N=-136(LC 7), T=-110(LC 10), U=-42(LC 10), V=-179(LC 10), Q=-111(LC 11), P=-43(LC 11), O=-176(LC 11)  
Max Grav W=224(LC 18), N=213(LC 17), S=174(LC 17), T=129(LC 17), U=108(LC 21), V=234(LC 8), R=171(LC 10), Q=130(LC 18), P=108(LC 22), O=225(LC 9)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD B-W=-169/112, A-B=0/43, B-C=-150/149, C-D=-82/143, D-E=-133/213, E-F=-214/317, F-G=-130/176, G-H=-130/176, H-I=-214/317, I-J=-133/213, J-K=-80/143, K-L=-138/138, L-M=0/43, L-N=-162/102  
BOT CHORD V-W=-115/116, U-V=-115/116, T-U=-115/116, S-T=-115/116, R-S=-115/116, Q-R=-115/116, P-Q=-115/116, O-P=-115/116, N-O=-115/116  
WEBS F-S=-208/92, E-T=-142/132, D-U=-100/82, C-V=-150/139, H-R=-208/92, I-Q=-142/132, J-P=-100/82, K-O=-150/137

- 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 1-4-0 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.
  - Bearing at joint(s) W, N 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 149 lb uplift at joint W, 136 lb uplift at joint N, 110 lb uplift at joint T, 42 lb uplift at joint U, 179 lb uplift at joint V, 111 lb uplift at joint V, 111 lb uplift at joint V, 43 lb uplift at joint P and 176 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/TPI 1.

**LOAD CASE(S)** Standard

Job 20071754	Truss K2	Truss Type Common	Qty 1	Ply 1	288 NC2015
-----------------	-------------	----------------------	----------	----------	------------

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

Job Reference (optional)

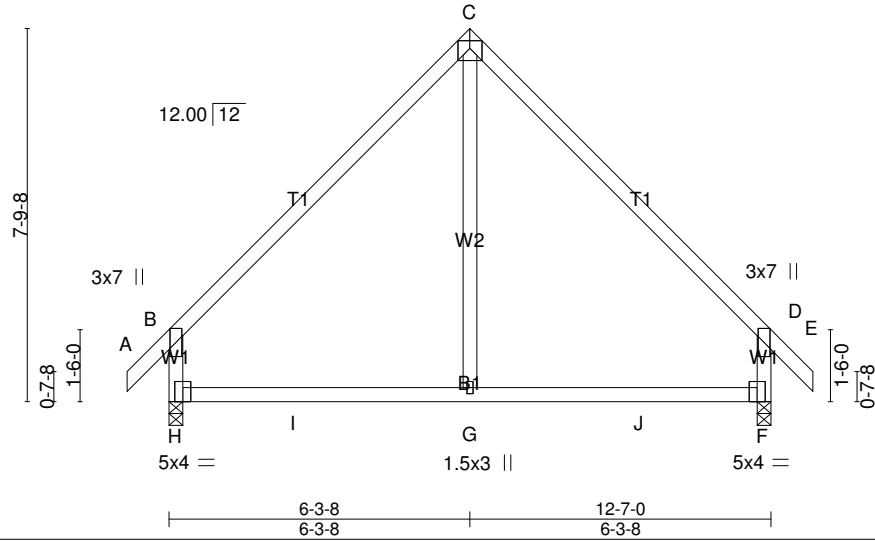
8.330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:01:53 2020 Page 1

ID:wtU0m002CvnP9KkLnVkyW5y7knd-nDnMxeZi2Vec2qP3uNdyULakdMaY4?wtQjKEkyoJAi

0-10-8 6-3-8 12-7-0 13-5-8  
0-10-8 6-3-8 6-3-8 0-10-8

5x6 =

Scale: 1/4"=1'



<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 0.79	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.35	Vert(LL) -0.07 G-H >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.13	Vert(CT) -0.09 G-H >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MR	Horz(CT) 0.01 F n/a n/a		
	Code IRC2015/TPI2014			Weight: 63 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.
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) H=553/0-3-8 (min. 0-1-8), F=553/0-3-8 (min. 0-1-8)  
 Max Horz H=224(LC 8)  
 Max Uplift H=52(LC 11), F=52(LC 10)  
 Max Grav H=598(LC 18), F=598(LC 17)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=0/43, B-C=-545/145, C-D=-545/145, D-E=0/43, B-H=-505/201, D-F=-505/201  
 BOT CHORD H-I=-29/339, G-I=-29/339, G-J=-29/339, F-J=-29/339  
 WEBS C-G=0/330

- 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; 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
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Bearing at joint(s) H, F considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 52 lb uplift at joint H and 52 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.

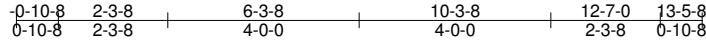
**LOAD CASE(S)** Standard

Job 20071754	Truss K3	Truss Type Roof Special	Qty 4	Ply 1	288 NC2015
-----------------	-------------	----------------------------	----------	----------	------------

Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

8,330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:01:54 2020 Page 1  
ID:wtU0m002CvnP9KkLnVkyYW5y7knd-FPLk8\_aLppmTf\_zFS58B0Y60PmidpRu164TmByoJAH



Scale: 1/4"=1'

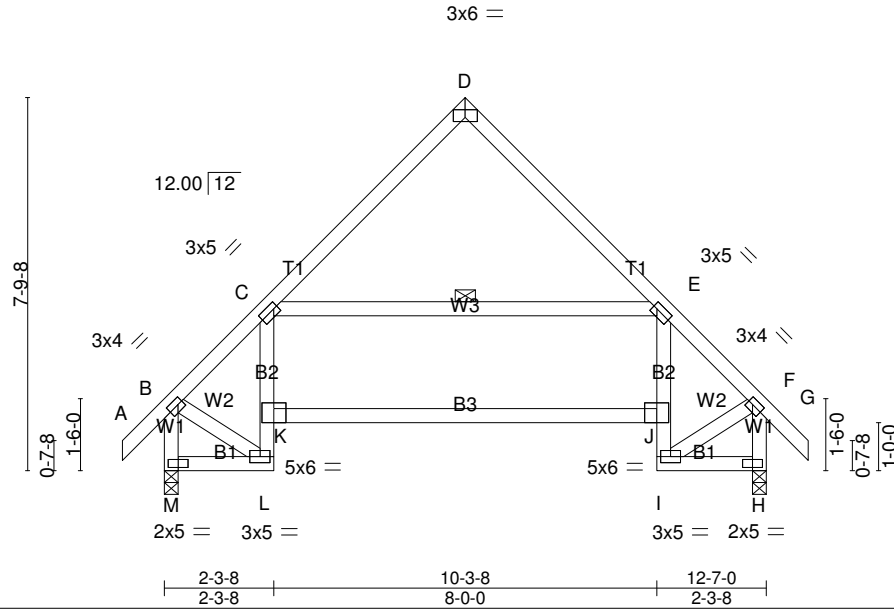


Plate Offsets (X,Y)-- [B:0-1-4,0-1-8], [C:0-1-0,0-1-8], [D:0-3-0,Edge], [E:0-1-0,0-1-8], [F:0-1-4,0-1-8]

<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 0.27 BC 1.00 WB 0.14 Matrix-MSH	<b>DEFL.</b> in (loc) l/defl L/d Vert(LL) -0.17 J-K >881 240 Vert(CT) -0.35 J-K >420 180 Horz(CT) 0.10 H n/a n/a	<b>PLATES</b> MT20 <b>GRIP</b> 244/190  Weight: 80 lb FT = 20%
---	---	--	---	---

<b>LUMBER-</b> TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 *Except* B2: 2x4 SP No.3 WEBS 2x4 SP No.3	<b>BRACING-</b> 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, Except: 10-0-0 oc bracing: J-K. WEBS 1 Row at midpt C-E
--	---

**REACTIONS.** (lb/size) M=553/0-3-8 (min. 0-1-8), H=553/0-3-8 (min. 0-1-8)  
Max Horz M=224(LC 9)  
Max UpliftM=-52(LC 11), H=-52(LC 10)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=0/43, B-C=-434/117, C-D=-259/99, D-E=-259/100, E-F=-434/117, F-G=0/43, B-M=-583/133, F-H=-583/133  
BOT CHORD L-M=-220/218, K-L=-135/48, C-K=-36/130, J-K=-40/471, I-J=-108/33, E-J=-21/130, H-I=-10/49  
WEBS C-E=-394/141, B-L=-38/336, F-I=-42/345

- 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) 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) Bearing at joint(s) M, H considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 52 lb uplift at joint M and 52 lb uplift at joint H.
  - 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.

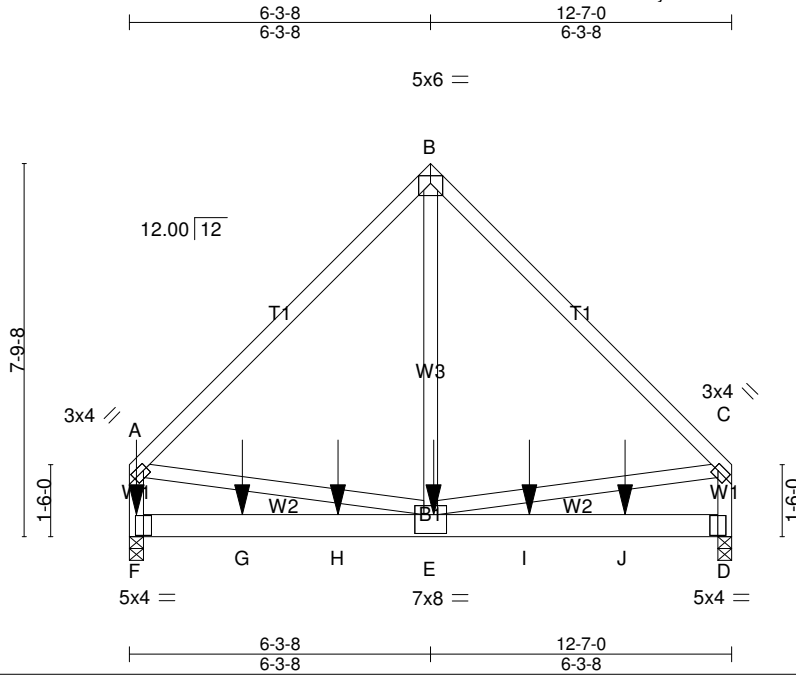
**LOAD CASE(S)** Standard



Job 20071754	Truss K4	Truss Type Common Girder	Qty 1	Ply 2	288 NC2015
-----------------	-------------	-----------------------------	----------	----------	------------

