Job	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	A1	Piggyback Base	1	1	Job Reference (optional)

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

8.330 s Apr 7 2020 MiTek Industries, Inc. Wed Sep 2 14:14:31 2020 Page 1
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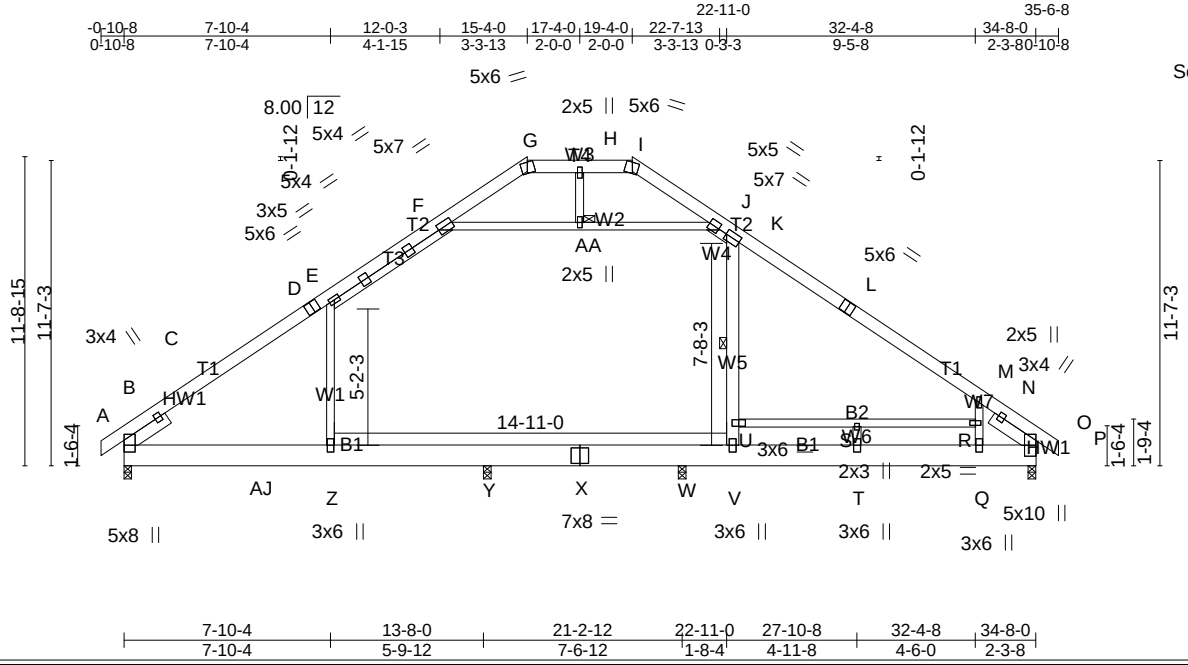

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.63	Vert(LL)	-0.17	R-S	>968	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.27	R-S	>600	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.51	Horz(CT)	-0.03	O	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MSH		Attic	-0.05	V-W	920	360	Weight: 319 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2 *Except*
T3: 2x4 SP No.2
BOT CHORD 2x10 SP No.1 *Except*
B2: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
W5: 2x6 SP No.2
SLIDER Left 2x6 SP No.2 - 1-11-12, Right 2x6 SP No.2 -$ 1-11-12

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-1-3 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): G-I.
BOT CHORD Rigid ceiling directly applied or 9-6-8 oc bracing.
WEBS 1 Row at midpt K-V
JOINTS 1 Brace at Jt(s): S, AA

REACTIONS. (lb/size) B=1191/0-3-8 (min. 0-1-8), O=1292/0-3-8 (min. 0-1-12), W=518/0-3-8 (min. 0-1-9), Y=311/0-3-8 (min. 0-1-8)
Max Horz B=265(LC 9)
Max Uplift B=-126(LC 10), O=-47(LC 10), W=-146(LC 6), Y=-144(LC 10)
Max Grav B=1274(LC 18), O=1500(LC 18), W=1337(LC 19), Y=872(LC 18)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=0/29, B-C=-308/35, C-D=-1313/170, D-E=-1148/175, E-F=-1152/310, F-G=-401/101, G-H=-251/111, H-I=-251/110, I-J=-399/119, J-K=-1026/314, K-L=-1251/294, L-M=-1418/217, M-N=-1452/119, N-O=-577/65, O-P=0/29
BOT CHORD B-AJ=-97/1120, Z-AJ=-97/1120, Y-Z=-97/1120, X-Y=-97/1120, W-X=-97/1120, V-W=-97/1120, T-V=-64/1237, Q-T=-64/1237, O-Q=-77/1174, S-U=-224/51, R-S=-224/51
WEBS E-Z=-236/214, F-AA=-962/305, J-AA=-962/305, U-V=-387/227, K-U=-340/248, Q-R=-548/396, M-R=-503/416, S-T=-549/0, H-AA=0/91

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Ceiling dead load (5.0 psf) on member(s). E-F, J-K, K-M, F-AA, J-AA
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. Y-Z, W-Y, V-W, S-U, R-S
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 126 lb uplift at joint B, 47 lb uplift at joint O, 146 lb uplift at joint W and 144 lb uplift at joint Y.
9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	A1A	Piggyback Base	4	1	Job Reference (optional)

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

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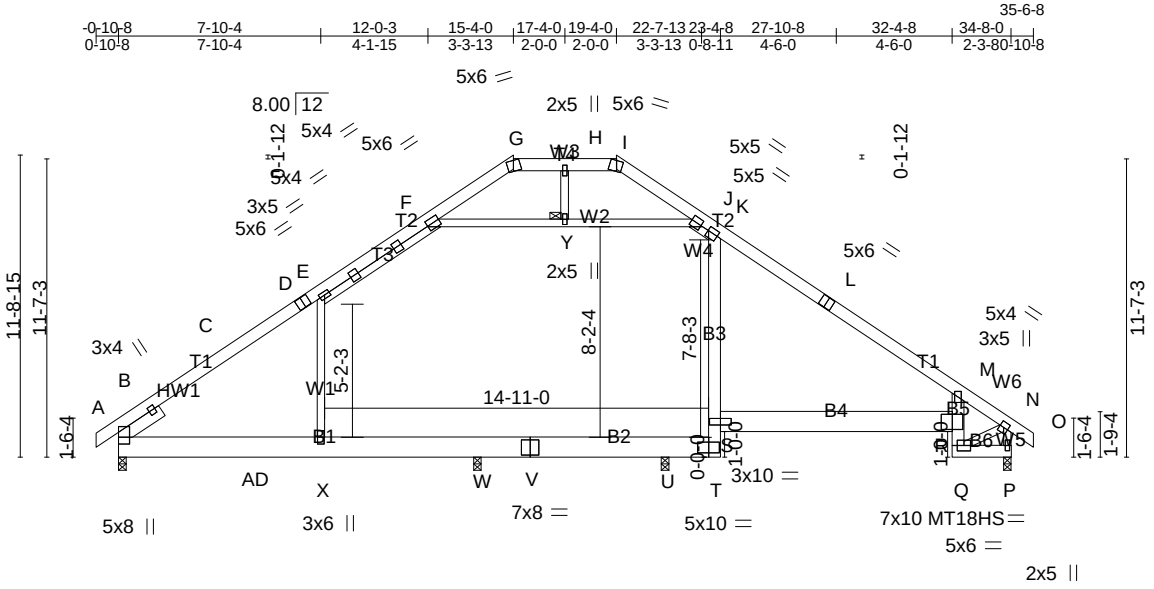

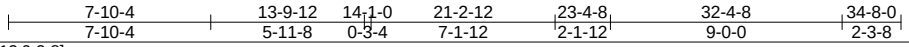

Plate Offsets (X,Y)-- [K:0-0-4,0-2-4], [N:0-1-12,0-2-8]

LOADING (psf)		SPACING- 2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC	0.60	Vert(LL)	-0.19	R-S	>844	240	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC	0.90	Vert(CT)	-0.30	R-S	>536	180	MT18HS	244/190
BCLL	0.0 *	Rep Stress Incr YES	WB	0.42	Horz(CT)	0.20	P	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix-MSH		Attic	-0.06	T-U	766	360	Weight: 302 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.2 *Except* T3: 2x4 SP No.2
BOT CHORD	2x6 SP No.2 *Except* B1,B4,B2: 2x10 SP No.1
WEBS	2x4 SP No.3 *Except* W1,W2: 2x4 SP No.2
SLIDER	Left 2x6 SP No.2 -$ 1-11-12

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-11-11 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): G-I.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: S-T 2-2-1 oc bracing: Q-R. 6-0-0 oc bracing: K-S
JOINTS	1 Brace at Jt(s): Y

REACTIONS. (lb/size) B=1143/0-3-8 (min. 0-1-8), P=1143/0-3-8 (min. 0-1-9), W=331/0-3-8 (min. 0-1-8), U=507/0-3-8 (min. 0-1-9)
Max Horz B=295(LC 9)
Max Uplift B=-146(LC 10), P=-108(LC 10), W=-98(LC 10), U=-197(LC 6)
Max Grav B=1200(LC 18), P=1332(LC 18), W=930(LC 18), U=1317(LC 19)

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD	A-B=0/29, B-C=-342/10, C-D=-1140/177, D-E=-961/182, E-F=-1064/316, F-G=-437/91, G-H=-290/86, H-I=-290/86, I-J=-450/95, J-K=-938/317, K-L=-1226/320, L-M=-1368/275, M-N=-1244/195, N-O=0/34, N-P=-1382/202
BOT CHORD	B-AD=-170/1001, X-AD=-170/1001, W-X=-170/1001, V-W=-170/1001, U-V=-170/1001, T-U=-170/1001, S-T=-748/199, K-S=-380/240, R-S=-146/1113, Q-R=-429/82, M-R=-350/184, P-Q=-10/69
WEBS	E-X=-277/194, F-Y=-768/322, J-Y=-768/322, N-Q=-136/1031, H-Y=0/86

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Ceiling dead load (5.0 psf) on member(s). E-F, J-K, K-M, F-Y, J-Y
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. W-X, U-W, T-U, R-S
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 146 lb uplift at joint B, 108 lb uplift at joint P, 98 lb uplift at joint W and 197 lb uplift at joint U.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	A1B	Piggyback Base	1	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC — 8.330 s Apr 7 2020 MiTek Industries, Inc. Wed Sep 2 14:14:35 2020 Page 1
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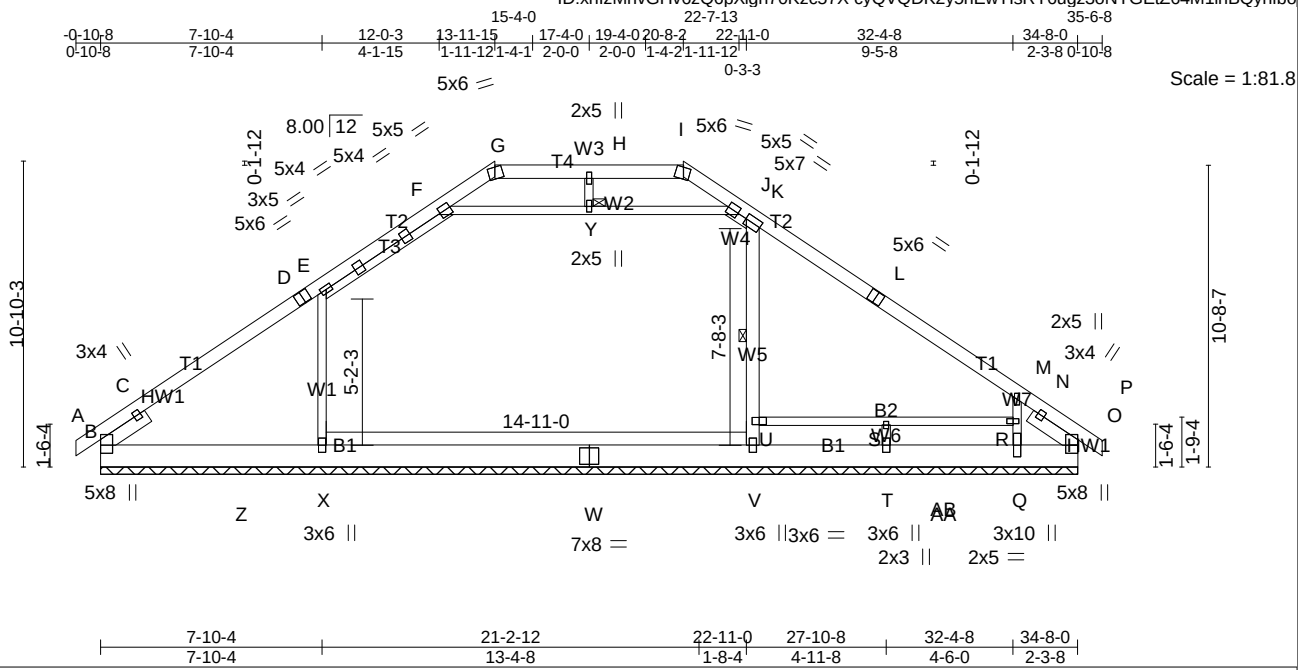

7-10-4		12-0-3	13-11-15	17-4-0	19-4-0	20-8-2	22-11-0		32-4-8		34-8-0
7-10-4		4-1-15	1-11-12	2-0-0	2-0-0	1-4-2	1-11-12		9-5-8		2-3-8

7-10-4		21-2-12		22-11-0	27-10-8		32-4-8		34-8-0		
7-10-4		13-4-8		1-8-4	4-11-8		4-6-0		2-3-8		

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	-0.00	O	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.00	P	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.01	O	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-SH							Weight: 317 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2 *Except*
T3: 2x4 SP No.2
BOT CHORD 2x10 SP No.1 *Except*
B2: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
W5: 2x6 SP No.2
SLIDER Left 2x6 SP No.2 -$ 1-11-12, Right 2x6 SP No.2 -$ 1-11-12

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): G-I.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt K-V
JOINTS 1 Brace at Jt(s): S, Y