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

ID:wtU0m002CvmP9KkLnVkyW5y7knd-kcu6Lkba7uKH8YS?ogQZmf3qA66Yn9ALKCQldyoJAg  
8,330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:01:55 2020 Page 1



Scale: 1/4"=1'

Plate Offsets (X,Y)-- [A:0-1-0,0-1-8], [C:0-1-0,0-1-8], [E:0-4-0,0-4-12]

<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 0.81	in (loc) l/def L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.92	Vert(LL) -0.06 D-E >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.59	Vert(CT) -0.11 D-E >999 180		
BCDL 10.0	Rep Stress Incr NO	Matrix-MSH	Horz(CT) 0.00 D n/a n/a		
	Code IRC2015/TPI2014			Weight: 175 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.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	

**REACTIONS.** (lb/size) F=2987/0-3-8 (min. 0-2-12), D=2293/0-3-8 (min. 0-2-1)  
Max Horz F=-196(LC 4)  
Max Grav F=3489(LC 2), D=2640(LC 2)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=-2272/0, B-C=-2272/0, A-F=-1907/0, C-D=-1906/0  
BOT CHORD F-G=-158/401, G-H=-158/401, E-H=-158/401, E-I=-37/407, I-J=-37/407, D-J=-37/407  
WEBS B-E=0/2761, A-E=0/1171, C-E=0/1165

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - 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; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Bearing at joint(s) F, D considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 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.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 885 lb down at 0-1-12, 877 lb down at 2-4-4, 877 lb down at 4-4-4, 877 lb down at 6-4-4, and 877 lb down at 8-4-4, and 877 lb down at 10-4-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - Attic room checked for L/360 deflection.

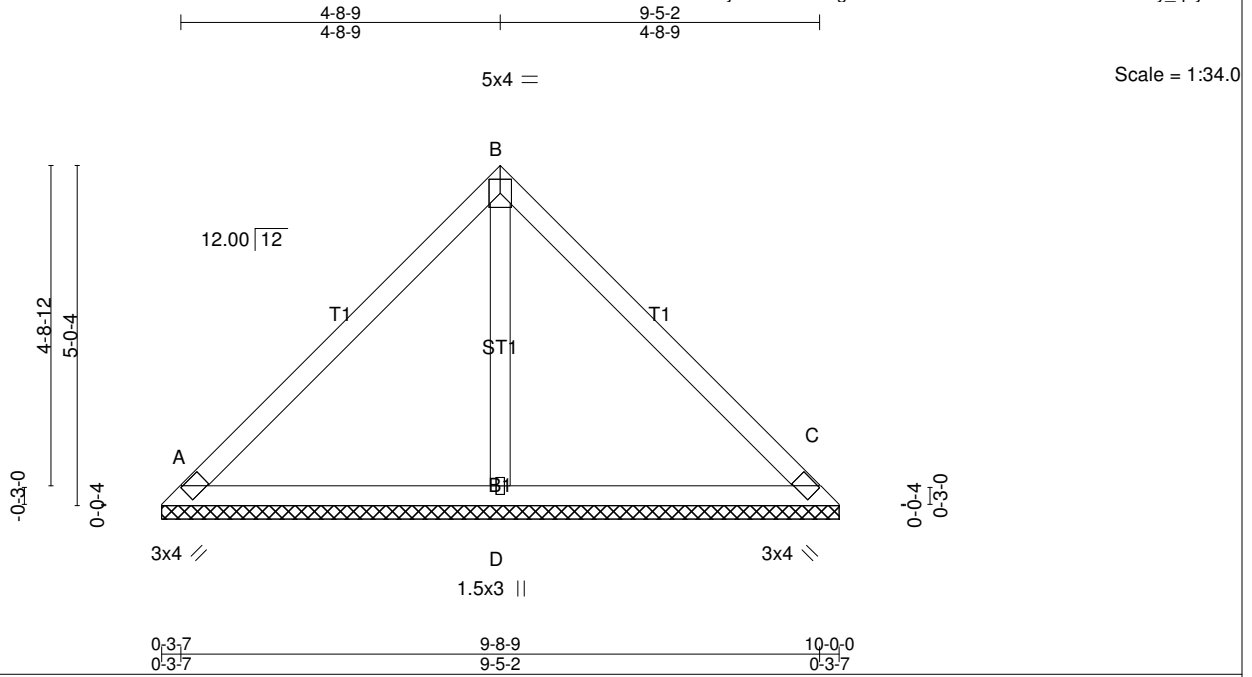
**LOAD CASE(S)** Standard  
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: A-B=-60, B-C=-60, D-F=-20  
Concentrated Loads (lb)  
Vert: E=-715(F) F=-723(F) G=-715(F) H=-715(F) I=-715(F) J=-715(F)

Job 20071754	Truss PA1	Truss Type Piggyback	Qty 4	Ply 1	288 NC2015
-----------------	--------------	-------------------------	----------	----------	------------

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

Job Reference (optional)

8,330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:01:56 2020 Page 1  
ID:wtU0m002CvnP9KkLnVkyW5y7knd-CoSUZgcbLQ0Bvi7eZWbf5zCMuZdGHMOKZOy\_q3yoJAf



<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 0.28	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.22	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.08	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.00 C n/a n/a		
	Code IRC2015/TPI2014			Weight: 41 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.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	

**REACTIONS.** (lb/size) A=203/10-0-0 (min. 0-1-8), C=203/10-0-0 (min. 0-1-8), D=342/10-0-0 (min. 0-1-8)  
Max Horz A=-115(LC 6)  
Max Uplift A=-33(LC 11), C=-33(LC 11), D=-19(LC 10)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=-180/90, B-C=-170/73  
BOT CHORD A-D=-31/84, C-D=-31/84  
WEBS B-D=-180/46

- NOTES-** (7)
- 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 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.

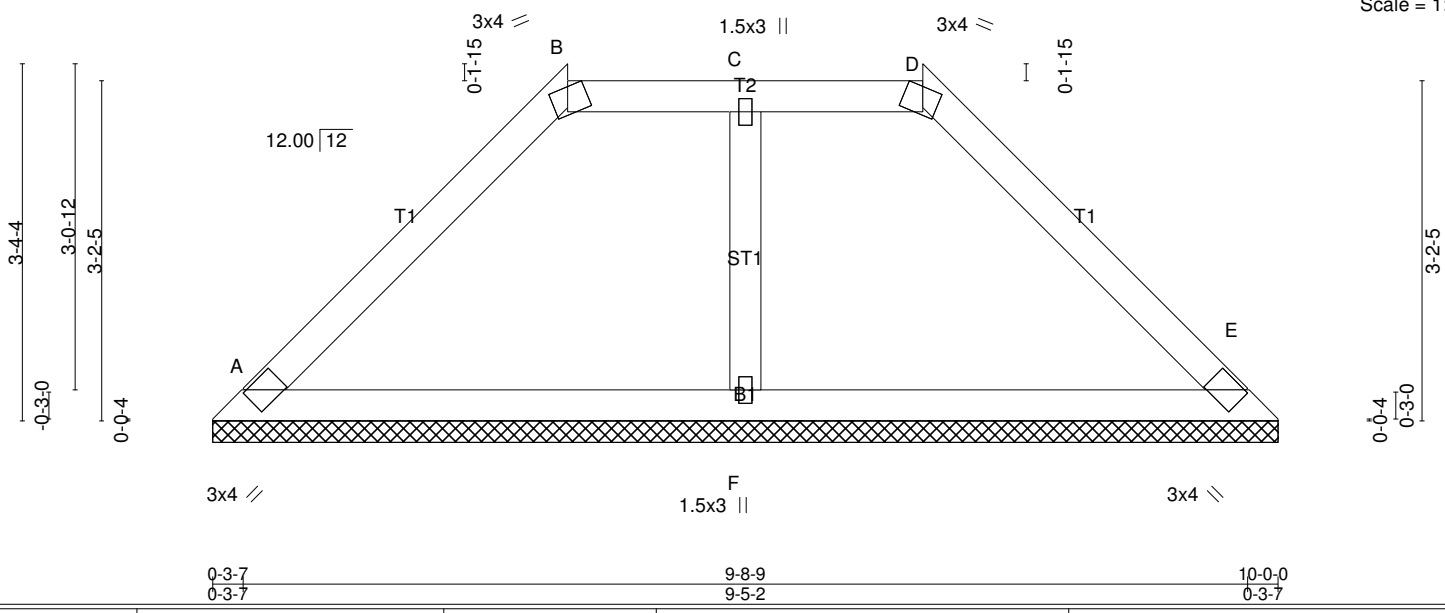
**LOAD CASE(S)** Standard

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

Job Reference (optional)  
8,330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:01:57 2020 Page 1  
ID:wtU0m002CvnP9KkLnVkyYw5y7knd-g\_0sm0cD6k82WRiq7DiueBkZjzzk0qSto2hXNVyoJae

9-5-2  
9-5-2

Scale = 1:21.6



<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.14	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.21	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.03	Vert(CT) n/a - n/a 999		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-SH	Horz(CT) 0.00 E n/a n/a		
				Weight: 37 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
BOT CHORD 2x4 SP No.2	2-0-0 oc purlins (6-0-0 max.); B-D.
OTHERS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) A=258/10-0-0 (min. 0-1-8), E=258/10-0-0 (min. 0-1-8), F=231/10-0-0 (min. 0-1-8)  
 Max Horz A=72(LC 7)  
 Max Uplift A=-47(LC 10), E=-49(LC 11)  
 Max Grav A=258(LC 1), E=258(LC 1), F=245(LC 3)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=-262/119, B-C=-168/130, C-D=-168/130, D-E=-262/119  
 BOT CHORD A-F=-31/144, E-F=-31/144  
 WEBS C-F=-110/56

- NOTES-** (11)
- 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 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) Gable requires continuous bottom chord bearing.
  - 6) Gable studs spaced at 4-0-0 oc.
  - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 9) 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) 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.

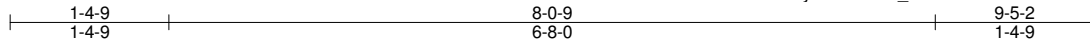
**LOAD CASE(S)** Standard

Job 20071754	Truss PA3	Truss Type Piggyback	Qty 1	Ply 1	288 NC2015
-----------------	--------------	-------------------------	----------	----------	------------

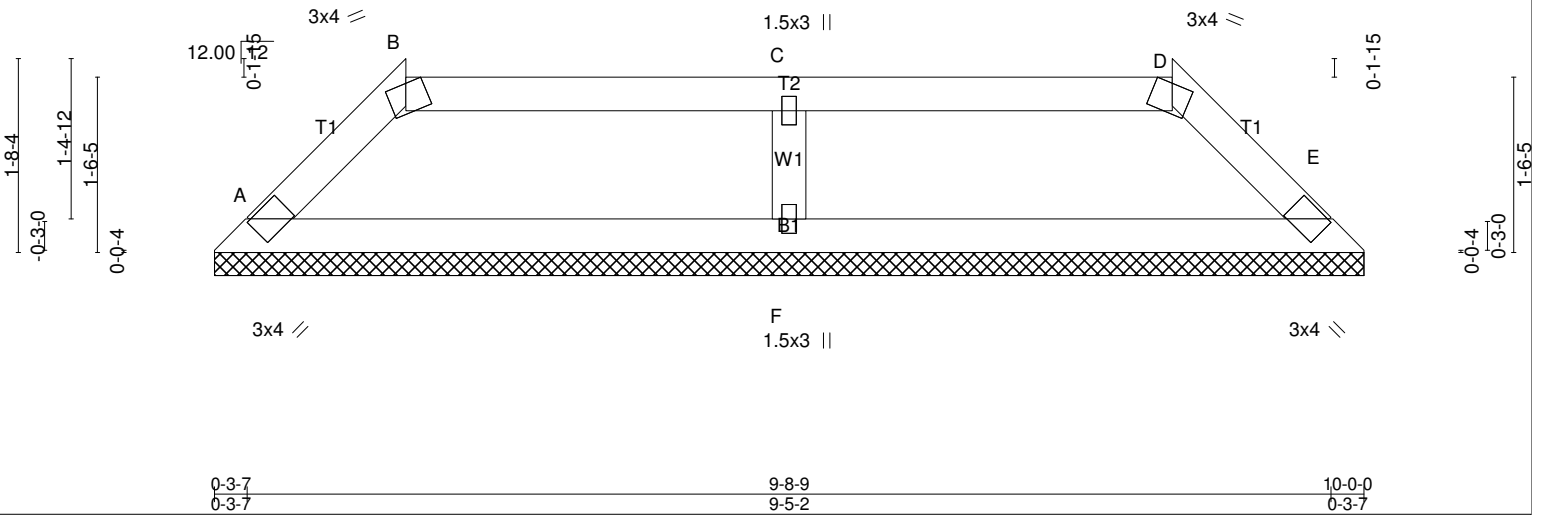
UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

Job Reference (optional)

8,330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:01:58 2020 Page 1  
ID:wtU0m002CvnP9KkLnVkyYW5y7knd-8BaF\_Ldrt2Gv8bH1hxD7AOHk0NKDIHNd1iR4vyyoJAd



Scale = 1:20.0



<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 0.17	in (loc) l/def L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.19	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.05	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.00 E n/a n/a		
	Code IRC2015/TPI2014			Weight: 32 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 2-0-0 oc purlins (6-0-0 max.); B-D.
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=202/10-0-0 (min. 0-1-8), E=202/10-0-0 (min. 0-1-8), F=344/10-0-0 (min. 0-1-8)  
Max Horz A=31(LC 6)  
Max Uplift A=-19(LC 10), E=-19(LC 11), F=-47(LC 7)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=-218/101, B-C=-157/90, C-D=-157/90, D-E=-218/101  
BOT CHORD A-F=-41/156, E-F=-41/156  
WEBS C-F=-238/151

- 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; 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) Gable requires continuous bottom chord bearing.
  - 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 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 20071754	Truss PB1	Truss Type Piggyback	Qty 1	Ply 1	288 NC2015
-----------------	--------------	-------------------------	----------	----------	------------

Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

8,330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:02:01 2020 Page 1  
ID:wtU0m002CvnP9KkLnVkyW5y7knd-YIGNcNfkAzfT?30cM3nqo1vF DaLwycy3jgflWHyoJAA

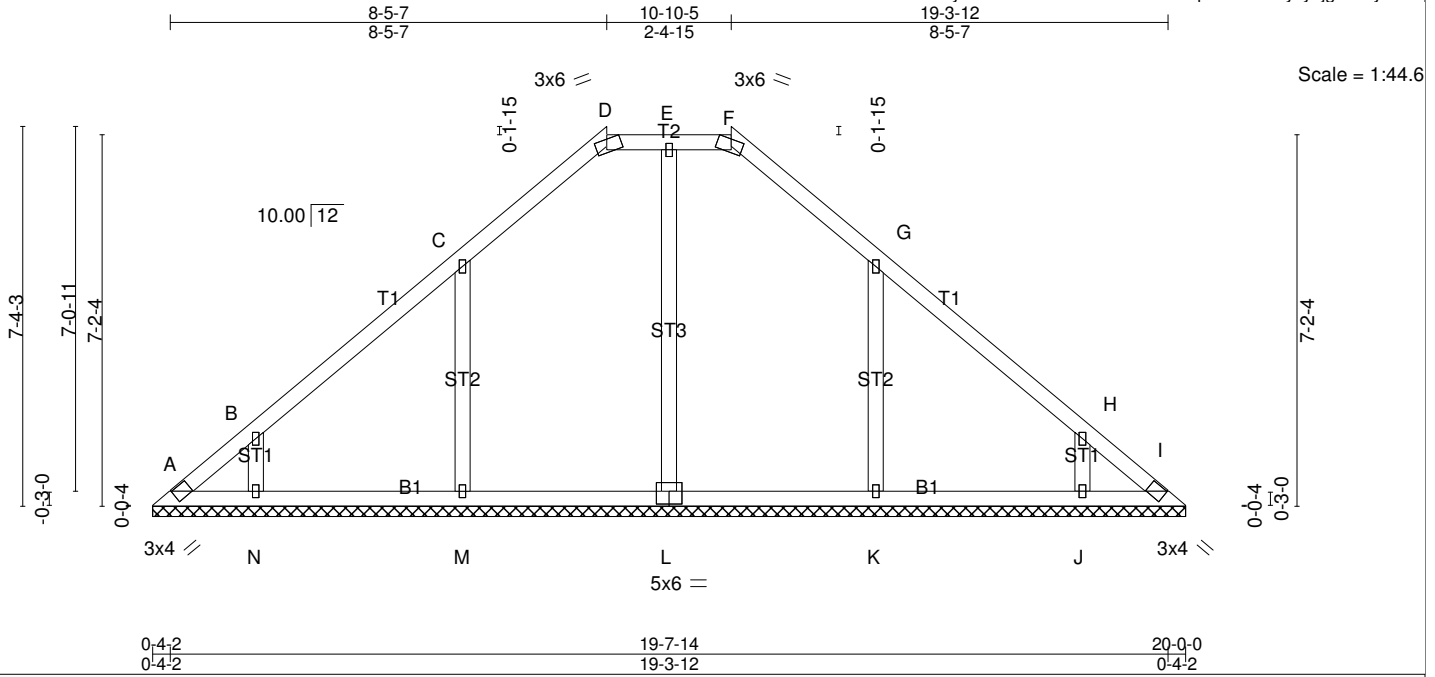


Plate Offsets (X,Y)-- [L:0-3-0,0-3-0]

<b>LOADING</b> (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	<b>SPACING-</b> Plate Grip DOL 2-0-0 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2015/TPI2014	<b>CSI.</b> TC 0.17 BC 0.19 WB 0.12 Matrix-SH	<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) 0.01 l n/a n/a	<b>PLATES GRIP</b> MT20 244/190 Weight: 93 lb FT = 20%
---	---	---	--	--

<b>LUMBER-</b> TOP CHORD 2x4 SP No.2 BOT CHORD 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 2-0-0 oc purlins (6-0-0 max.): D-F. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
--	---

**REACTIONS.** (lb/size) A=79/20-0-0 (min. 0-2-8), I=79/20-0-0 (min. 0-2-8), L=210/20-0-0 (min. 0-2-8), M=314/20-0-0 (min. 0-2-8), N=272/20-0-0 (min. 0-2-8), K=314/20-0-0 (min. 0-2-8), J=272/20-0-0 (min. 0-2-8)  
Max Horz A=-171(LC 6)  
Max Uplift A=62(LC 8), I=43(LC 9), M=-155(LC 10), N=143(LC 10), K=-152(LC 11), J=-144(LC 11)  
Max Grav A=147(LC 19), I=138(LC 20), L=343(LC 20), M=411(LC 17), N=284(LC 17), K=408(LC 18), J=285(LC 18)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=-234/132, B-C=-197/90, C-D=-171/123, D-E=-131/120, E-F=-131/120, F-G=-171/123, G-H=-181/59, H-I=-214/120  
BOT CHORD A-N=-79/167, M-N=-79/167, L-M=-79/167, K-L=-79/167, J-K=-79/167, I-J=-79/167  
WEBS E-L=-132/38, C-M=-269/204, B-N=-252/187, G-K=-266/202, H-J=-252/188

- 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
  - Provide adequate drainage to prevent water ponding.
  - All plates are 1.5x3 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 62 lb uplift at joint A, 43 lb uplift at joint I, 155 lb uplift at joint M, 143 lb uplift at joint N, 152 lb uplift at joint K and 144 lb uplift at joint J.
  - 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.
  - See standard piggyback truss connection detail for connection to base truss.
  - 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