REACTIONS. (lb/size) B=754/34-8-0 (min. 0-4-8), X=706/34-8-0 (min. 0-4-8), O=547/34-8-0 (min. 0-4-8), V=672/34-8-0 (min. 0-4-8), Q=509/34-8-0 (min. 0-4-8), T=125/34-8-0 (min. 0-4-8)
Max Horz B=-248(LC 6)
Max Uplift B=-10(LC 10), X=-172(LC 10), O=-240(LC 7), V=-13(LC 11), Q=-367(LC 11)
Max Grav B=757(LC 22), X=1115(LC 18), O=589(LC 22), V=1250(LC 19), Q=726(LC 19), T=221(LC 3)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=-16/0, B-C=-888/38, C-D=-817/56, D-E=-603/61, E-F=-851/238, F-G=-621/189, I-J=-616/188, J-K=-742/249, K-L=-723/239, L-M=-910/194, M-N=-734/292, N-O=-749/312, O-P=-16/0, G-H=-528/180, H-I=-527/180
BOT CHORD B-Z=-179/614, X-Z=-179/614, W-X=-179/614, V-W=-179/614, T-V=-176/604, T-AA=-176/604, Q-AA=-176/604, O-Q=-177/610, S-U=-4/12, S-AB=-4/12, R-AB=-4/12
WEBS E-X=-471/272, F-Y=-269/174, J-Y=-269/174, U-V=-526/190, K-U=-463/212, Q-R=-733/456, M-R=-699/476, S-T=-249/0, H-Y=0/72

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) 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, with BCDL = 10.0psf.
7) Ceiling dead load (5.0 psf) on member(s). E-F, J-K, K-M, F-Y, J-Y
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 10 lb uplift at joint B, 172 lb uplift at joint X, 240 lb uplift at joint O, 13 lb uplift at joint V and 367 lb uplift at joint Q.
9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	A2	Piggyback Base	6	1	Job Reference (optional)

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

8.330 s Apr 7 2020 MiTek Industries, Inc. Wed Sep 2 14:14:36 2020 Page 1
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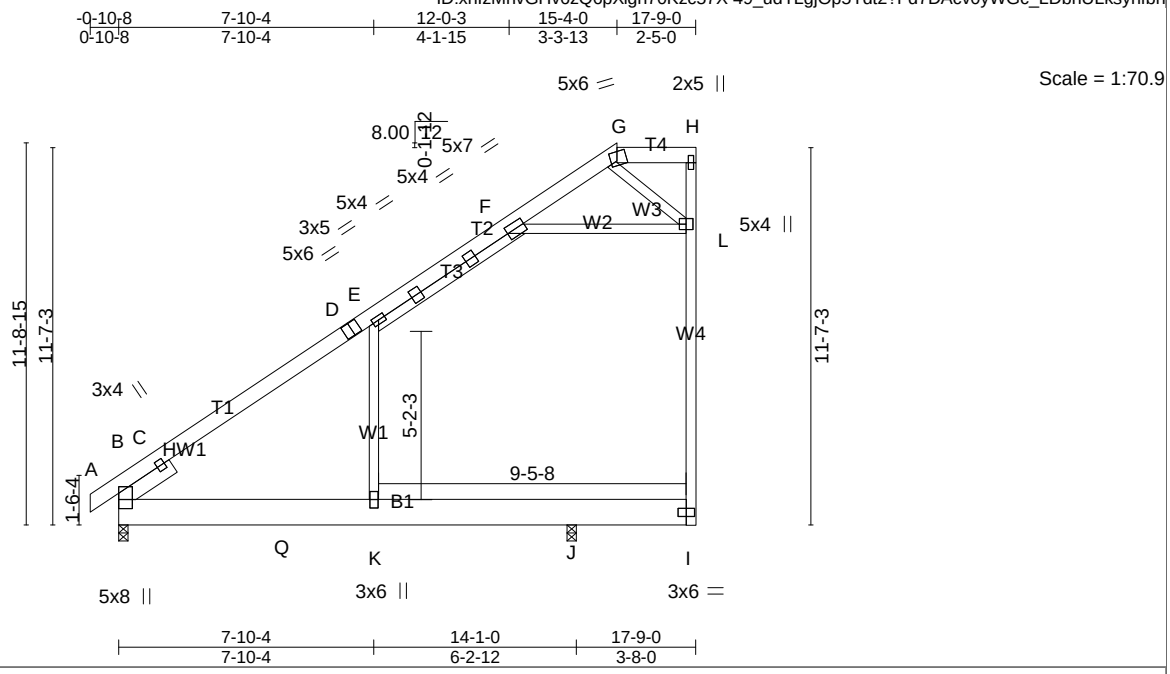

Plate Offsets (X,Y)-- [G:0-3-0,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	0.22	K-O	>759	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.36	K-O	>468	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.07	B	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MSH		Attic	-0.20	J-K	730	360	Weight: 170 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2 *Except*
T3: 2x4 SP No.2
BOT CHORD 2x10 SP No.1
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 -$ 1-11-12

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

REACTIONS. (lb/size) B=582/0-3-8 (min. 0-1-8), J=977/0-3-8 (min. 0-1-13)
Max Horz B=414(LC 9)
Max Uplift B=-30(LC 10), J=-150(LC 10)
Max Grav B=669(LC 19), J=1548(LC 18)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=0/29, B-C=-368/241, C-D=-530/445, D-E=-486/452, E-F=-307/144, F-G=-216/92, G-H=-72/104, I-L=-325/156, H-L=-34/65
BOT CHORD B-Q=-110/114, K-Q=-110/114, J-K=-110/114, I-J=-110/114
WEBS E-K=-677/428, F-L=-325/371, G-L=-469/265

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Ceiling dead load (5.0 psf) on member(s). E-F, F-L
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. J-K, I-J
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint B and 150 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	A3	Piggyback Base	3	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC — 8.330 s Apr 7 2020 MiTek Industries, Inc. Wed Sep 2 14:14:37 2020 Page 1
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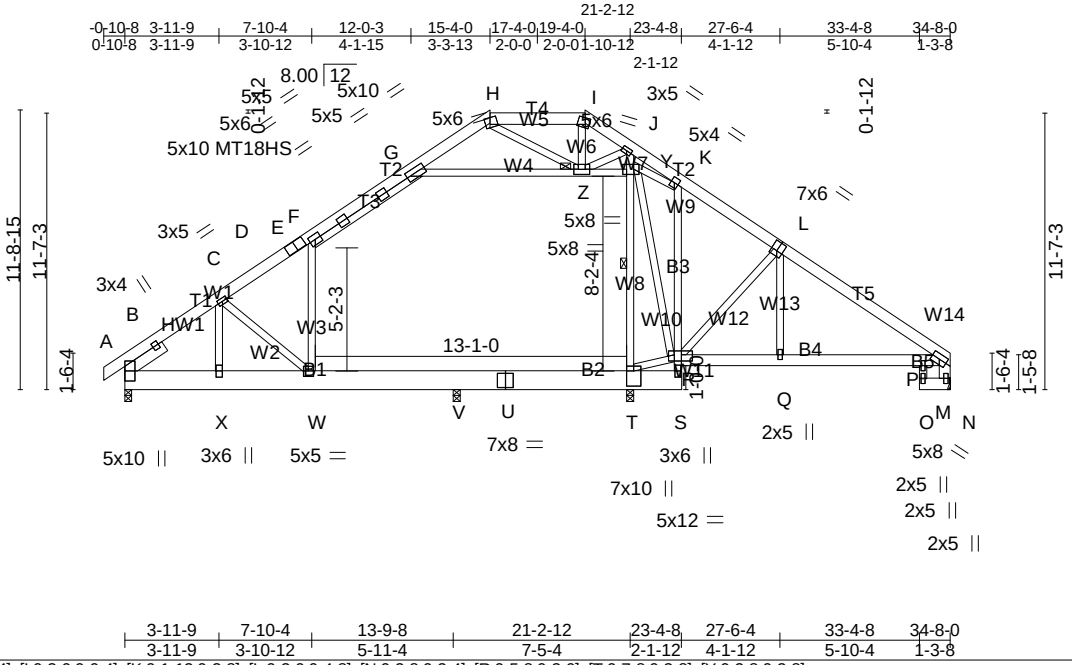

Plate Offsets (X,Y)-- [H:0-3-0,0-0-4], [I:0-3-0,0-0-4], [K:0-1-12,0-2-8], [L:0-3-0,0-4-8], [N:0-2-8,0-2-4], [R:0-5-8,0-3-0], [T:0-7-8,0-3-8], [Y:0-2-8,0-2-8]

LOADING (psf)		**SPACING-** 2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL	20.0	Plate Grip DOL 1.15	TC	0.21	Vert(LL)	-0.07	W	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC	0.44	Vert(CT)	-0.13	W	>999	180	MT18HS	244/190
BCLL	0.0 *	Rep Stress Incr YES	WB	0.48	Horz(CT)	0.05	N	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix-MSH		Attic	-0.07	V-W	2085	360	Weight: 338 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP SS *Except*
T4,T5: 2x6 SP No.2, T3: 2x4 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
B1,B2: 2x10 SP No.1, B3,B5: 2x4 SP No.3
WEBS 2x4 SP No.3 *Except*
W3,W8,W4: 2x4 SP No.2, W14: 2x6 SP No.2
SLIDER Left 2x6 SP No.2 -$ 1-11-12

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-9-14 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): H-I.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: R-S.
WEBS 1 Row at midpt T-Y
JOINTS 1 Brace at Jt(s): Z

REACTIONS. (lb/size) B=1073/0-3-8 (min. 0-1-8), N=998/Mechanical, T=394/0-3-8 (min. 0-1-8), V=477/0-3-8 (min. 0-1-8)
Max Horz B=290(LC 9)
Max Uplift B=-168(LC 10), N=-139(LC 10), T=-192(LC 6), V=-44(LC 10)
Max Grav B=1088(LC 18), N=998(LC 1), T=663(LC 25), V=1061(LC 18)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=0/29, B-C=-522/89, C-D=-1261/252, D-E=-957/211, E-F=-865/218, F-G=-934/315, G-H=-392/144, H-I=-206/119, I-J=-308/128, J-K=0/310, K-L=-1093/347, L-M=-1433/305, M-N=-996/206
BOT CHORD B-X=-270/1176, W-X=-270/1176, V-W=-191/875, U-V=-191/875, T-U=-191/875, S-T=-19/110, R-S=-114/33, K-R=-76/380, Q-R=-142/1110, P-Q=-142/1111, M-P=-119/1073, O-P=-16/18, N-O=-38/45
WEBS F-W=-199/105, T-Y=-630/108, J-Y=-681/95, R-T=-193/849, L-R=-475/200, R-Y=-94/268, L-Q=0/263, G-Z=-618/272, Y-Z=-907/277, I-Z=-12/73, J-Z=-23/339, K-Y=-1053/296, H-Z=-85/60, D-X=-50/236, D-W=-405/206

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Ceiling dead load (5.0 psf) on member(s). F-G, G-Z, Y-Z
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. V-W, T-V
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 168 lb uplift at joint B, 139 lb uplift at joint N, 192 lb uplift at joint T and 44 lb uplift at joint V.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	A4	Piggyback Base	2	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC — 8.330 s Apr 7 2020 MiTek Industries, Inc. Wed Sep 2 14:14:39 2020 Page 1
ID:xhIzMnvGHv6zQ6pXlgn70Kzc57X-Ukf0FaNY?JBfP4cdgOBqrpESNATbpHDgHfj?KByhfbk

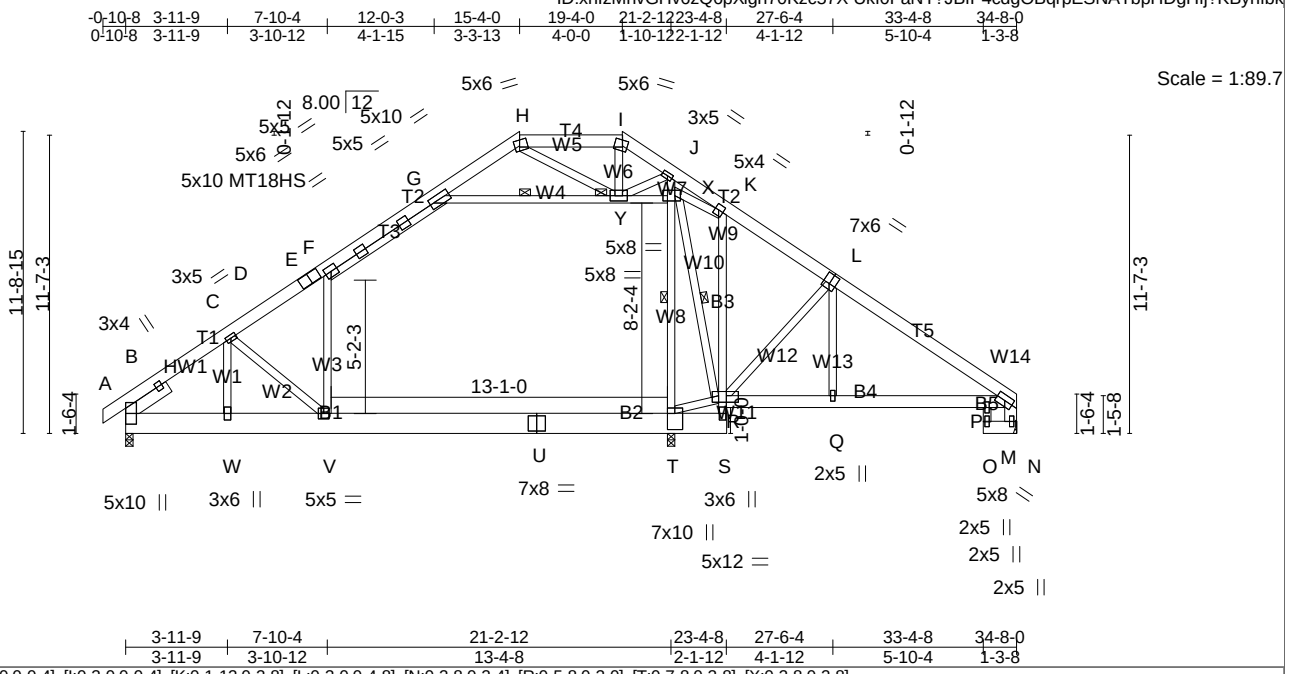

Plate Offsets (X,Y)-- [H:0-3-0,0-0-4], [I:0-3-0,0-0-4], [K:0-1-12,0-2-8], [L:0-3-0,0-4-8], [N:0-2-8,0-2-4], [R:0-5-8,0-3-0], [T:0-7-8,0-3-8], [X:0-2-8,0-2-8]

LOADING (psf)		SPACING- 2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.62	Vert(LL)	-0.28	T-V	>917	240	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.96	Vert(CT)	-0.41	T-V	>614	180	MT18HS	244/190
BCLL	0.0 *	Rep Stress Incr YES	WB 0.61	Horz(CT)	0.05	N	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix-MSH	Attic	-0.18	T-V	908	360	Weight: 338 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP SS *Except*
T4,T5: 2x6 SP No.2, T3: 2x4 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
B1,B2: 2x10 SP No.1, B3,B5: 2x4 SP No.3
WEBS 2x4 SP No.3 *Except*
W3,W8,W4: 2x4 SP No.2, W14: 2x6 SP No.2
SLIDER Left 2x6 SP No.2 -$ 1-11-12

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-1-12 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): H-I.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt T-X, R-X, G-Y
JOINTS 1 Brace at Jt(s): Y

REACTIONS. (lb/size) B=1319/0-3-8 (min. 0-1-15), N=1129/Mechanical, T=495/0-3-8 (min. 0-1-8)
Max Horz B=290(LC 9)
Max Uplift B=-190(LC 10), N=-151(LC 10), T=-143(LC 6)
Max Grav B=1634(LC 18), N=1232(LC 18), T=857(LC 19)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=0/29, B-C=-942/96, C-D=-1937/263, D-E=-1889/227, E-F=-1792/233, F-G=-1507/324, G-H=-360/143, H-I=-221/120, I-J=-324/128, J-K=-138/203, K-L=-1613/369, L-M=-1895/313, M-N=-1221/210
BOT CHORD B-W=-294/1754, V-W=-294/1754, U-V=-165/1529, T-U=-165/1529, S-T=-85/54, R-S=-1146/0, K-R=-78/434, Q-R=-159/1519, P-Q=-159/1520, M-P=-135/1475, O-P=-16/17, N-O=-38/46
WEBS F-V=0/652, T-X=-308/935, J-X=-591/92, R-T=-160/1671, L-R=-442/204, R-X=-764/57, L-Q=0/252, G-Y=-1415/305, X-Y=-1421/298, I-Y=-13/74, J-Y=-28/283, K-X=-1323/302, H-Y=0/222, D-W=-253/86, D-V=-348/202

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Ceiling dead load (5.0 psf) on member(s). F-G, G-Y, X-Y
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. T-V
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 190 lb uplift at joint B, 151 lb uplift at joint N and 143 lb uplift at joint T.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	A5	PIGGYBACK BASE	1	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC — 8.330 s Apr 7 2020 MiTek Industries, Inc. Wed Sep 2 14:14:40 2020 Page 1
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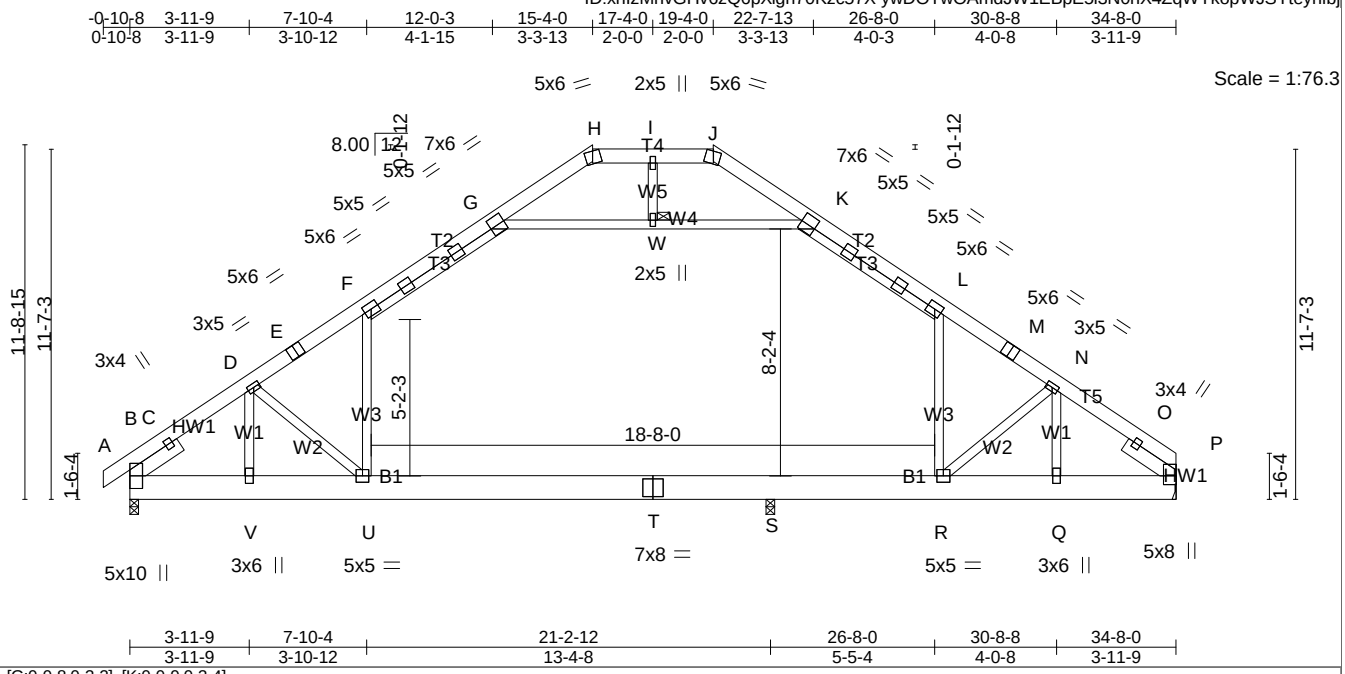

Plate Offsets (X,Y)-- [G:0-0-8,0-3-2], [K:0-0-9,0-3-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	1.00	Vert(LL)	-0.50	S-U	>507	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.70	S-U	>366	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.06	B	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MSH		Attic	-0.36	R-U	626	360	Weight: 319 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2 *Except*
T2: 2x6 SP No.1, T3: 2x4 SP No.2
BOT CHORD 2x10 SP No.1
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 -$ 1-11-12, Right 2x6 SP No.2 -$ 1-11-12

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (6-0-0 max.): H-J.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
JOINTS 1 Brace at Jt(s): W

REACTIONS. (lb/size) B=1327/0-3-8 (min. 0-1-12), P=1153/Mechanical, S=535/0-3-8 (min. 0-1-10)
Max Horz B=261(LC 7)
Max Uplift B=-146(LC 10), P=-72(LC 10), S=-14(LC 11)
Max Grav B=1495(LC 18), P=1153(LC 1), S=1383(LC 16)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=0/29, B-C=-898/85, C-D=-1714/254, D-E=-1571/214, E-F=-1474/227, F-G=-1224/323, G-H=-417/159, H-I=-289/132, I-J=-290/134, J-K=-436/124, K-L=-1283/322, L-M=-1443/233, M-N=-1540/217, N-O=-1351/261, O-P=-596/91
BOT CHORD B-V=-273/1629, U-V=-273/1629, T-U=-78/1220, S-T=-78/1220, R-S=-78/1220, Q-R=-153/1067, P-Q=-153/1067
WEBS F-U=0/591, L-R=-255/311, G-W=-1139/274, K-W=-1139/274, I-W=0/96, D-V=-133/180, D-U=-550/263, N-Q=-569/266, N-R=-308/347

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Ceiling dead load (5.0 psf) on member(s). F-G, K-L, G-W, K-W
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. S-U, R-S
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 146 lb uplift at joint B, 72 lb uplift at joint P and 14 lb uplift at joint S.
9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	A5A	PIGGYBACK BASE	1	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC — 8.330 s Apr 7 2020 MiTek Industries, Inc. Wed Sep 2 14:14:41 2020 Page 1
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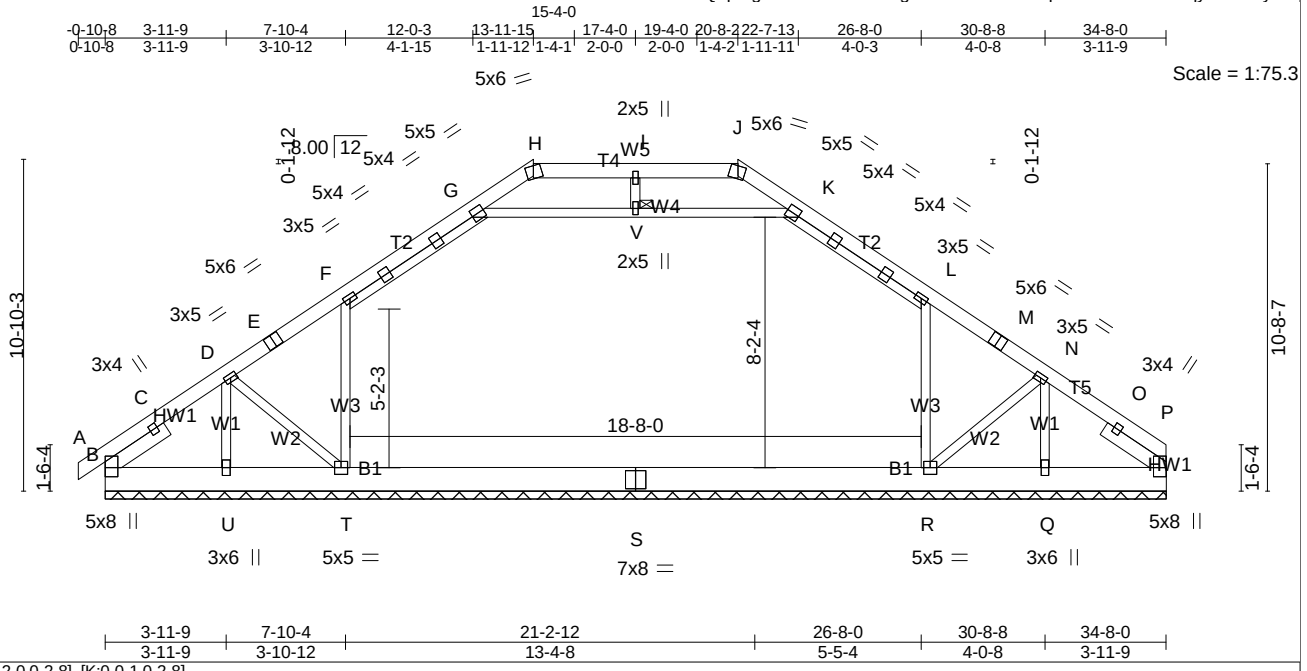

Plate Offsets (X,Y)-- [G:0-2-0,0-2-8], [K:0-0-1,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	0.00	A	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	0.00	A	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.01	P	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-SH							Weight: 318 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2 *Except* T3: 2x4 SP No.2
BOT CHORD 2x10 SP No.1
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 -$ 2-4-13, Right 2x6 SP No.2 -$ 2-4-13

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): H-J.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): V

REACTIONS. (lb/size) B=710/34-8-0 (min. 0-3-13), T=599/34-8-0 (min. 0-3-13), P=653/34-8-0 (min. 0-3-13), R=600/34-8-0 (min. 0-3-13), U=224/34-8-0 (min. 0-3-13), Q=229/34-8-0 (min. 0-3-13)
Max Horz B=-253(LC 6)
Max Uplift B=-2(LC 11), T=-60(LC 10), R=-69(LC 11), U=-430(LC 16), Q=-429(LC 16)
Max Grav B=710(LC 1), T=1284(LC 18), P=653(LC 1), R=1294(LC 19), U=224(LC 1), Q=229(LC 1)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=-16/0, B-C=-763/73, C-D=-685/94, D-E=-868/128, E-F=-764/143, F-G=-950/274, G-H=-724/209, J-K=-724/209, K-L=-950/274, L-M=-765/144, M-N=-868/128, N-O=-687/95, O-P=-765/69, H-I=-631/201, I-J=-631/201
BOT CHORD B-U=-140/524, T-U=-140/524, S-T=-102/699, R-S=-102/699, Q-R=-44/526, P-Q=-44/526
WEBS F-T=-436/220, L-R=-435/216, G-V=-188/114, K-V=-188/114, I-V=0/70, D-U=-379/72, D-T=-52/239, N-Q=-377/71, N-R=-77/242

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) 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, with BCDL = 10.0psf.
7) Ceiling dead load (5.0 psf) on member(s). F-G, K-L, G-V, K-V
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2 lb uplift at joint B, 60 lb uplift at joint T, 69 lb uplift at joint R, 430 lb uplift at joint U and 429 lb uplift at joint Q.
9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	A6	MONOPITCH	2	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC — 8.330 s Apr 7 2020 MiTek Industries, Inc. Wed Sep 2 14:14:42 2020 Page 1

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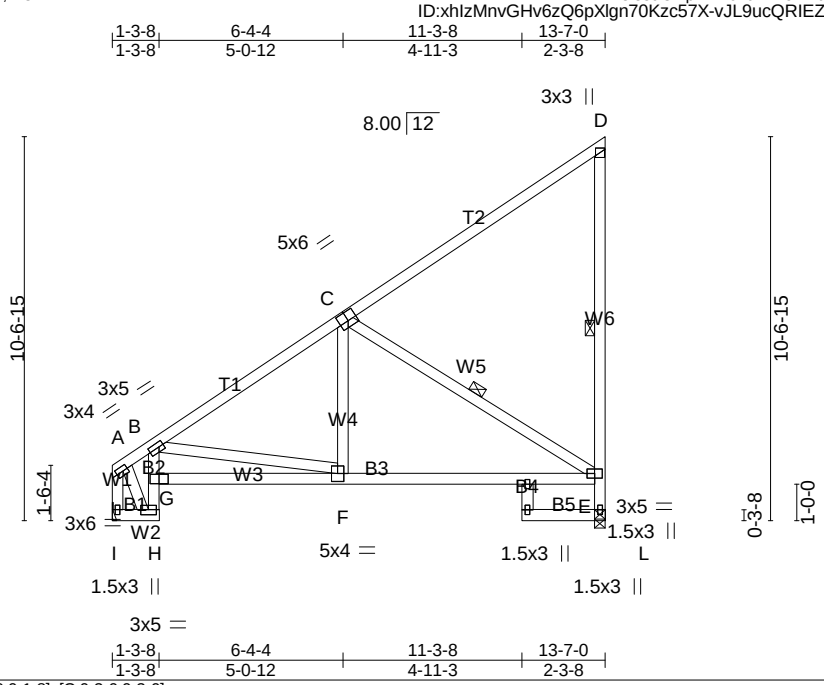

Plate Offsets (X,Y)-- [A:0-1-12,0-1-8], [B:0-1-8,0-1-8], [C:0-3-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	-0.07	E-F	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.14	E-F	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.23	Horz(CT)	0.06	L	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MSH							Weight: 95 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
B2,B4: 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.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt D-L, C-E

REACTIONS. (lb/size) I=532/Mechanical, L=532/0-3-8 (min. 0-1-8)
Max Horz I=325(LC 10)
Max UpliftL=-244(LC 10)
Max Grav I=532(LC 1), L=576(LC 17)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=-360/45, B-C=-633/0, C-D=-168/94, E-L=-592/244, D-E=-189/128, A-I=-578/47
BOT CHORD H-I=-355/305, G-H=-238/0, B-G=-204/0, F-G=-620/912, E-F=-242/546
WEBS C-F=0/303, A-H=0/384, C-E=-632/282, B-F=-369/388