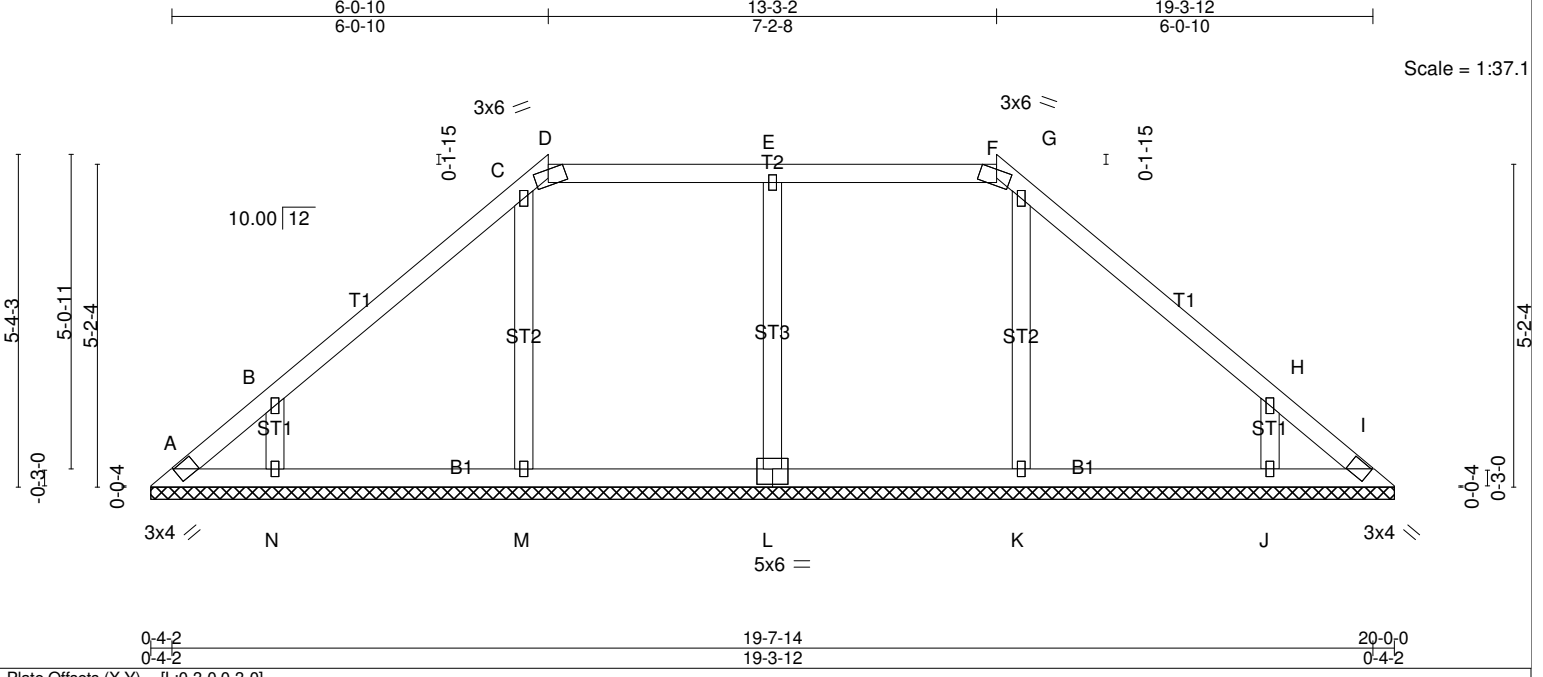


Plate Offsets (X,Y)-- [L:0-3-0-0-3-0]

<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 0.19	in (loc) l/def L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.19	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.12	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.00 l n/a n/a		
	Code IRC2015/TPI2014			Weight: 87 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, except 2-0-0 oc purlins (6-0-0 max.): D-F.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

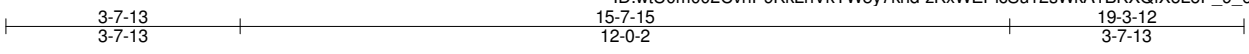
**REACTIONS.** (lb/size) A=29/20-0-0 (min. 0-2-8), I=29/20-0-0 (min. 0-2-8), L=321/20-0-0 (min. 0-2-8), M=306/20-0-0 (min. 0-2-8), N=275/20-0-0 (min. 0-2-8), K=306/20-0-0 (min. 0-2-8), J=275/20-0-0 (min. 0-2-8)  
 Max Horz A=-122(LC 6)  
 Max Uplift A=82(LC 8), I=56(LC 9), L=69(LC 7), M=62(LC 10), N=160(LC 10), K=44(LC 11), J=161(LC 11)  
 Max Grav A=127(LC 10), I=109(LC 11), L=422(LC 23), M=364(LC 17), N=300(LC 17), K=344(LC 18), J=301(LC 18)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=201/158, B-C=120/106, C-D=91/90, D-E=50/73, E-F=50/73, F-G=91/90, G-H=120/74, H-I=173/151  
 BOT CHORD A-N=100/130, M-N=100/130, L-M=100/130, K-L=100/130, J-K=100/130, I-J=100/130  
 WEBS E-L=250/116, C-M=223/111, B-N=267/206, G-K=223/102, H-J=267/208

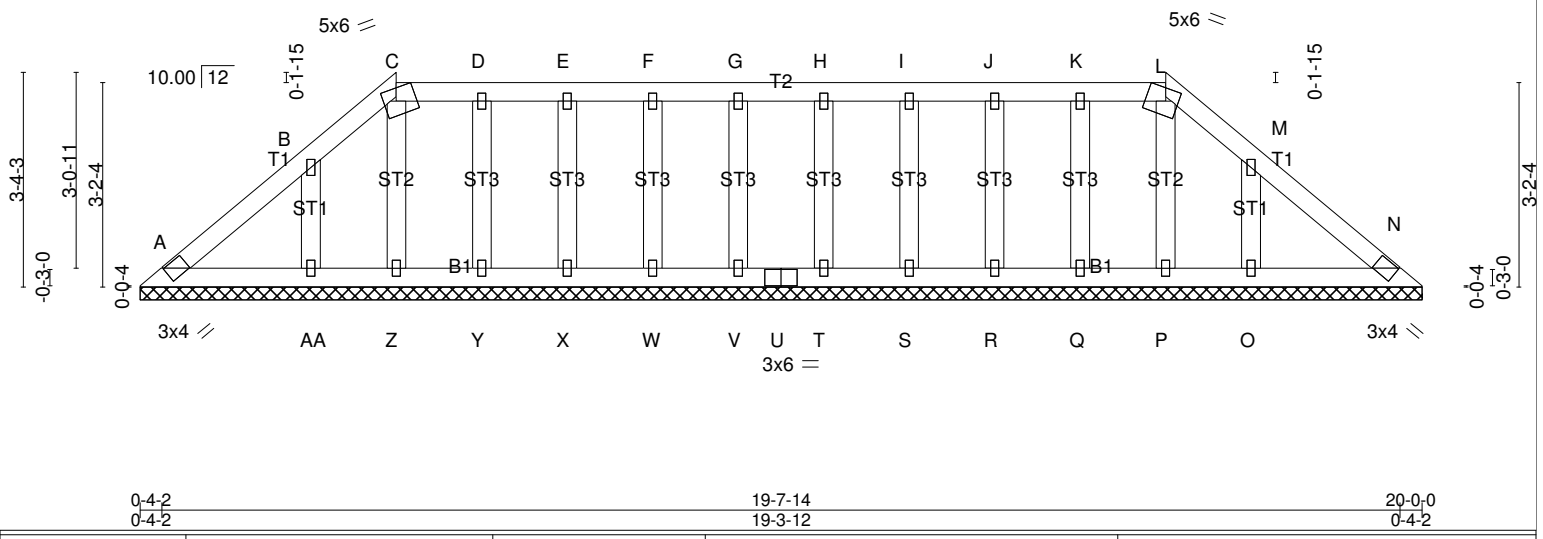
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed: MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end 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 1.5x3 MT20 unless otherwise indicated.
  - 5) Gable requires continuous bottom chord bearing.
  - 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, with BCDL = 10.0psf.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 82 lb uplift at joint A, 56 lb uplift at joint I, 69 lb uplift at joint L, 62 lb uplift at joint M, 160 lb uplift at joint N, 44 lb uplift at joint K and 161 lb uplift at joint J.
  - 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) See standard piggyback truss connection detail for connection to base truss.
  - 11) 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

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC



Scale = 1:35.9



<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 0.05	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.04	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.03	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.00 N n/a n/a		
	Code IRC2015/TPI2014			Weight: 105 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, except 2-0-0 oc purlins (6-0-0 max.): C-L.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) A=80/20-0-0 (min. 0-2-7), N=80/20-0-0 (min. 0-2-7), V=107/20-0-0 (min. 0-2-7), W=107/20-0-0 (min. 0-2-7), X=105/20-0-0 (min. 0-2-7), Y=116/20-0-0 (min. 0-2-7), Z=68/20-0-0 (min. 0-2-7), AA=188/20-0-0 (min. 0-2-7), T=107/20-0-0 (min. 0-2-7), S=107/20-0-0 (min. 0-2-7), R=105/20-0-0 (min. 0-2-7), Q=116/20-0-0 (min. 0-2-7), P=68/20-0-0 (min. 0-2-7), O=188/20-0-0 (min. 0-2-7)  
Max Horz A=-73(LC 6)  
Max Uplift A=-8(LC 11), V=-20(LC 6), W=-20(LC 7), X=-20(LC 6), Y=-22(LC 7), Z=-8(LC 7), AA=-96(LC 10), T=-20(LC 7), S=-19(LC 6), R=-20(LC 6), Q=-22(LC 6), O=-94(LC 11)  
Max Grav A=86(LC 18), N=80(LC 1), V=107(LC 22), W=107(LC 21), X=105(LC 22), Y=116(LC 21), Z=75(LC 20), AA=208(LC 17), T=107(LC 21), S=107(LC 22), R=105(LC 21), Q=116(LC 22), P=70(LC 20), O=206(LC 18)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=-76/74, B-C=-66/68, C-D=-52/60, D-E=-51/59, E-F=-51/59, F-G=-51/59, G-H=-51/59, H-I=-51/59, I-J=-51/59, J-K=-51/59, K-L=-52/60, L-M=-66/65, M-N=-49/47  
BOT CHORD A-AA=-37/55, Z-AA=-37/55, Y-Z=-37/55, X-Y=-37/55, W-X=-37/55, V-W=-37/55, U-V=-37/55, T-U=-37/55, S-T=-37/55, R-S=-37/55, Q-R=-37/55, P-Q=-37/55, O-P=-37/55, N-O=-37/55  
WEBS G-V=-80/37, F-W=-80/37, E-X=-79/38, D-Y=-86/39, C-Z=-59/23, B-AA=-150/107, H-T=-80/37, I-S=-80/37, J-R=-79/38, K-Q=-86/39, L-P=-55/8, M-O=-150/106

- 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 1.5x3 MT20 unless otherwise indicated.
  - 6) Gable requires continuous bottom chord bearing.
  - 7) Gable studs spaced at 1-4-0 oc.
  - 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 8 lb uplift at joint A, 20 lb uplift at joint V, 20 lb uplift at joint W, 20 lb uplift at joint X, 22 lb uplift at joint Y, 8 lb uplift at joint Z, 96 lb uplift at joint AA, 20 lb uplift at joint T, 19 lb uplift at joint S, 20 lb uplift at joint R, 22 lb uplift at joint Q and 94 lb uplift at joint O.
  - 11) 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.
  - 12) See standard piggyback truss connection detail for connection to base truss.
  - 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