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) Bearing at joint(s) L 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 244 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	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	A7	MONOPITCH	2	1	Job Reference (optional)

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

8.330 s Apr 7 2020 MiTek Industries, Inc. Wed Sep 2 14:14:43 2020 Page 1
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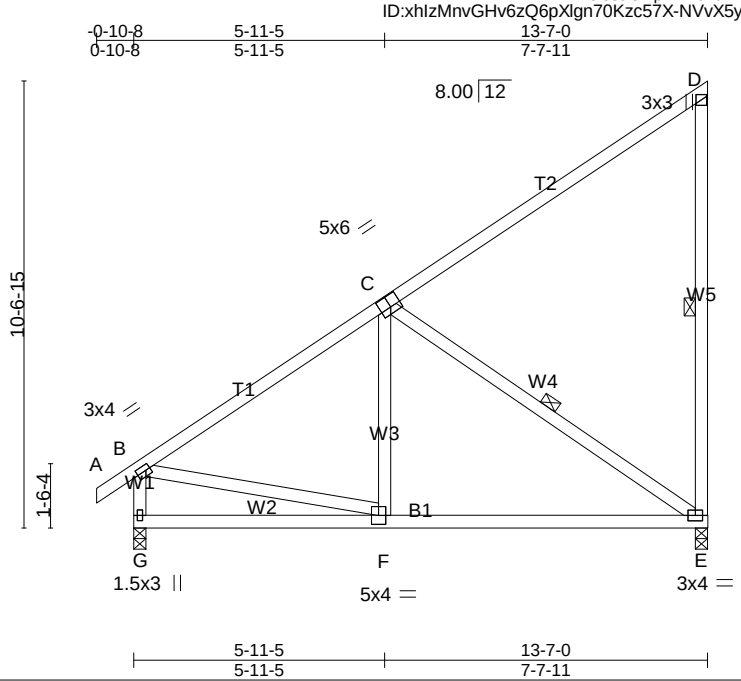

Plate Offsets (X,Y)-- [B:0-1-4,0-1-8], [C:0-3-0,0-3-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	-0.09	E-F	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.18	E-F	>877	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.24	Horz(CT)	-0.01	E	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MSH							Weight: 91 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 9-1-14 oc bracing.
WEBS 1 Row at midpt D-E, C-E

REACTIONS. (lb/size) G=595/0-3-8 (min. 0-1-8), E=529/0-3-8 (min. 0-1-8)
Max Horz G=348(LC 10)
Max Uplift E=-245(LC 10)
Max Grav G=595(LC 1), E=574(LC 17)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=0/34, B-C=-568/0, C-D=-176/102, D-E=-201/136, B-G=-550/15
BOT CHORD F-G=-404/361, E-F=-212/475
WEBS C-F=0/258, C-E=-566/253, B-F=0/352

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 245 lb uplift at joint E.
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	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	A7A	ROOF TRUSS	2	1	Job Reference (optional)

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

8.330 s Apr 7 2020 MiTek Industries, Inc. Wed Sep 2 14:14:44 2020 Page 1
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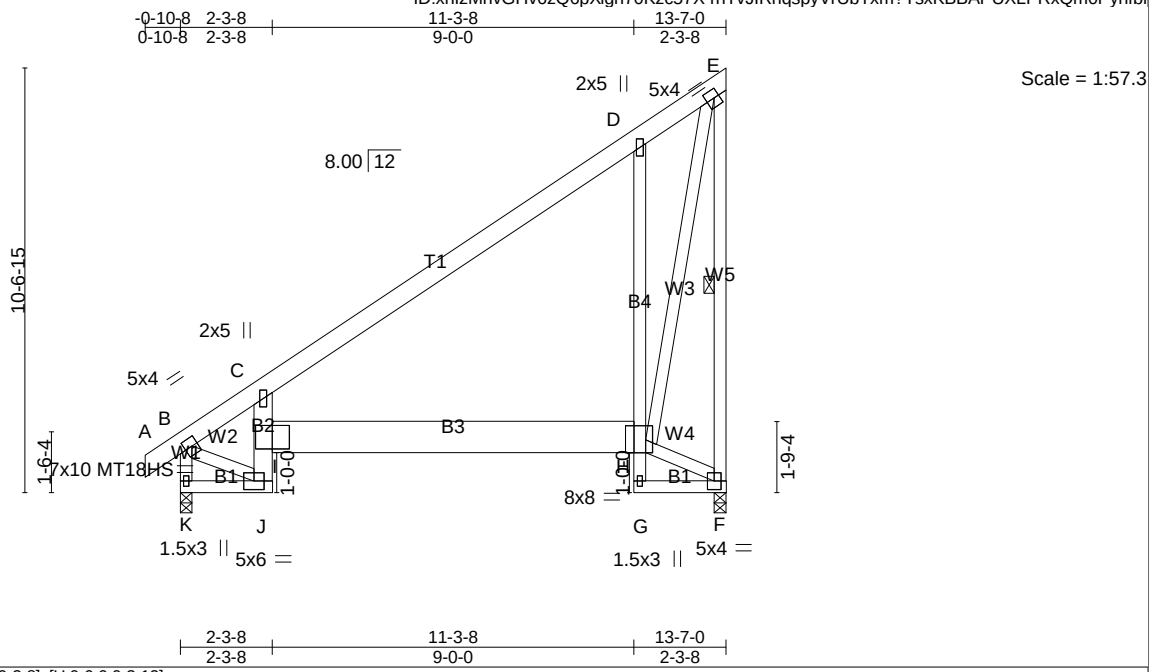

Plate Offsets (X,Y)-- [B:0-1-12,0-2-8], [E:0-1-8,0-2-8], [H:0-6-0,0-3-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.48	Vert(LL)	-0.15	H-I	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.22	H-I	>718	180	MT18HS	244/190
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.12	F	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MSH		Attic	-0.10	H-I	1168	360	Weight: 135 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
B2: 2x6 SP No.2, B3: 2x10 SP No.1, B4: 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.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt E-F

REACTIONS. (lb/size) F=529/0-3-8 (min. 0-1-8), K=595/0-3-8 (min. 0-1-8)
Max Horz K=349(LC 10)
Max Uplift F=-242(LC 10)
Max Grav F=852(LC 18), K=837(LC 18)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=0/34, B-C=-703/7, C-D=-431/0, D-E=-519/176, E-F=-936/267, B-K=-837/21
BOT CHORD J-K=-372/280, I-J=-274/0, C-I=-223/146, H-I=-115/336, G-H=0/38, D-H=-667/419, F-G=-203/28
WEBS F-H=-33/240, E-H=-449/1349, B-J=0/589

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 MT20 plates unless otherwise indicated.
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) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. H-I
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 242 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.
8) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	B1	GABLE	1	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC — 8.330 s Apr 7 2020 MiTek Industries, Inc. Wed Sep 2 14:14:45 2020 Page 1
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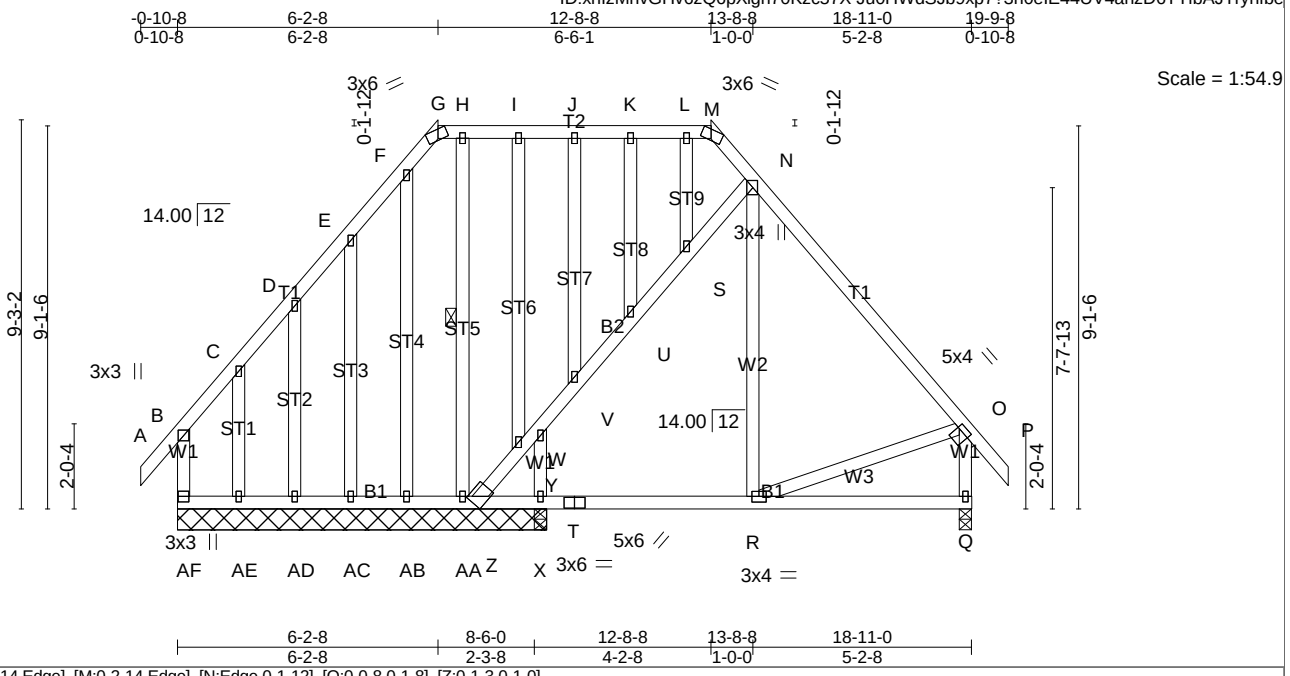

Plate Offsets (X,Y)-- [G:0-2-14,Edge], [M:0-2-14,Edge], [N:Edge,0-1-12], [O:0-0-8,0-1-8], [Z:0-1-3,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	-0.03	S	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.04	S-U	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.00	Q	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MSH							Weight: 187 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, and 2-0-0 oc purlins (6-0-0 max.): G-M.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt H-AA
JOINTS 1 Brace at Jt(s): W, U, S

REACTIONS. (lb/size) AF=176/8-9-8 (min. 0-1-8), Q=523/0-3-8 (min. 0-1-8), Z=134/8-9-8 (min. 0-1-8), X=436/8-9-8 (min. 0-1-8), X=436/8-9-8 (min. 0-1-8), AE=52/8-9-8 (min. 0-1-8), AD=118/8-9-8 (min. 0-1-8), AC=107/8-9-8 (min. 0-1-8), AB=99/8-9-8 (min. 0-1-8), AA=101/8-9-8 (min. 0-1-8)
Max Horz AF=-278(LC 8)
Max Uplift AF=-4(LC 6), Q=-73(LC 10), Z=-150(LC 11), AE=-256(LC 10), AD=-53(LC 10), AC=-115(LC 10), AA=-17(LC 8)
Max Grav AF=211(LC 21), Q=525(LC 22), Z=200(LC 18), X=473(LC 3), X=436(LC 1), AE=169(LC 8), AD=123(LC 21), AC=140(LC 17), AB=101(LC 18), AA=150(LC 19)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=0/47, B-C=-113/99, C-D=-71/119, D-E=-114/200, E-F=-199/303, F-G=-187/266, G-H=-164/243, H-I=-164/243, I-J=-164/243, J-K=-164/243, K-L=-164/243, L-M=-164/243, M-N=-223/257, N-O=-402/204, O-P=0/47, B-AF=-173/66, O-Q=-478/199
BOT CHORD AE-AF=-243/233, AD-AE=-243/233, AC-AD=-243/233, AB-AC=-243/233, AA-AB=-243/233, Z-AA=-243/233, X-Z=-60/238, T-X=-60/238, R-T=-60/238, Q-R=-74/80, Y-Z=-357/131, W-Y=-289/149, V-W=-431/139, U-V=-372/123, S-U=-361/119, N-S=-335/121
WEBS N-R=0/134, W-X=-360/50, O-R=-74/213, C-AE=-195/177, D-AD=-111/94, E-AC=-139/125, F-AB=-75/0, H-AA=-86/67, I-Y=-161/45, J-V=-118/37, K-U=-20/62, L-S=-70/69

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 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 4 lb uplift at joint AF, 73 lb uplift at joint Q, 150 lb uplift at joint Z, 256 lb uplift at joint AE, 53 lb uplift at joint AD, 115 lb uplift at joint AC and 17 lb uplift at joint AA.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
20083567	B2	ROOF TRUSS	1	2	THE NELSON II LH ROOF

Job Reference (optional)

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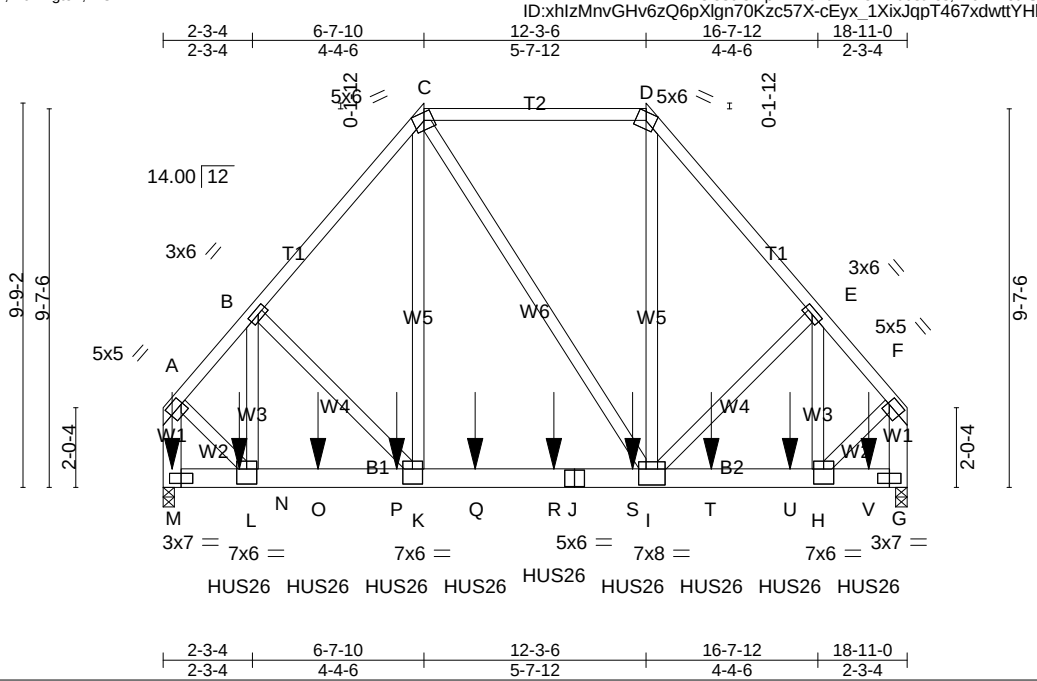

Plate Offsets (X,Y)-- [A:0-0-8,0-2-8], [C:0-3-4,Edge], [D:0-2-14,Edge], [F:0-0-8,0-2-8], [H:0-3-0,0-4-8], [I:0-4-0,0-4-12], [K:0-3-0,0-4-8], [L:0-3-0,0-4-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	-0.08	I-K	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.15	I-K	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.65	Horz(CT)	0.02	G	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MSH							Weight: 338 lb	FT = 20%

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

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

REACTIONS. (lb/size) M=5686/0-3-8 (min. 0-1-8), G=4322/0-3-8 (min. 0-1-8)
Max Horz M=-258(LC 4)
Max UpliftM=-323(LC 8)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=-3726/411, B-C=-3923/517, C-D=-2276/310, D-E=-3616/364, E-F=-2946/36, A-M=-4933/509, F-G=-3867/8
BOT CHORD M-N=-249/273, L-N=-249/273, L-O=-422/2399, O-P=-422/2399, K-P=-422/2399, K-Q=-365/2467, Q-R=-365/2467, J-R=-365/2467, J-S=-365/2467, I-S=-365/2467, I-T=-13/1891, T-U=-13/1891, H-U=-13/1891, H-V=-30/101, G-V=-30/101
WEBS B-L=-399/98, B-K=-156/273, C-K=-500/2934, C-I=-511/293, D-I=-217/2360, E-I=-357/648, E-H=-1067/411, A-L=-326/3116, F-H=-3/2406

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-8-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=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
5) Provide adequate drainage to prevent water ponding.
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) Bearing at joint(s) M, 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 323 lb uplift at joint M.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Use USP HUS26 (With 14-16d nails into Girder & 6-16d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-11-4 from the left end to 17-11-4 to connect truss(es) A5 (1 ply 2x10 SP), A4 (1 ply 2x6 SP), A3 (1 ply 2x6 SP), A6 (1 ply 2x4 SP), A7 (1 ply 2x4 SP) to back face of bottom chord.
13) Fill all nail holes where hanger is in contact with lumber.
14) 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-C=-60, C-D=-60, D-F=-60, G-M=-20
Concentrated Loads (lb)
Vert: M=-644 N=-1133(B) O=-1109(B) P=-1109(B) Q=-978(B) R=-978(B) S=-978(B) T=-512(B) U=-512(B) V=-578(B)

Job	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	C1	GABLE	1	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC — 8.330 s Apr 7 2020 MiTek Industries, Inc. Wed Sep 2 14:14:53 2020 Page 1
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0-10-8 | 7-7-12 | 7-7-12 | 0-11-0

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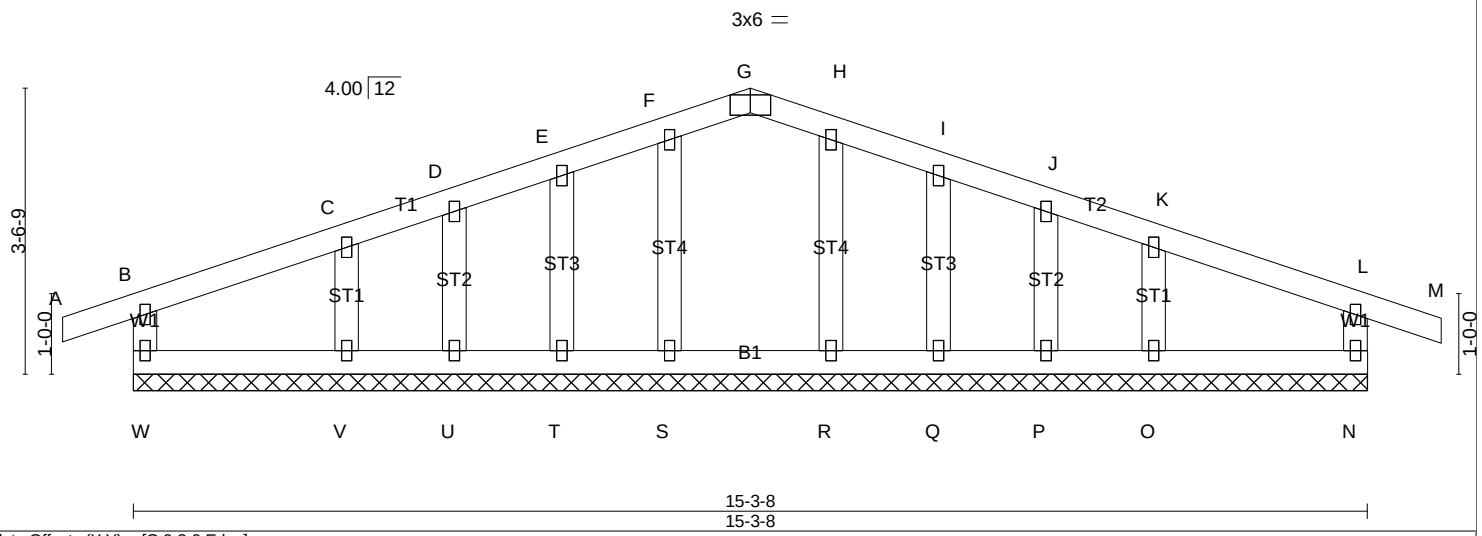

Plate Offsets (X,Y)-- [G:0-3-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.00	M	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	M	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	N	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-R							Weight: 75 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) W=169/15-3-8 (min. 0-2-1), N=173/15-3-8 (min. 0-2-1), S=138/15-3-8 (min. 0-2-1), T=100/15-3-8 (min. 0-2-1), U=86/15-3-8 (min. 0-2-1), V=168/15-3-8 (min. 0-2-1), R=138/15-3-8 (min. 0-2-1), Q=100/15-3-8 (min. 0-2-1), P=87/15-3-8 (min. 0-2-1), O=166/15-3-8 (min. 0-2-1)
Max Horz W=-24(LC 15)
Max Uplift W=-56(LC 6), N=-59(LC 7), T=-37(LC 10), U=-16(LC 6), V=-54(LC 10), Q=-37(LC 11), P=-17(LC 7), O=-52(LC 11)
Max Grav W=169(LC 1), N=173(LC 1), S=138(LC 1), T=104(LC 21), U=86(LC 1), V=170(LC 21), R=138(LC 1), Q=104(LC 22), P=87(LC 1), O=168(LC 22)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD B-W=-146/110, A-B=0/19, B-C=-43/39, C-D=-49/65, D-E=-52/82, E-F=-61/107, F-G=-65/115, G-H=-65/115, H-I=-61/107, I-J=-52/82, J-K=-49/65, K-L=-41/37, L-M=0/20, L-N=-149/113
BOT CHORD V-W=-0/40, U-V=-0/40, T-U=-0/40, S-T=-0/40, R-S=-0/40, Q-R=-0/40, P-Q=-0/40, O-P=-0/40, N-O=-0/40
WEBS F-S=-102/16, E-T=-79/63, D-U=-67/39, C-V=-122/76, H-R=-102/15, I-Q=-78/63, J-P=-68/39, K-O=-121/75

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) All plates are 1.5x3 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
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 56 lb uplift at joint W, 59 lb uplift at joint N, 37 lb uplift at joint T, 16 lb uplift at joint U, 54 lb uplift at joint V, 37 lb uplift at joint Q, 17 lb uplift at joint P and 52 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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	C2	COMMON	6	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC — 8.330 s Apr 7 2020 MiTek Industries, Inc. Wed Sep 2 14:14:54 2020 Page 1
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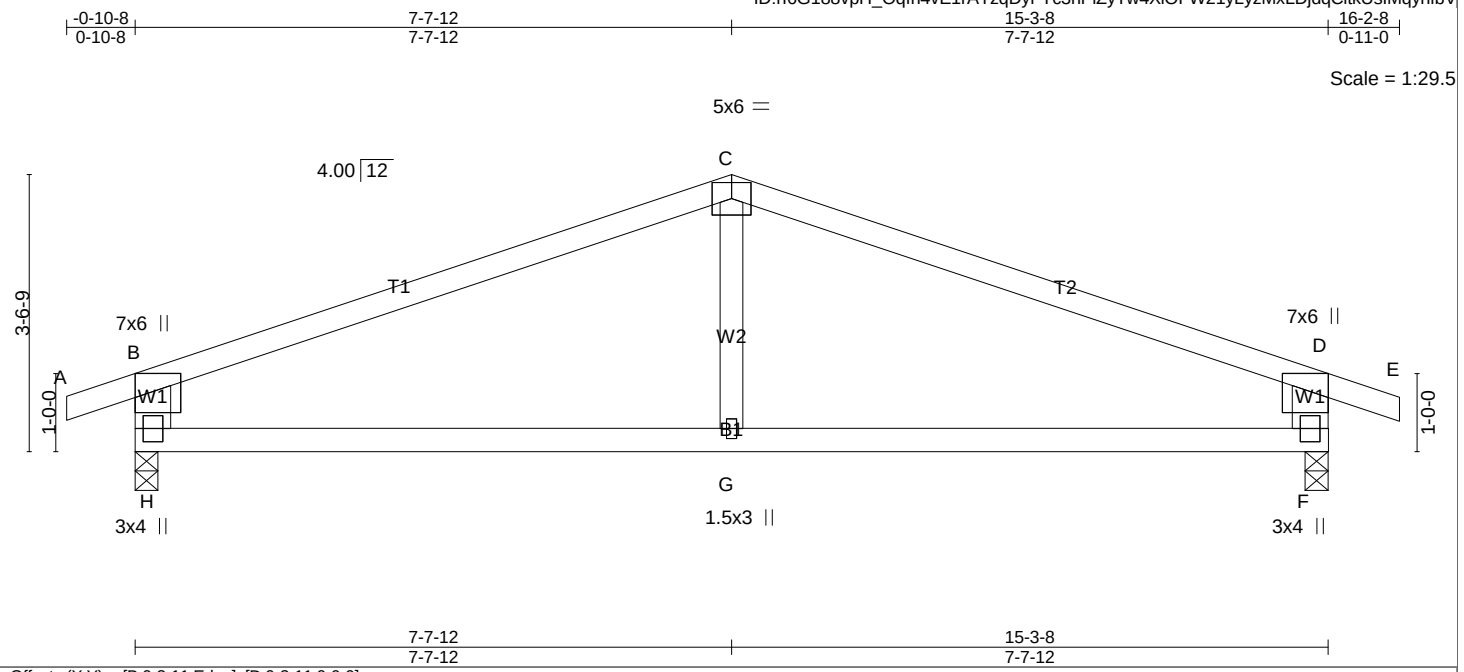

Plate Offsets (X,Y)-- [B:0-3-11,Edge], [D:0-3-11,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.95	Vert(LL)	-0.09	G-H	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.19	G-H	>917	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.02	F	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MR							Weight: 57 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x6 SP No.2 *Except*
W2: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-11-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) H=659/0-3-8 (min. 0-1-8), F=662/0-3-8 (min. 0-1-8)
Max Horz H=-23(LC 15)
Max UpliftH=-127(LC 6), F=-129(LC 7)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=0/21, B-C=-827/225, C-D=-827/225, D-E=0/22, B-H=-573/256, D-F=-575/259
BOT CHORD G-H=-89/703, F-G=-89/703
WEBS C-G=0/287

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 127 lb uplift at joint H and 129 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	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	D1	ATTIC GIRDER	2	1	Job Reference (optional)

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

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ID:rI6G188vpH_Oqfn4vE1rAYzqDyf-U?BRqOaD?YKFyhPuAS_p1ORM60QrI1uABoLPRiyhfbT

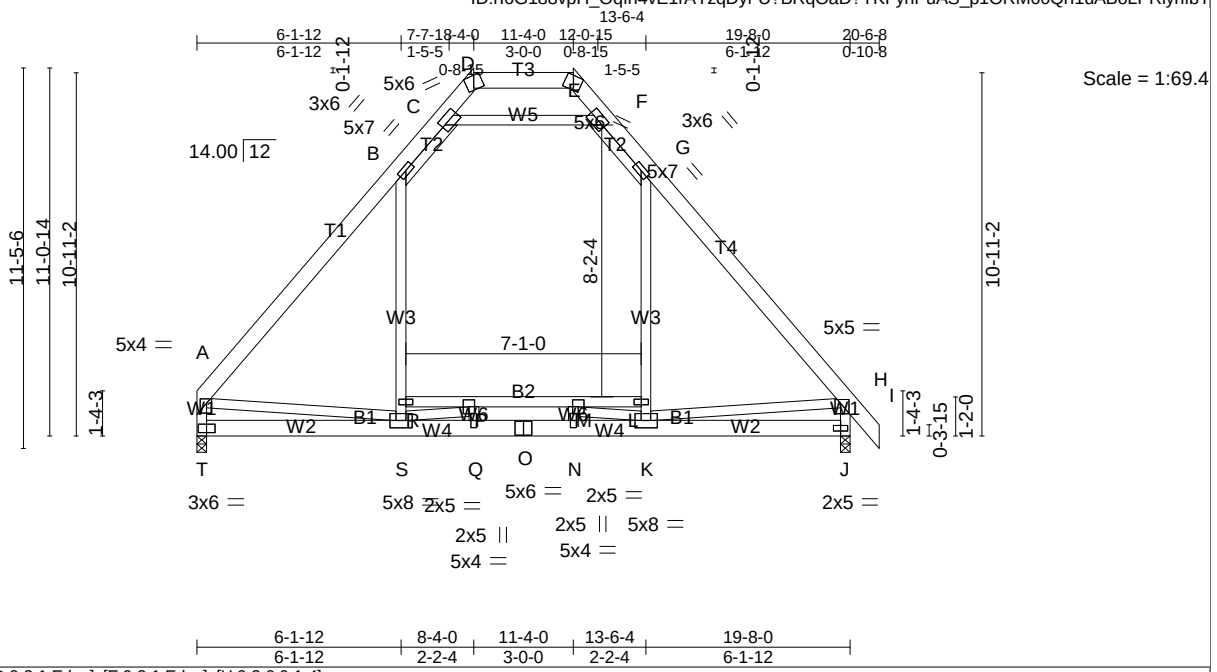

Plate Offsets (X,Y)-- [A:0-2-4,0-1-8], [D:0-2-1,Edge], [E:0-2-1,Edge], [H:0-3-0,0-1-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	0.10	S-T	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.12	S-T	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.01	J	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MSH		Attic	-0.05	L-R	1660	360	Weight: 191 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2 *Except*
T2: 2x4 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
B2: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
W3: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): D-E.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
6-0-0 oc bracing: L-R