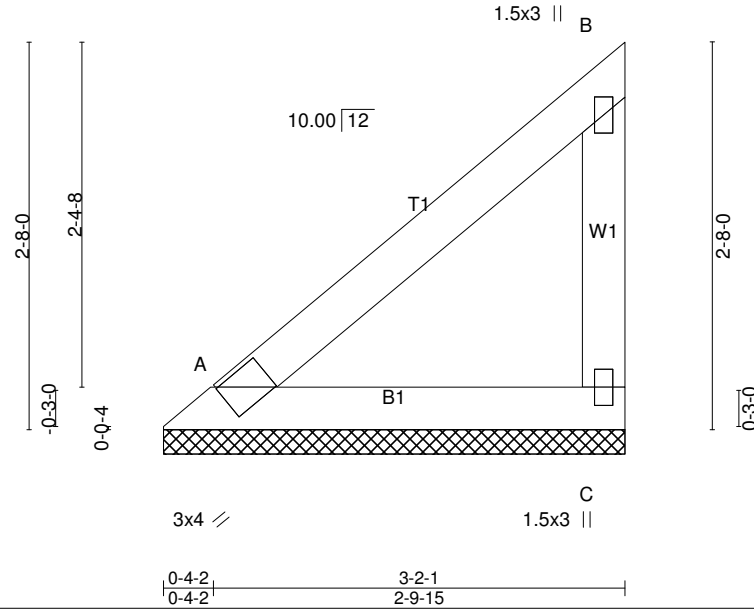


Job 20071754	Truss PB4	Truss Type Piggyback	Qty 3	Ply 1	288 NC2015
-----------------	--------------	-------------------------	----------	----------	------------

Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

8.330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:02:05 2020 Page 1  
ID:wtU0m002CvnP9KkLnVkyYw5y7knd-RXVuSijEDB9vUgJNbvrmzt4xvCkcuFreedlyf2yoJAW



Scale = 1:15.8

<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 0.13	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.08	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: 13 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-2-1 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=106/3-2-1 (min. 0-1-8), C=106/3-2-1 (min. 0-1-8)  
 Max Horz A=83(LC 7)  
 Max Uplift A=1(LC 10), C=38(LC 10)  
 Max Grav A=108(LC 18), C=123(LC 17)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=-75/59, B-C=-96/53  
 BOT CHORD A-C=-40/44

- 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) 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.

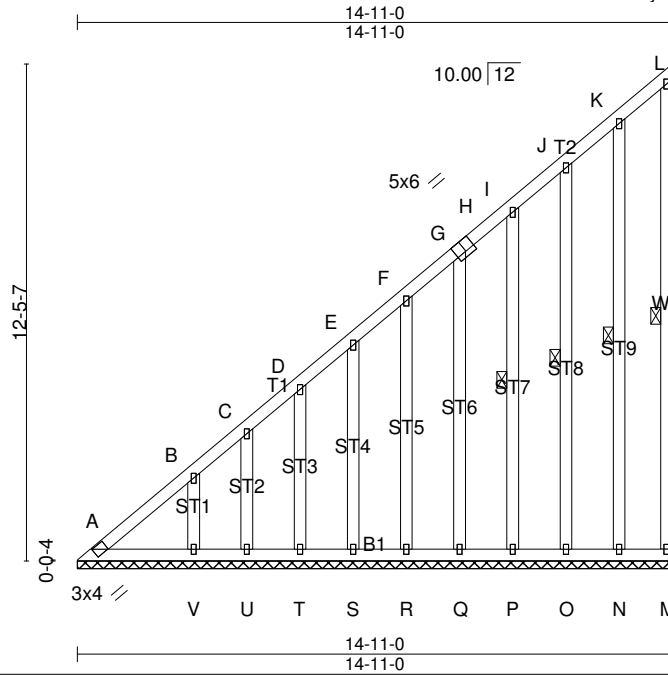
**LOAD CASE(S)** Standard

Job 20071754	Truss V1	Truss Type GABLE	Qty 1	Ply 1	288 NC2015
-----------------	-------------	---------------------	----------	----------	------------

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

Job Reference (optional)

8.330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:02:07 2020 Page 1  
ID:wtU0m002CvnP9KkLnVkyW5y7knd-NvdetQkUlpPdj\_TiiKtE2I9IS?QYMKgx5c63jwyoJAU



Scale = 1:57.8

Plate Offsets (X,Y)-- [G:0-2-4-0-0-0], [H:0-3-0-Edge], [I:0-0-0-1-12]

<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 0.13	in (loc) l/def L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.05	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.11	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) -0.00 M n/a n/a		
	Code IRC2015/TPI2014			Weight: 153 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.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt L-M, K-N, J-O, I-P
OTHERS 2x4 SP No.3	

**REACTIONS.** (lb/size) M=41/14-11-0 (min. 0-1-8), A=83/14-11-0 (min. 0-1-8), N=106/14-11-0 (min. 0-1-8), O=109/14-11-0 (min. 0-1-8), P=107/14-11-0 (min. 0-1-8), Q=107/14-11-0 (min. 0-1-8), R=107/14-11-0 (min. 0-1-8), S=105/14-11-0 (min. 0-1-8), T=115/14-11-0 (min. 0-1-8), U=68/14-11-0 (min. 0-1-8), V=205/14-11-0 (min. 0-1-8)  
Max Horz A=464(LC 10)  
Max Uplift M=24(LC 10), A=73(LC 8), N=51(LC 10), O=58(LC 10), P=55(LC 10), Q=55(LC 10), R=55(LC 10), S=55(LC 10), T=59(LC 10), U=36(LC 10), V=106(LC 10)  
Max Grav M=45(LC 17), A=343(LC 10), N=115(LC 17), O=119(LC 17), P=117(LC 17), Q=117(LC 17), R=117(LC 17), S=115(LC 17), T=126(LC 17), U=74(LC 17), V=225(LC 17)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=559/456, B-C=465/368, C-D=419/339, D-E=362/292, E-F=306/248, F-G=250/203, G-H=194/142, H-I=194/159, I-J=139/115, J-K=81/68, K-L=33/22, L-M=38/28  
BOT CHORD A-V=0/0, U-V=0/0, T-U=0/0, S-T=0/0, R-S=0/0, Q-R=0/0, P-Q=0/0, O-P=0/0, N-O=0/0, M-N=0/0  
WEBS K-N=93/69, J-O=99/73, I-P=96/71, G-Q=96/71, F-R=96/71, E-S=96/71, D-T=100/74, C-U=72/56, B-V=165/116

- 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 exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) All plates are 1.5x3 MT20 unless otherwise indicated.
  - 3) Gable requires continuous bottom chord bearing.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint M, 73 lb uplift at joint A, 51 lb uplift at joint N, 58 lb uplift at joint O, 55 lb uplift at joint P, 55 lb uplift at joint Q, 55 lb uplift at joint R, 55 lb uplift at joint S, 59 lb uplift at joint T, 36 lb uplift at joint U and 106 lb uplift at joint V.
  - 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.

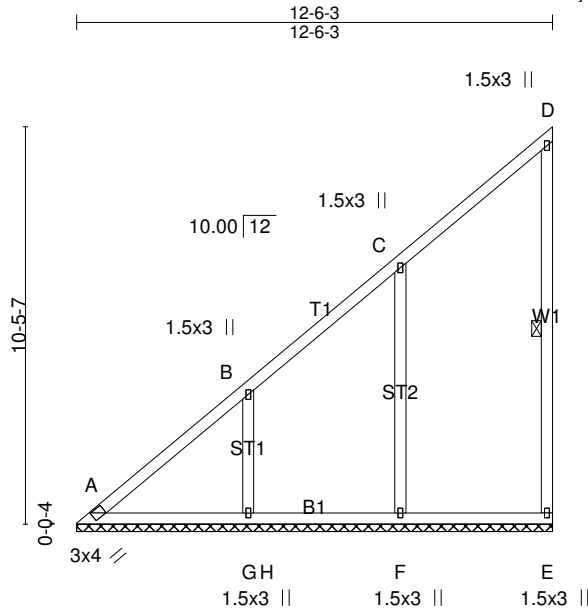
**LOAD CASE(S)** Standard

Job 20071754	Truss V2	Truss Type VALLEY	Qty 1	Ply 1	288 NC2015
-----------------	-------------	----------------------	----------	----------	------------

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

Job Reference (optional)

8,330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:02:08 2020 Page 1  
ID:wtU0m002CvnP9KkLnVkyYW5y7knd-r6B04ml7W6XUL82yG1PTaViRePjV5kP5KGscFNyoJAT



Scale = 1:60.6

<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 0.23	in (loc) l/def L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.19	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.27	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.00 E n/a n/a		
	Code IRC2015/TPI2014			Weight: 71 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.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt D-E
OTHERS 2x4 SP No.3	

**REACTIONS.** (lb/size) A=134/12-6-3 (min. 0-1-8), E=128/12-6-3 (min. 0-1-8), F=332/12-6-3 (min. 0-1-8), G=365/12-6-3 (min. 0-1-8)  
Max Horz A=386(LC 10)  
Max Uplift A=9(LC 8), E=67(LC 10), F=171(LC 10), G=190(LC 10)  
Max Grav A=252(LC 10), E=186(LC 17), F=502(LC 17), G=442(LC 17)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=-434/368, B-C=-259/219, C-D=-109/67, D-E=-115/84  
BOT CHORD A-G=-1/3, G-H=-1/3, F-H=-1/3, E-F=-1/3  
WEBS C-F=-308/228, B-G=-313/223

- 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 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, with BCDL = 10.0psf.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 9 lb uplift at joint A, 67 lb uplift at joint E, 171 lb uplift at joint F and 190 lb uplift at joint G.
  - 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.