REACTIONS. (lb/size) T=884/0-3-8 (min. 0-1-8), J=949/0-3-8 (min. 0-1-8)
Max Horz T=-300(LC 6)
Max Grav T=1009(LC 2), J=1063(LC 2)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=-1107/88, B-C=-565/184, C-D=-136/287, D-E=-215/495, E-F=-132/290, F-G=-563/181, G-H=-1113/98, H-I=0/47, A-T=-974/85, H-J=-1020/132
BOT CHORD S-T=-344/474, Q-S=0/1260, O-Q=0/1260, N-O=0/1260, K-N=0/1260, J-K=-183/295, P-R=-90/92, M-P=-682/0, L-M=-90/94
WEBS A-S=-109/580, R-S=-1/369, B-R=0/448, K-L=0/379, G-L=0/456, H-K=-148/595, C-F=-1123/478, P-Q=-31/36, M-N=-31/36, P-S=-733/0, K-M=-736/0

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Ceiling dead load (5.0 psf) on member(s). B-C, F-G, C-F
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. P-R, M-P, L-M
8) Bearing at joint(s) T, J considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
20083567	D1A	ATTIC GIRDER	1	2	THE NELSON II LH ROOF

Job Reference (optional)

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

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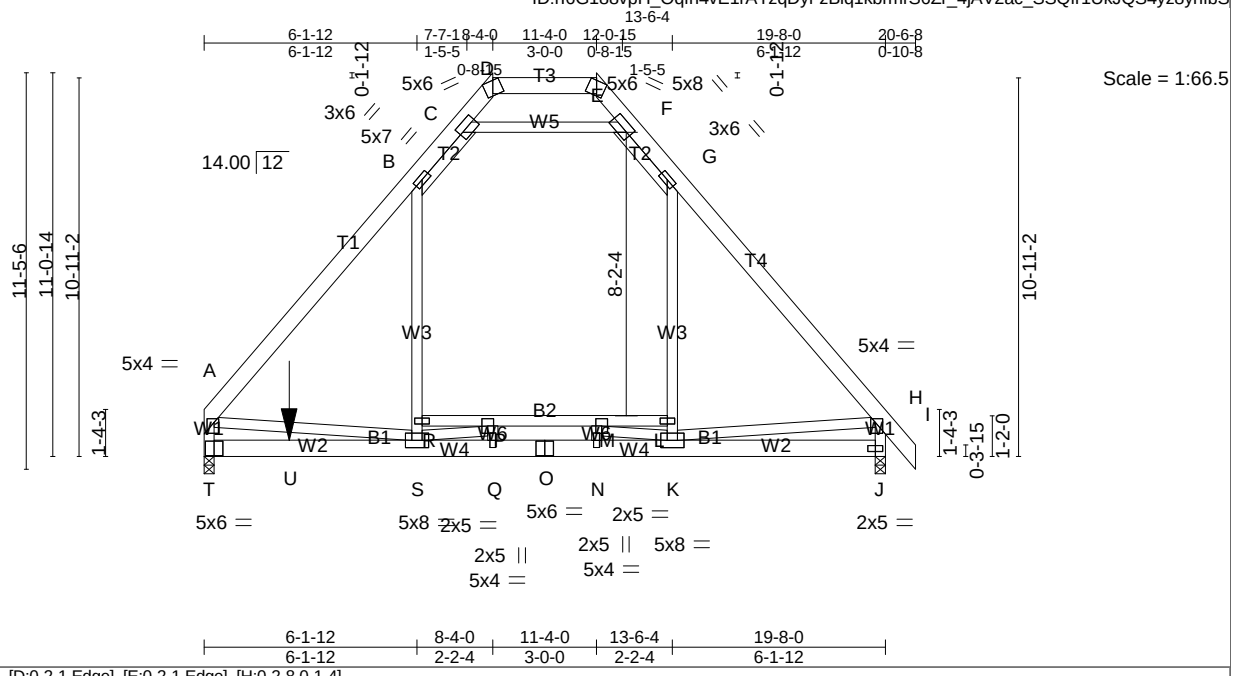

Plate Offsets (X,Y)-- [A:0-2-8,0-1-4], [D:0-2-1,Edge], [E:0-2-1,Edge], [H:0-2-8,0-1-4]

LOADING (psf)		SPACING-	4-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.11	S-T	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.18	S-T	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.35	Horz(CT)	0.01	J	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MSH		Attic	-0.08	L-R	1106	360	Weight: 382 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.2 *Except*
T2: 2x4 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
B2: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
W3: 2x4 SP No.2

BRACING-

TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals (Switched from sheeted: Spacing > 2-0-0).
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 6-0-0 oc bracing: L-R

REACTIONS. (lb/size) T=2476/0-3-8 (min. 0-1-8), J=1993/0-3-8 (min. 0-1-8)
Max Horz T=-599(LC 4)
Max Grav T=2789(LC 2), J=2230(LC 2)

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD A-B=-2423/48, B-C=-1182/232, C-D=-233/609, D-E=-326/942, E-F=-252/574, F-G=-1259/203, G-H=-2328/89, H-I=0/93, A-T=-2114/21, H-J=-2178/49
BOT CHORD T-U=-571/1057, S-U=-571/1057, Q-S=0/2480, O-Q=0/2480, N-O=0/2480, K-N=0/2480, J-K=-393/565, P-R=-232/144, M-P=-1147/0, L-M=-147/223
WEBS A-S=-288/1094, R-S=0/1002, B-R=0/1136, K-L=0/792, G-L=0/959, H-K=-228/1254, C-F=-2282/632, P-Q=-184/2, M-N=-131/33, P-S=-1255/129, K-M=-1336/0

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) 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; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
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). B-C, F-G, C-F
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. P-R, M-P, L-M
10) Bearing at joint(s) T, J considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 876 lb down at 2-5-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
14) 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=-120, B-C=-140, C-D=-120, D-E=-120, E-F=-120, F-G=-140, G-H=-120, H-I=-120, J-T=-40, L-R=-40, C-F=-20
Concentrated Loads (lb)
Vert: U=-803(B)

Job	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	D1B	ATTIC GIRDER	1	1	Job Reference (optional)

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

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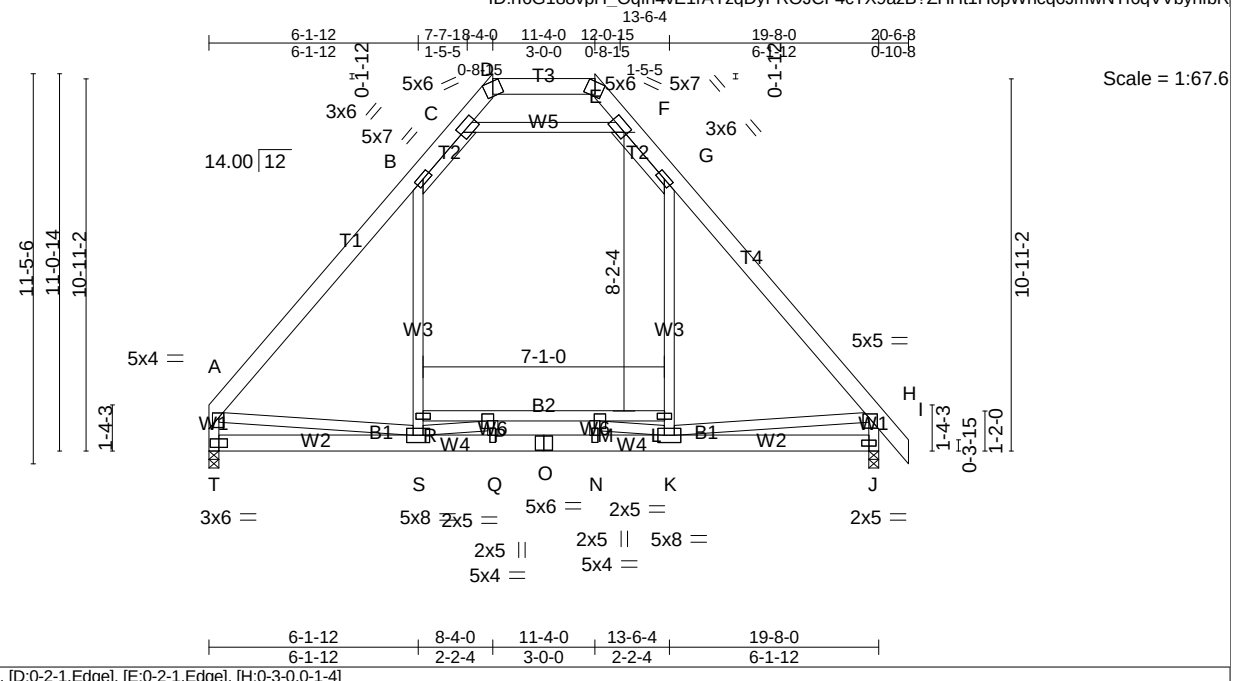

Scale = 1:67.6

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	0.10	S-T	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.12	S-T	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.01	J	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MSH		Attic	-0.05	L-R	1660	360	Weight: 191 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2 *Except*
T2: 2x4 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
B2: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
W3: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): D-E.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
6-0-0 oc bracing: L-R

REACTIONS. (lb/size) T=884/0-3-8 (min. 0-1-8), J=949/0-3-8 (min. 0-1-8)
Max Horz T=-300(LC 6)
Max Grav T=1009(LC 2), J=1063(LC 2)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=-1107/88, B-C=-565/184, C-D=-136/287, D-E=-215/495, E-F=-132/290, F-G=-563/181, G-H=-1113/98, H-I=0/47, A-T=-974/85, H-J=-1020/132
BOT CHORD S-T=-344/474, Q-S=0/1260, O-Q=0/1260, N-O=0/1260, K-N=0/1260, J-K=-183/295, P-R=-90/92, M-P=-682/0, L-M=-90/94
WEBS A-S=-109/580, R-S=-1/369, B-R=0/448, K-L=0/379, G-L=0/456, H-K=-148/595, C-F=-1123/478, P-Q=-31/36, M-N=-31/36, P-S=-733/0, K-M=-736/0

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Ceiling dead load (5.0 psf) on member(s). B-C, F-G, C-F
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. P-R, M-P, L-M
8) Bearing at joint(s) T, J considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	D2	ATTIC	1	1	Job Reference (optional)

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

8.330 s Apr 7 2020 MiTek Industries, Inc. Wed Sep 2 14:15:00 2020 Page 1
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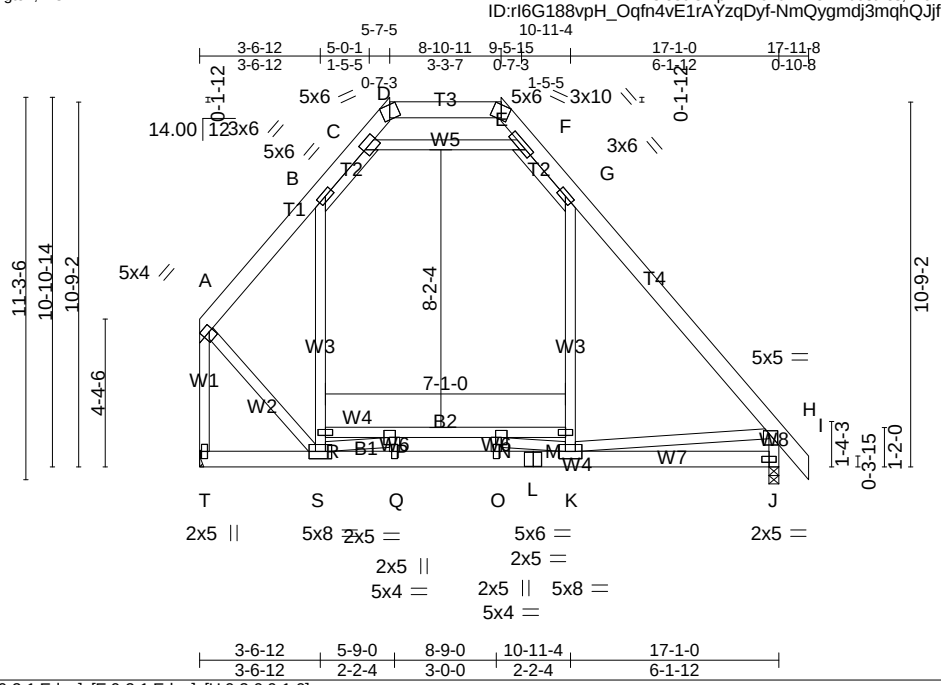

3-6-12	5-9-0	8-9-0	10-11-4	17-1-0
3-6-12	2-2-4	3-0-0	2-2-4	6-1-12

Plate Offsets (X,Y)-- [A:0-2-12,Edge], [D:0-2-1,Edge], [E:0-2-1,Edge], [H:0-3-0,0-1-0]

LOADING (psf)		**SPACING-** 2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL	20.0	Plate Grip DOL 1.15	TC	0.70	Vert(LL)	0.12	J-K	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC	0.59	Vert(CT)	-0.17	K	>999	180		
BCLL	0.0 *	Rep Stress Incr YES	WB	0.31	Horz(CT)	0.01	J	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix-MSH		Attic	0.06	M-R	1427	360	Weight: 178 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2 *Except*
T2: 2x4 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
B2: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
W3: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): D-E.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: S-T.
6-0-0 oc bracing: M-R

REACTIONS. (lb/size) T=798/Mechanical, J=829/0-3-8 (min. 0-1-8)
Max Horz T=-331(LC 6)
Max Grav T=977(LC 19), J=921(LC 2)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=-712/149, B-C=-486/173, C-D=-101/188, D-E=-178/373, E-F=-125/255, F-G=-424/188, G-H=-900/87, H-I=0/47, A-T=-1121/76, H-J=-834/125
BOT CHORD S-T=-273/306, Q-S=0/1083, O-Q=0/1083, L-O=0/1083, K-L=0/1083, J-K=-181/360, P-R=-55/171, N-P=-654/0, M-N=-152/70
WEBS R-S=-77/164, B-R=-69/224, K-M=-3/267, G-M=0/371, C-F=-873/425, A-S=-73/771, H-K=-216/399, P-Q=-68/30, N-O=-29/45, P-S=-807/0, K-N=-621/2

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Ceiling dead load (5.0 psf) on member(s). B-C, F-G, C-F
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. P-R, N-P, M-N
8) Bearing at joint(s) J considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
20083567	D3	FLAT GIRDER	1	2	THE NELSON II LH ROOF

Job Reference (optional)

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

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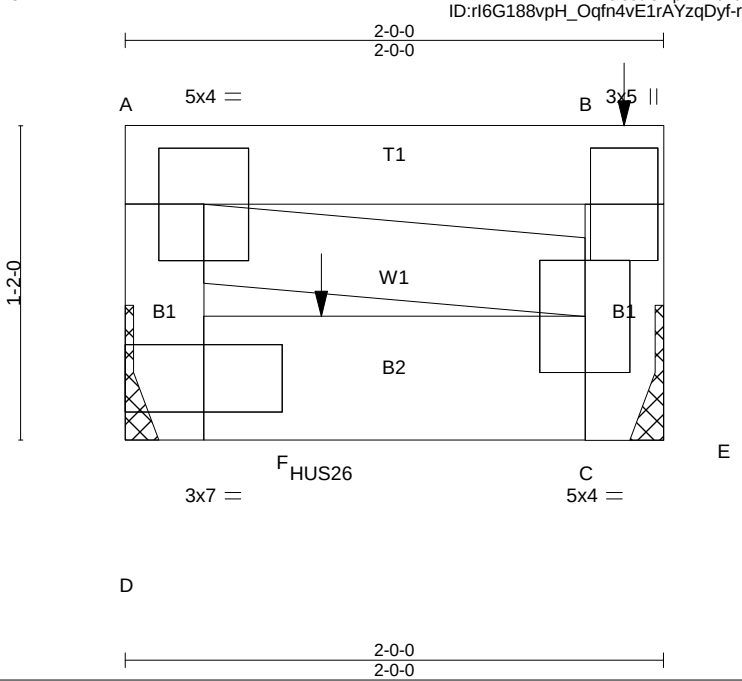

Scale = 1:8.6

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	-0.00	B	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.00	B	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	E	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MP							Weight: 22 lb	FT = 20%

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

BRACING-
TOP CHORD 2-0-0 oc purlins: A-B.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) D=841/Mechanical, E=4948/Mechanical
Max UpliftE=-765(LC 4)
Max GravD=913(LC 2), E=4948(LC 1)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=0/0
BOT CHORD A-D=-308/70, C-E=-4948/765, B-C=-4664/867, D-F=-0/0, C-F=-0/0
WEBS A-C=0/0

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-8-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-3-0 oc, 2x6 - 2 rows staggered at 0-6-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) 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; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide metal plate or equivalent at bearing(s) E to support reaction shown.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 765 lb uplift at joint E.
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) Use USP HUS26 (With 14-16d nails into Girder & 6-16d nails into Truss) or equivalent at 0-8-12 from the left end to connect truss(es) D2 (1 ply 2x6 SP) to front face of bottom chord.
12) Fill all nail holes where hanger is in contact with lumber.
13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 4356 lb down and 797 lb up at 1-10-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
14) 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=-360(F=-300), C-D=-20
Concentrated Loads (lb)
Vert: B=-4356 F=-784(F)

Job	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	E1	Roof Special Girder	1	1	Job Reference (optional)

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

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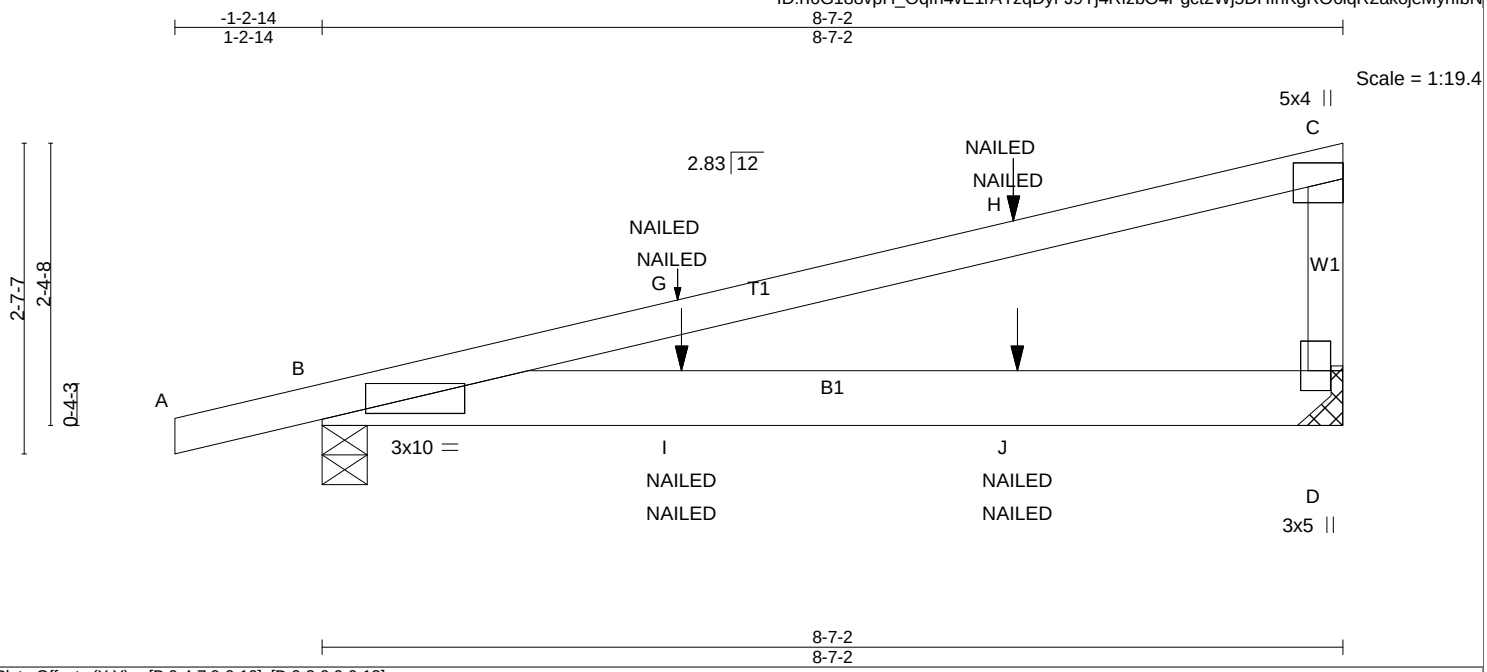

Plate Offsets (X,Y)-- [B:0-4-7,0-0-10], [D:0-2-0,0-0-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	0.10	D-F	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.20	D-F	>516	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	D	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MSH							Weight: 38 lb	FT = 20%

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

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

REACTIONS. (lb/size) D=395/Mechanical, B=452/0-4-9 (min. 0-1-8)
Max Horz B=86(LC 5)
Max UpliftD=-81(LC 8), B=-129(LC 4)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=0/17, B-G=-227/32, G-H=-181/41, C-H=-163/43, C-D=-192/93
BOT CHORD B-I=-56/176, I-J=-56/176, D-J=-56/176

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; cantilever left and right exposed ; end vertical left and right exposed; 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 81 lb uplift at joint D and 129 lb uplift at joint B.
5) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) "NAILED" indicates 3-10d skew 45 to 135 degrees (0.148" x 3") toe-nails per NDS guidelines.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: A-C=-60, B-D=-20
Concentrated Loads (lb)
Vert: H=-34(F=-17, B=-17) I=-13(F=-7, B=-7) J=-50(F=-25, B=-25)

Job	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	E2	Monopitch	2	1	Job Reference (optional)

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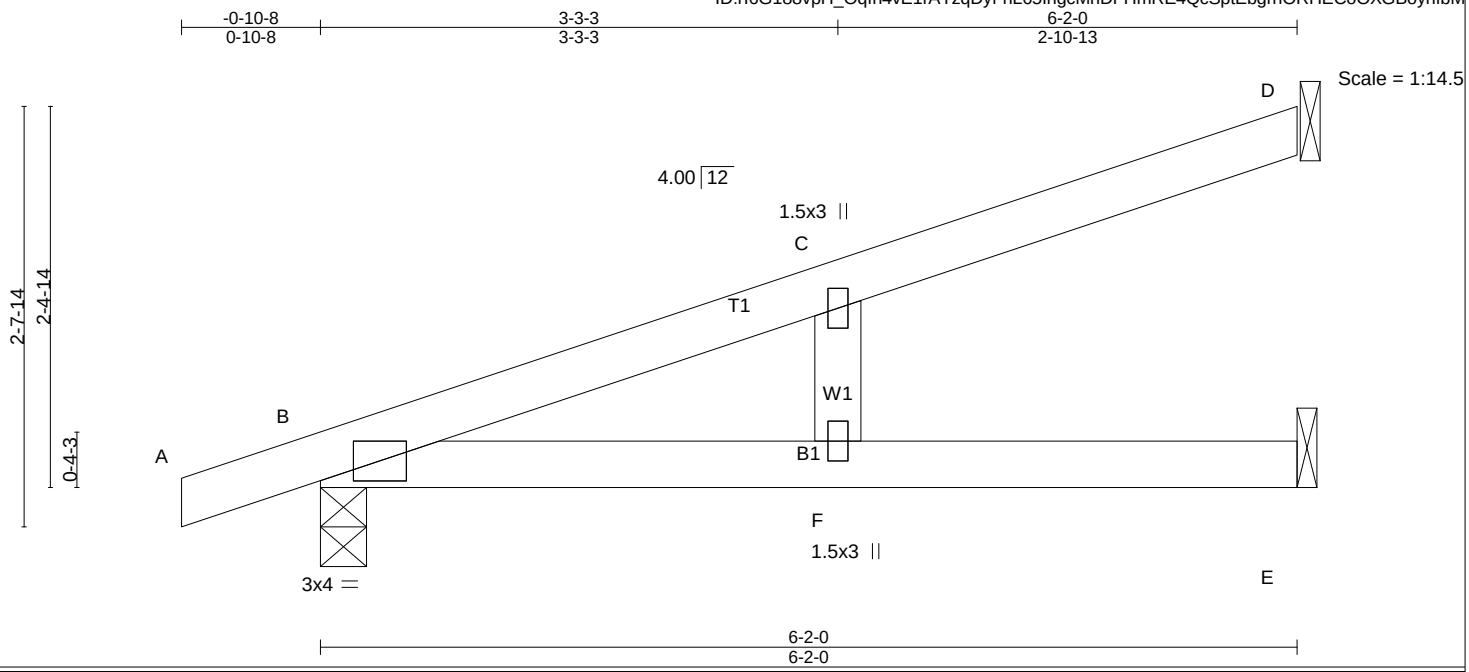

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	0.09	F	>822	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.16	F	>448	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	B	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MSH							Weight: 22 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.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) D=141/Mechanical, B=300/0-3-8 (min. 0-1-8), E=100/Mechanical
Max Horz B=94(LC 6)
Max Uplift D=-52(LC 10), B=-68(LC 6), E=-5(LC 10)
Max Grav D=141(LC 1), B=300(LC 1), E=104(LC 3)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=0/17, B-C=-80/26, C-D=-39/39
BOT CHORD B-F=0/0, E-F=0/0
WEBS C-F=-66/100

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) 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 52 lb uplift at joint D, 68 lb uplift at joint B and 5 lb uplift at joint E.
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	Truss	Truss Type	Qty	Ply	
20083567	E3	Half Hip Girder	1	2	THE NELSON II LH ROOF

Job Reference (optional)

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

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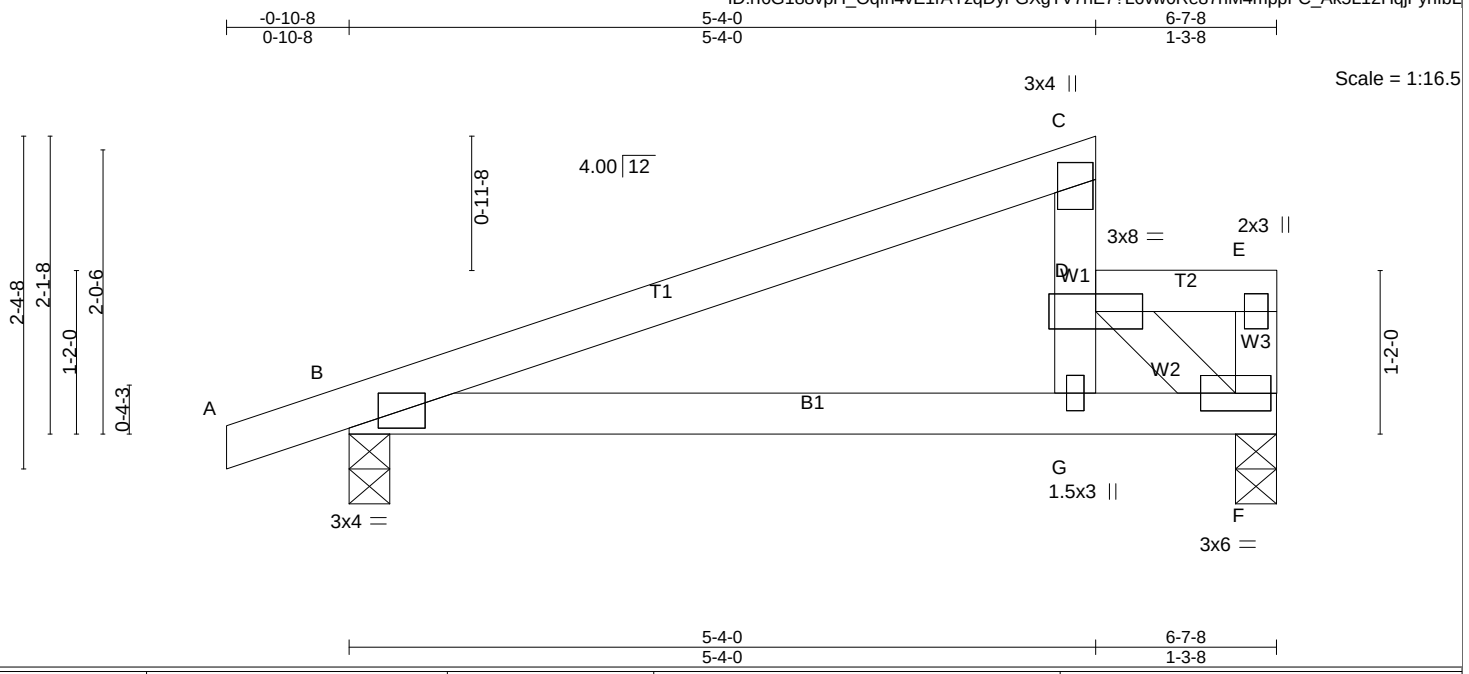