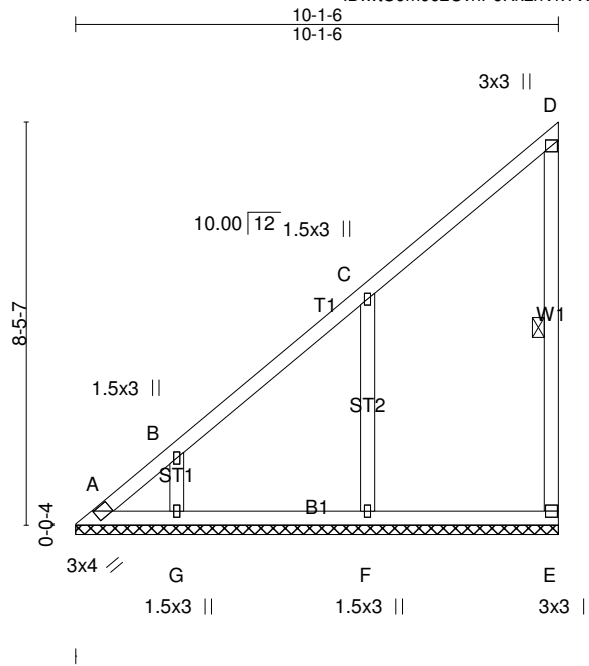
**LOAD CASE(S)** Standard

Job 20071754	Truss V3	Truss Type Valley	Qty 1	Ply 1	288 NC2015
-----------------	-------------	----------------------	----------	----------	------------

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

Job Reference (optional)

8.330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:02:09 2020 Page 1  
ID:wtU0m002CvnP9KkLnVkyW5y7knd-JIIPH6mHQfLyHd8qIw7jEU0p3VqDkEZwbAopyoJAS



Scale: 1/4"=1'

<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 0.76	in (loc) l/def L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.21	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.13	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) -0.00 E n/a n/a		
	Code IRC2015/TPI2014			Weight: 54 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.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt D-E
OTHERS 2x4 SP No.3	

**REACTIONS.** (lb/size) A=28/10-1-6 (min. 0-1-8), E=124/10-1-6 (min. 0-1-8), F=355/10-1-6 (min. 0-1-8), G=260/10-1-6 (min. 0-1-8)  
Max Horz A=302(LC 7)  
Max Uplift A=-101(LC 8), E=-74(LC 7), F=-185(LC 10), G=-134(LC 10)  
Max Grav A=194(LC 7), E=212(LC 17), F=460(LC 17), G=271(LC 17)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=-302/202, B-C=-240/169, C-D=-184/117, D-E=-121/78  
BOT CHORD A-G=-132/146, F-G=-132/146, E-F=-132/146  
WEBS C-F=-307/218, B-G=-256/195

- 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) 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, with BCDL = 10.0psf.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 101 lb uplift at joint A, 74 lb uplift at joint E, 185 lb uplift at joint F and 134 lb uplift at joint G.
  - 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.

**LOAD CASE(S)** Standard

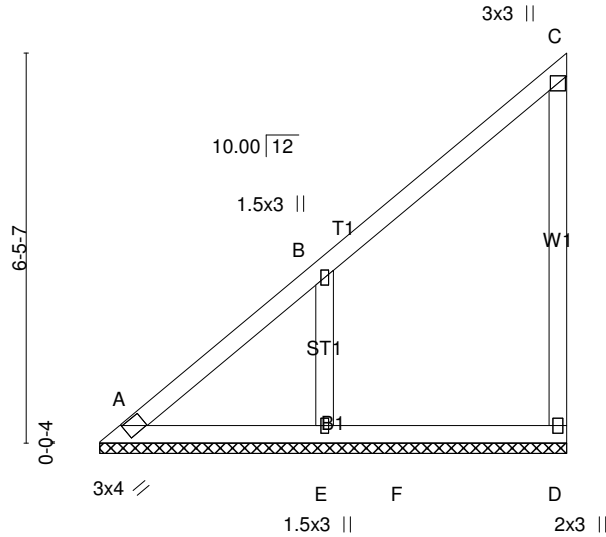
Job 20071754	Truss V4	Truss Type Valley	Qty 1	Ply 1	288 NC2015
-----------------	-------------	----------------------	----------	----------	------------

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

Job Reference (optional)

8,330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:02:10 2020 Page 1

ID:wtU0m002CvnP9KkLnVkyW5y7Knd-nUlnVSmN2knCaRCKOSRngxwnj4DQiZh4OnaLjKFyoJAR  
7-8-9  
7-8-9



Scale = 1:38.1

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/def L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.42	Vert(LL) n/a - n/a 999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.15	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.06	Horz(CT) -0.00 D 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  
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) A=100/7-8-9 (min. 0-1-8), D=125/7-8-9 (min. 0-1-8), E=350/7-8-9 (min. 0-1-8)  
Max Horz A=226(LC 7)  
Max Uplift A=-28(LC 6), D=-61(LC 7), E=-182(LC 10)  
Max Grav A=156(LC 18), D=203(LC 17), E=417(LC 17)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=-210/149, B-C=-163/86, C-D=-120/73  
BOT CHORD A-E=-100/112, E-F=-100/112, D-F=-100/112  
WEBS B-E=-297/216

- 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) 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, with BCDL = 10.0psf.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 28 lb uplift at joint A, 61 lb uplift at joint D and 182 lb uplift at joint E.
  - 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.

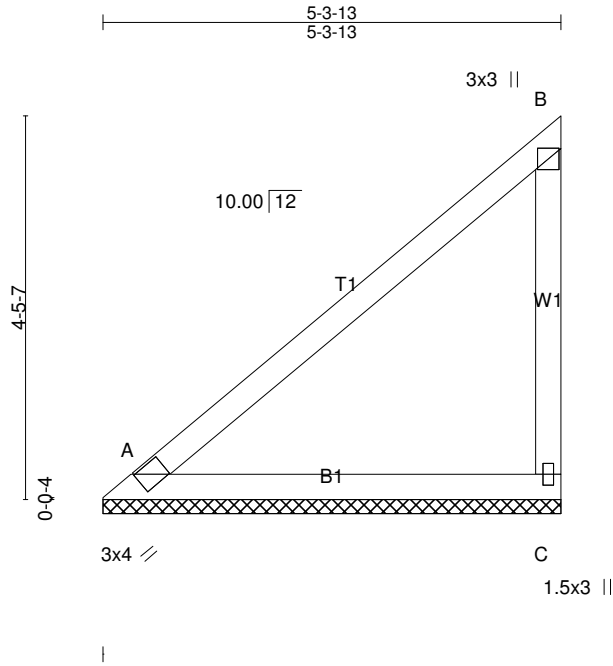
**LOAD CASE(S)** Standard

Job 20071754	Truss V5	Truss Type Valley	Qty 1	Ply 1	288 NC2015
-----------------	-------------	----------------------	----------	----------	------------

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

Job Reference (optional)

8,330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:02:11 2020 Page 1  
ID:wtU0m002CvnP9KkLnVkyYw5y7knd-Ghs9ion?p1v3CbnXx9yAC8KwccleI9KX0E4GshyoJAQ



Scale = 1:26.7

<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 0.31	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.23	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-SH	Horz(CT) -0.00 C n/a n/a		
	Code IRC2015/TPI2014			Weight: 23 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-4-2 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=192/5-3-13 (min. 0-1-8), C=192/5-3-13 (min. 0-1-8)  
Max Horz A=151(LC 7)  
Max Uplift A=-2(LC 10), C=-68(LC 10)  
Max Grav A=195(LC 18), C=222(LC 17)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=-167/88, B-C=-149/78  
BOT CHORD A-C=-49/66

- 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) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2 lb uplift at joint A and 68 lb uplift at joint C.
  - 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.

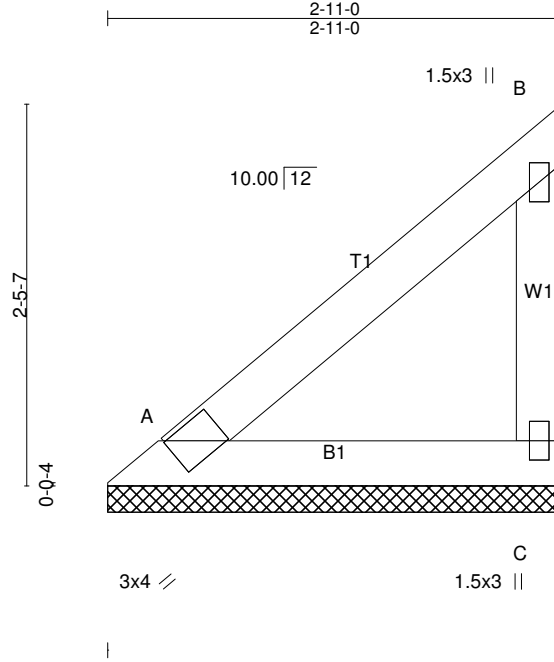
**LOAD CASE(S)** Standard

Job 20071754	Truss V6	Truss Type Valley	Qty 1	Ply 1	288 NC2015
-----------------	-------------	----------------------	----------	----------	------------

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

Job Reference (optional)

8,330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:02:11 2020 Page 1  
ID:wtU0m002CvnP9KkLnVkyYw5y7knd-Ghs9ion?p1v3CbnXx9yAC8KzocoFI9KX0E4GshyoJAJQ



Scale = 1:14.8

<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 0.10 BC 0.06 WB 0.00 Matrix-P	<b>DEFL.</b> in (loc) l/def 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: 12 lb FT = 20%
---	--	--	--	--

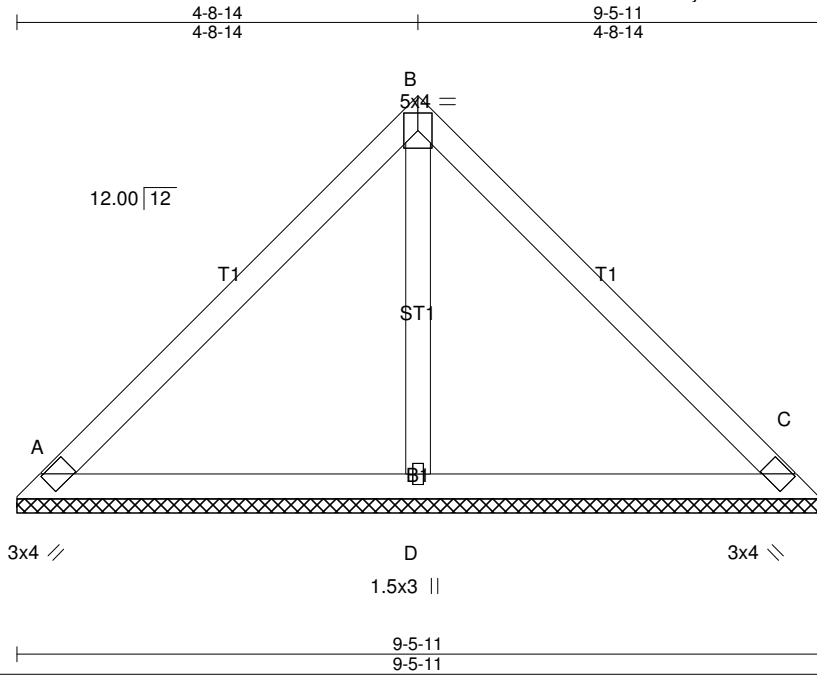
<b>LUMBER-</b> TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3	<b>BRACING-</b> TOP CHORD Structural wood sheathing directly applied or 2-11-5 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
--	---

**REACTIONS.** (lb/size) A=96/2-11-0 (min. 0-1-8), C=96/2-11-0 (min. 0-1-8)  
Max Horz A=75(LC 7)  
Max Uplift A=1(LC 10), C=34(LC 10)  
Max Grav A=98(LC 18), C=111(LC 17)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=-67/53, B-C=-87/48  
BOT CHORD A-C=-36/39

- 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 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1 lb uplift at joint A and 34 lb uplift at joint C.
  - 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.

**LOAD CASE(S)** Standard



Scale = 1:27.2

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.24	in (loc) l/def L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.20	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.07	Vert(CT) n/a - n/a 999		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-SH	Horz(CT) 0.00 C n/a n/a		
				Weight: 39 lb	FT = 20%

<b>LUMBER-</b> TOP CHORD 2x4 SP No.2 BOT CHORD 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. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
--	--

**REACTIONS.** (lb/size) A=191/9-5-11 (min. 0-1-8), C=191/9-5-11 (min. 0-1-8), D=323/9-5-11 (min. 0-1-8)  
 Max Horz A=109(LC 7)  
 Max Uplift A=-31(LC 11), C=-31(LC 11), D=-18(LC 10)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=-171/85, B-C=-161/70  
 BOT CHORD A-D=-30/79, C-D=-30/79  
 WEBS B-D=-170/45

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint A, 31 lb uplift at joint C and 18 lb uplift at joint D.
  - 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

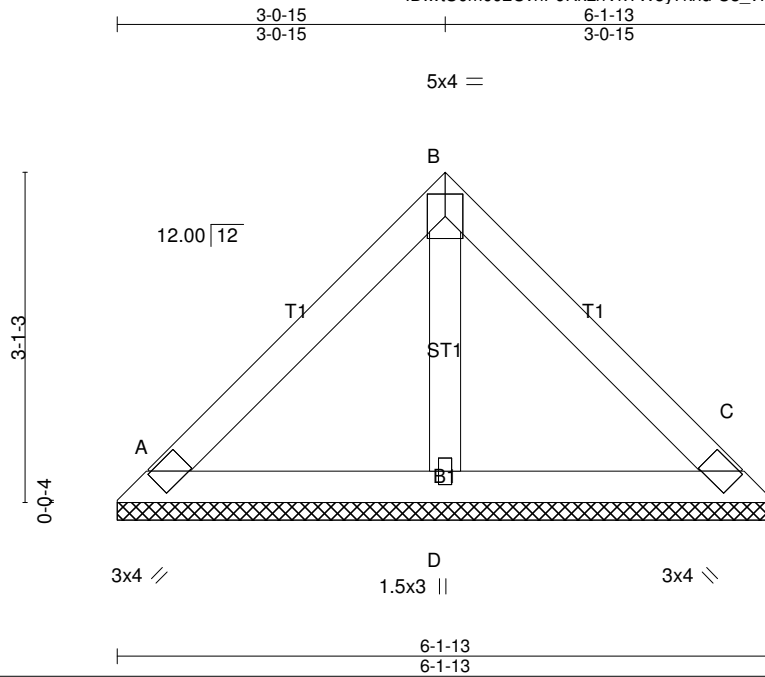


Job 20071754	Truss V8	Truss Type Valley	Qty 1	Ply 1	288 NC2015
-----------------	-------------	----------------------	----------	----------	------------

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

Job Reference (optional)

8.330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:02:13 2020 Page 1  
ID:wtU0m002CvnP9KkLnVkyYW5y7knd-C3\_v7UpFLf9mRvwv3a\_eH ZPJXQSVm3SqUXZNxayoJAO



Scale = 1:21.6

<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 0.09	in (loc) l/def L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.08	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.02	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.00 C n/a n/a		
	Code IRC2015/TPI2014			Weight: 24 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.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	

**REACTIONS.** (lb/size) A=119/6-1-13 (min. 0-1-8), C=119/6-1-13 (min. 0-1-8), D=201/6-1-13 (min. 0-1-8)  
Max Horz A=-68(LC 8)  
Max Uplift A=-19(LC 11), C=-19(LC 11), D=-11(LC 10)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=-106/53, B-C=-100/46  
BOT CHORD A-D=-18/49, C-D=-18/49  
WEBS B-D=-106/31

- 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; 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
  - 3) Gable requires continuous bottom chord bearing.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint A, 19 lb uplift at joint C and 11 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.

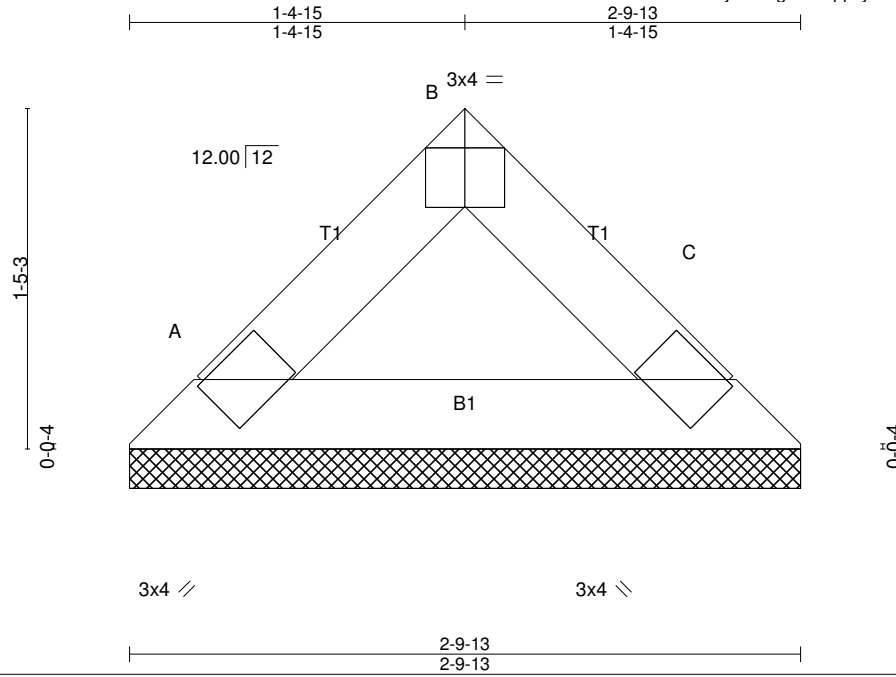
**LOAD CASE(S)** Standard

Job 20071754	Truss V9	Truss Type Valley	Qty 1	Ply 1	288 NC2015
-----------------	-------------	----------------------	----------	----------	------------

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

Job Reference (optional)

8,330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:02:14 2020 Page 1  
ID:wtU0m002CvmP9KkLnVkyYW5y7knd-gGYILqqt6yHd33V5dlVtqmxVKqp7VW4ziBjxT0yoJAN



Scale = 1:9.7

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

<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 0.02	in (loc) l/def L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.05	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: 9 lb	FT = 20%

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

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

**REACTIONS.** (lb/size) A=86/2-9-13 (min. 0-1-8), C=86/2-9-13 (min. 0-1-8)  
Max Horz A=27(LC 7)  
Max Uplift A=-7(LC 11), C=-7(LC 10)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=-64/27, B-C=-64/27  
BOT CHORD A-C=-7/37

- 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
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 7 lb uplift at joint A and 7 lb uplift at joint C.
  - 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.

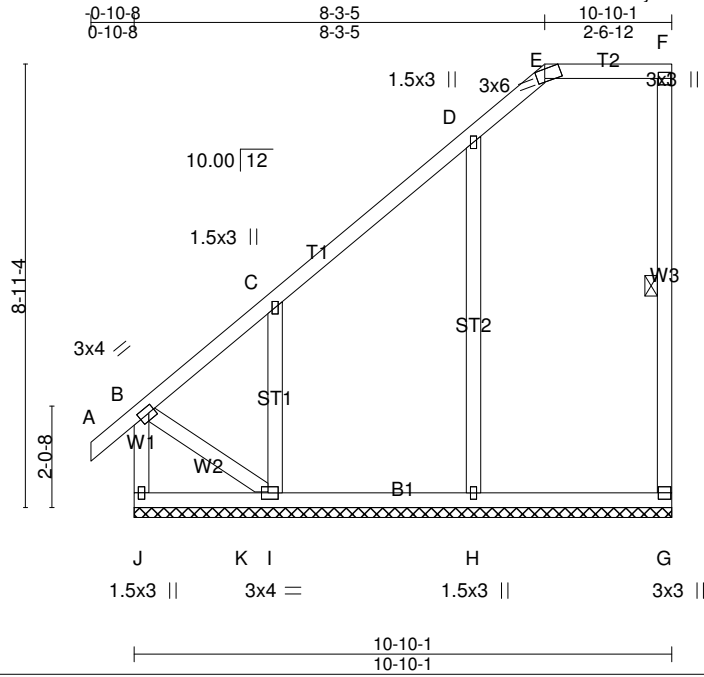
**LOAD CASE(S)** Standard

Job 20071754	Truss V10	Truss Type Valley	Qty 1	Ply 1	288 NC2015
-----------------	--------------	----------------------	----------	----------	------------

Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

8.330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:02:15 2020 Page 1  
ID:wtU0m002CvnP9KkLnVkyYw5y7knd-8S6gY9qWtGpUhd4IA?16N\_USIE6FEvc7xr2U?TyoJAM



Scale = 1:46.4

Plate Offsets (X,Y)-- [B:0-1-8,0-1-8], [E:0-1-13,Edge], [I:0-1-12,0-0-0], [L:0-1-8,0-1-8], [K:0-0-0,0-1-1]

<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 0.90	Vert(LL)	0.00	B	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.25	Vert(CT)	0.00	B	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.30	Horz(CT)	-0.00	G	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-SH					Weight: 74 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.): E-F.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt F-G
OTHERS 2x4 SP No.3	

**REACTIONS.** (lb/size) J=155/10-10-1 (min. 0-1-11), G=126/10-10-1 (min. 0-1-11), H=353/10-10-1 (min. 0-1-11), I=271/10-10-1 (min. 0-1-11)  
 Max Horz J=337(LC 7)  
 Max Uplift J=136(LC 6), G=-42(LC 7), H=-105(LC 7), I=-299(LC 10)  
 Max Grav J=326(LC 7), G=156(LC 2), H=505(LC 17), I=450(LC 17)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD B-J=-308/145, A-B=0/39, B-C=-274/187, C-D=-231/147, D-E=-145/138, E-F=-143/156, F-G=-93/57  
 BOT CHORD I-J=-322/204, H-I=-144/158, G-H=-144/158  
 WEBS D-H=-290/183, I-K=-370/347, C-K=-312/230, B-K=-199/298

- 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) Provide adequate drainage to prevent water ponding.
  - 3) Gable requires continuous bottom chord bearing.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 136 lb uplift at joint J, 42 lb uplift at joint G, 105 lb uplift at joint H and 299 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.

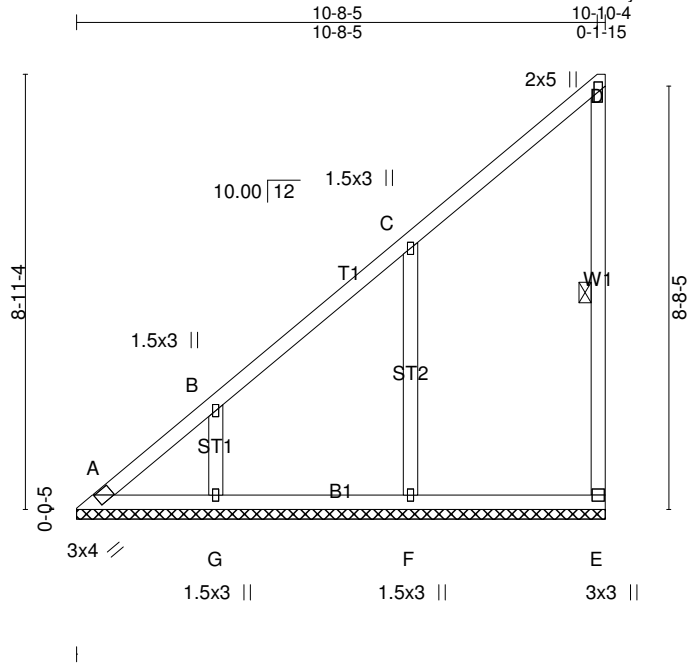
**LOAD CASE(S)** Standard

Job 20071754	Truss V11	Truss Type Valley	Qty 1	Ply 1	288 NC2015
-----------------	--------------	----------------------	----------	----------	------------

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

Job Reference (optional)

8,330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:02:16 2020 Page 1  
ID:wtU0m002CvnP9KkLnVkyW5y7knd-ceg2IVr8eaXLIMfUkjYLvB1eldSczOvGAVo1YvyoJAL



Scale = 1:47.3

<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 0.89	Vert(LL) n/a - n/a 999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.24	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.17	Horz(CT) -0.00 E n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-SH		Weight: 59 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.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt D-E
OTHERS 2x4 SP No.3	

**REACTIONS.** (lb/size) A=68/10-10-4 (min. 0-1-8), E=125/10-10-4 (min. 0-1-8), F=353/10-10-4 (min. 0-1-8), G=282/10-10-4 (min. 0-1-8)  
 Max Horz A=325(LC 7)  
 Max Uplift A=-79(LC 8), E=-79(LC 7), F=-184(LC 10), G=-146(LC 10)  
 Max Grav A=203(LC 7), E=214(LC 17), F=457(LC 17), G=297(LC 17)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=-316/211, B-C=-249/172, C-D=-190/127, D-E=-122/80  
 BOT CHORD A-G=-141/156, F-G=-141/156, E-F=-141/156  
 WEBS C-F=-307/214, B-G=-267/199

- 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) 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, with BCDL = 10.0psf.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 79 lb uplift at joint A, 79 lb uplift at joint E, 184 lb uplift at joint F and 146 lb uplift at joint G.
  - 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.

**LOAD CASE(S)** Standard

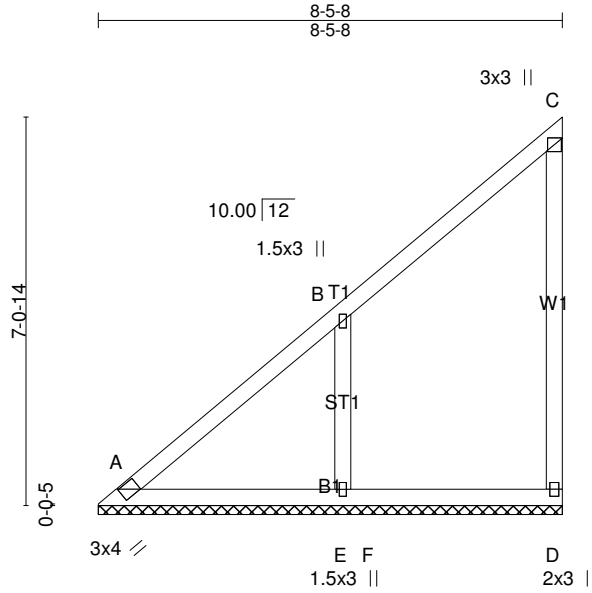
Job 20071754	Truss V12	Truss Type Valley	Qty 1	Ply 1	288 NC2015
-----------------	--------------	----------------------	----------	----------	------------

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

Job Reference (optional)

8.330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:02:17 2020 Page 1

ID:wtU0m002CvnP9KkLnVkyW5y7knd-4qDQzrsmOtgCwWEglQ3aSPZur1p9iscQO9Xb4LYoJAK



Scale = 1:42.0

<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 0.52	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.16	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.08	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) -0.00 D n/a n/a		
	Code IRC2015/TPI2014			Weight: 43 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.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.3	

**REACTIONS.** (lb/size) A=129/8-5-8 (min. 0-1-8), D=117/8-5-8 (min. 0-1-8), E=389/8-5-8 (min. 0-1-8)  
 Max Horz A=250(LC 7)  
 Max Uplift A=-25(LC 6), D=-64(LC 7), E=-202(LC 10)  
 Max Grav A=186(LC 18), D=200(LC 17), E=478(LC 17)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=-226/167, B-C=-171/94, C-D=-116/74  
 BOT CHORD A-E=-111/123, E-F=-111/123, D-F=-111/123  
 WEBS B-E=-322/229

- 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) 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, with BCDL = 10.0psf.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint A, 64 lb uplift at joint D and 202 lb uplift at joint E.
  - 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.

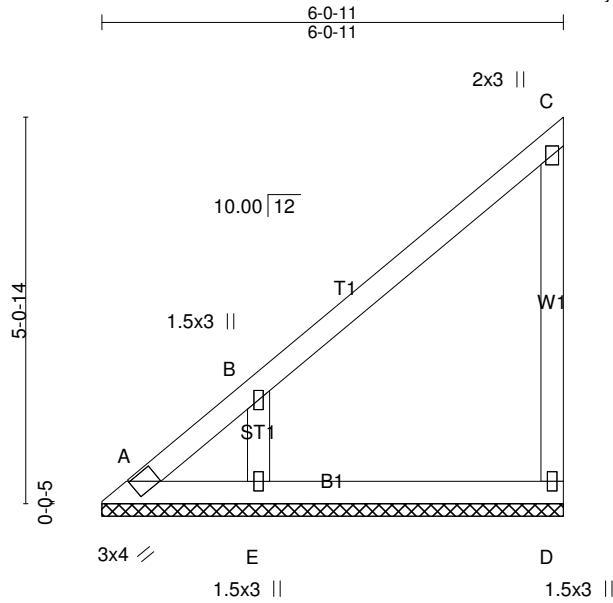
**LOAD CASE(S)** Standard

Job 20071754	Truss V13	Truss Type Valley	Qty 1	Ply 1	288 NC2015
-----------------	--------------	----------------------	----------	----------	------------

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

Job Reference (optional)

8,330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:02:18 2020 Page 1  
ID:wtU0m002CvnP9KkLnVkyW5y7knd-Y1noABtO9Bo3Ygpts7ap\_c68rRADRJ5ZdpH8cnyoJAJ



Scale = 1:30.2

<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 0.24	Vert(LL) n/a - n/a 999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.11	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.06	Horz(CT) -0.00 D n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-SH		Weight: 28 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) A=14/6-0-11 (min. 0-1-8), D=131/6-0-11 (min. 0-1-8), E=298/6-0-11 (min. 0-1-8)  
Max Horz A=174(LC 7)  
Max Uplift A=60(LC 8), D=52(LC 7), E=154(LC 10)  
Max Grav A=111(LC 7), D=157(LC 17), E=326(LC 17)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD A-B=-180/127, B-C=-147/83, C-D=-120/67  
BOT CHORD A-E=-75/86, D-E=-75/86  
WEBS B-E=-274/211

- 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) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 60 lb uplift at joint A, 52 lb uplift at joint D and 154 lb uplift at joint E.
  - 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.

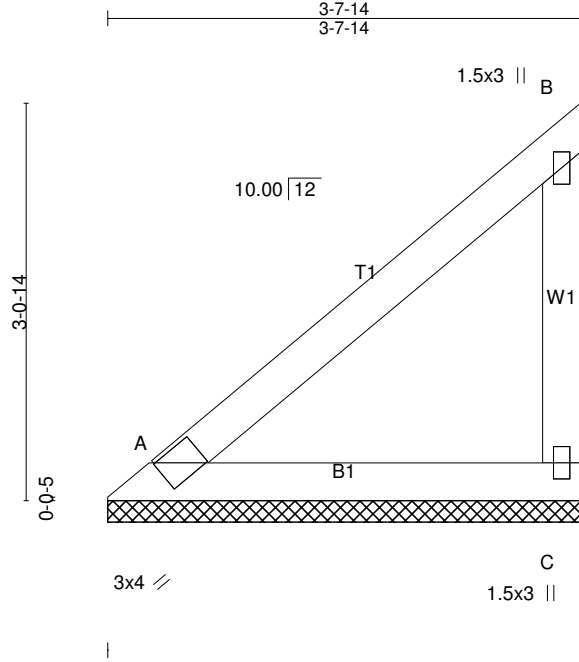
**LOAD CASE(S)** Standard

Job 20071754	Truss V14	Truss Type Valley	Qty 1	Ply 1	288 NC2015
-----------------	--------------	----------------------	----------	----------	------------

Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC

8,330 s Apr 7 2020 MiTek Industries, Inc. Thu Aug 13 10:02:43 2020 Page 1  
 ID:wtU0m002CvnP9KkLnVkyW5y7knd-KroFQkA4HtxW1WDgguXgVueQQWiyodFENCqz\_ryoJ9w



Scale = 1:17.8

<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 0.19	Vert(LL) n/a - n/a 999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.11	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: 15 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-8-4 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=126/3-7-14 (min. 0-1-8), C=126/3-7-14 (min. 0-1-8)  
 Max Horz A=99(LC 7)  
 Max Uplift A=-1(LC 10), C=-45(LC 10)  
 Max Grav A=128(LC 18), C=145(LC 17)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD A-B=-88/70, B-C=-114/63  
 BOT CHORD A-C=-48/52

- 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) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1 lb uplift at joint A and 45 lb uplift at joint C.
  - 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.

**LOAD CASE(S)** Standard