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	-0.01	G-J	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.03	G-J	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.05	Horz(CT)	0.00	F	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MSH							Weight: 53 lb	FT = 20%

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

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

REACTIONS. (lb/size) F=604/0-3-8 (min. 0-1-8), B=354/0-3-8 (min. 0-1-8)
Max Horz B=100(LC 10)
Max UpliftF=-107(LC 10), B=-83(LC 6)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=0/17, B-C=-386/100, D-G=0/161, C-D=-47/71, D-E=-62/41, E-F=-301/136
BOT CHORD B-G=-136/341, F-G=-208/511
WEBS D-F=-552/243

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-8-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) 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 6-5-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 107 lb uplift at joint F and 83 lb uplift at joint B.
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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) . The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: A-C=-60, D-E=-360(F=-300), F-H=-20

Job	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	E4	Half Hip	3	1	Job Reference (optional)

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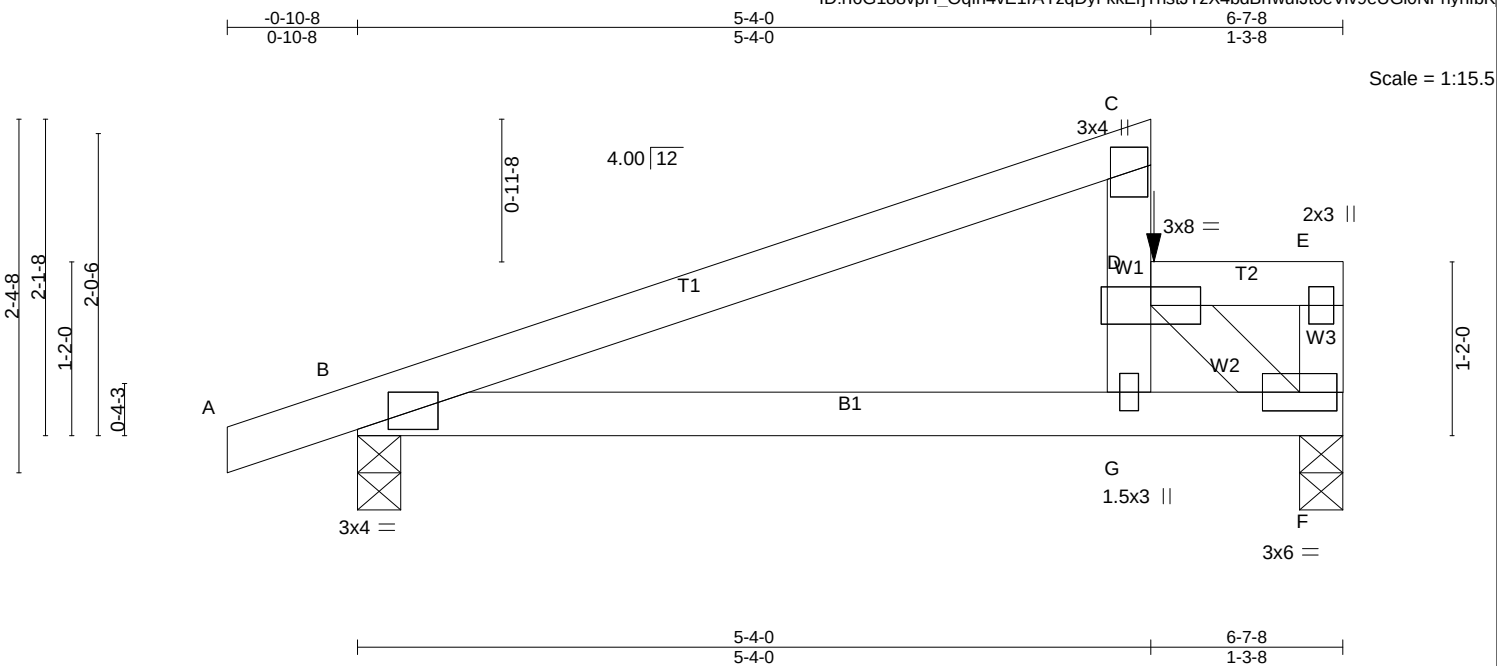

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.03	G-J	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.06	G-J	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.01	F	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MSH							Weight: 26 lb	FT = 20%

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

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

REACTIONS. (lb/size) F=744/0-3-8 (min. 0-1-8), B=405/0-3-8 (min. 0-1-8)
Max Horz B=94(LC 11)
Max UpliftF=-130(LC 10), B=-86(LC 6)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=0/17, B-C=-532/162, D-G=0/143, C-D=-5/84, D-E=-74/46, E-F=-276/126
BOT CHORD B-G=-195/481, F-G=-307/745
WEBS D-F=-821/356

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 6-5-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 130 lb uplift at joint F and 86 lb uplift at joint B.
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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) . The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: A-C=-60, D-E=-260(F=-200), F-H=-20
Concentrated Loads (lb)
Vert: D=-320

Job	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	E5	Jack-Open	2	1	Job Reference (optional)

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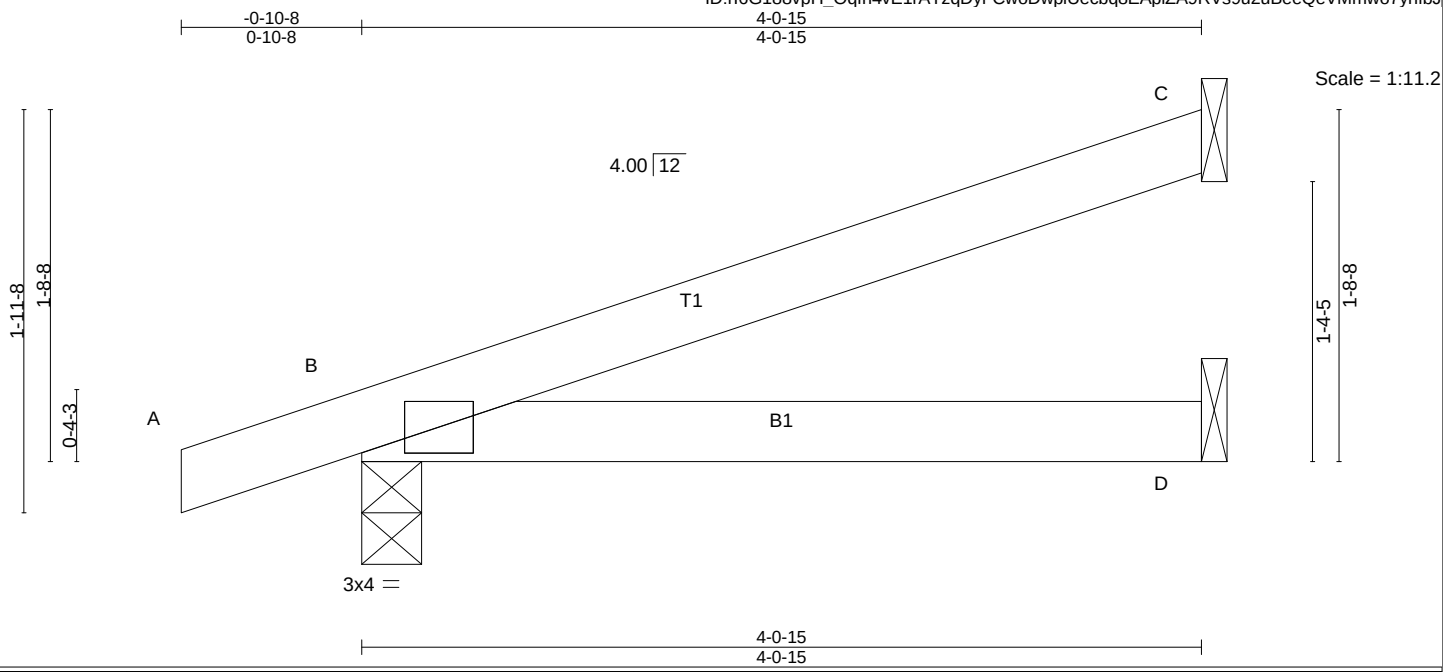

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	-0.01	D-G	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.03	D-G	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	B	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MP							Weight: 14 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-0-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) C=102/Mechanical, B=219/0-3-8 (min. 0-1-8), D=53/Mechanical
Max Horz B=67(LC 6)
Max Uplift C=-45(LC 10), B=-59(LC 6)
Max Grav C=102(LC 1), B=219(LC 1), D=72(LC 3)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=0/17, B-C=-37/26
BOT CHORD B-D=0/0

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) 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 45 lb uplift at joint C and 59 lb uplift at joint B.
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	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	E6	Jack-Open	2	1	Job Reference (optional)

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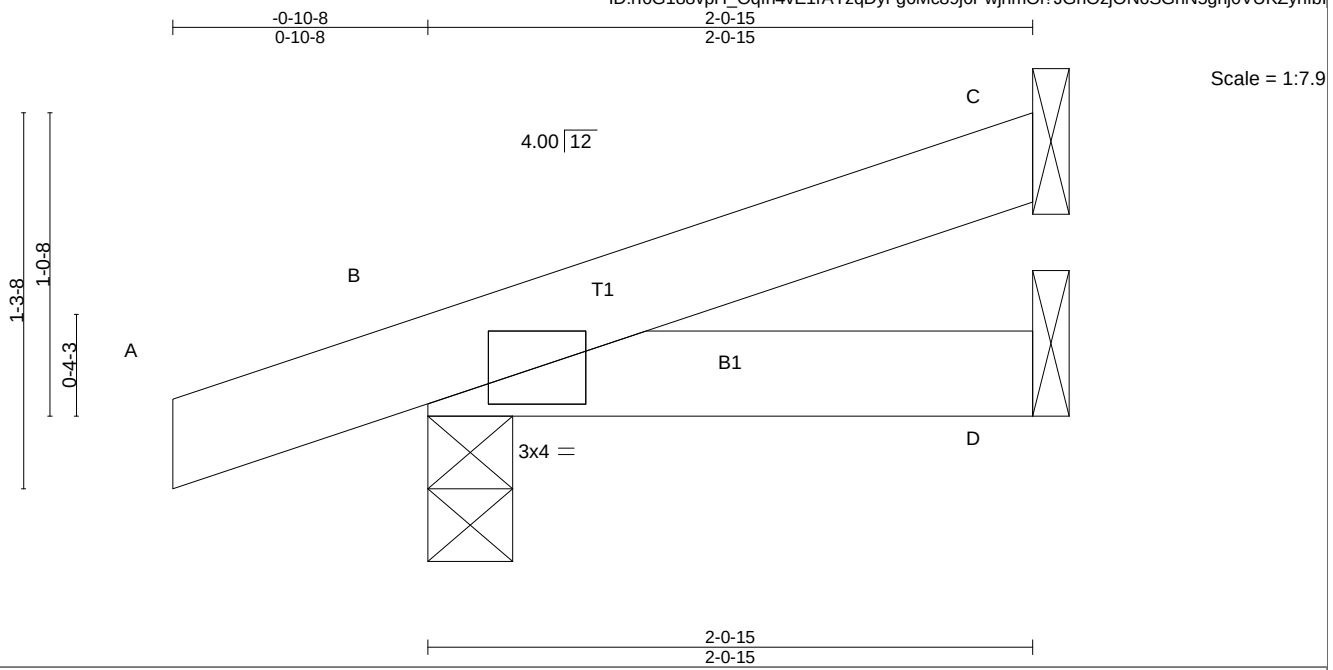

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	-0.00	G	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	G	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	B	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MP							Weight: 8 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-0-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) C=44/Mechanical, B=145/0-3-8 (min. 0-1-8), D=25/Mechanical
Max Horz B=41(LC 6)
Max Uplift C=-18(LC 10), B=-53(LC 6)
Max Grav C=44(LC 1), B=145(LC 1), D=34(LC 3)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=0/17, B-C=-15/12
BOT CHORD B-D=0/0

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) 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 18 lb uplift at joint C and 53 lb uplift at joint B.
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	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	G1	GABLE	1	1	Job Reference (optional)

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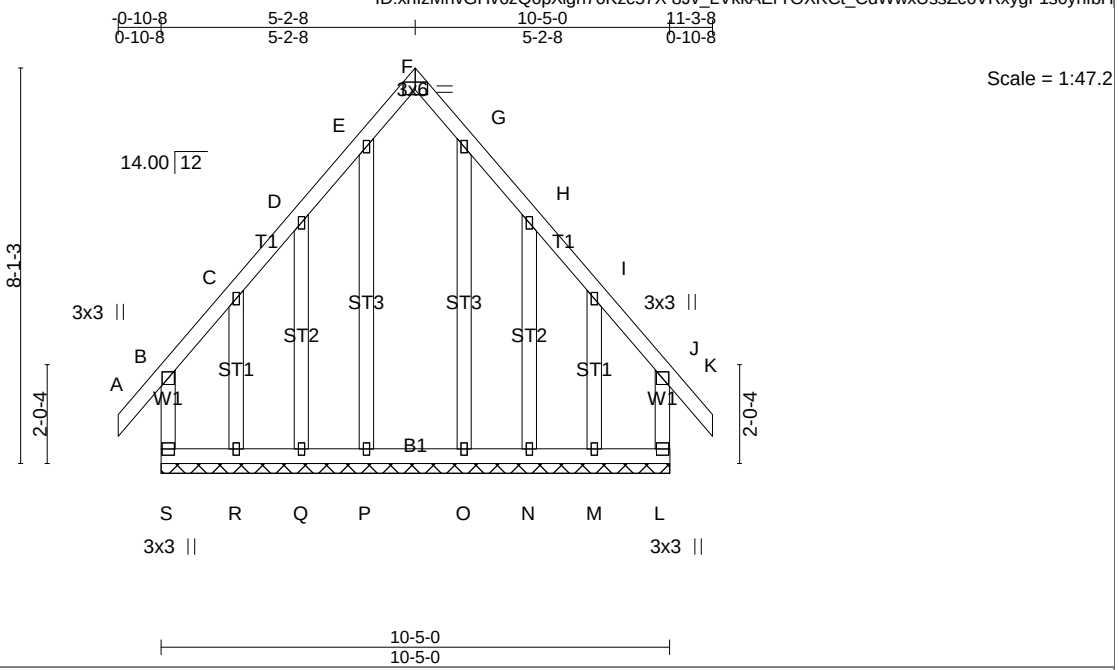

Plate Offsets (X,Y)-- [F:Edge,0-1-14]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.00	K	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.00	K	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.22	Horz(CT)	-0.00	L	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-R							Weight: 92 lb	FT = 20%

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

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

REACTIONS. (lb/size) S=137/10-5-0 (min. 0-1-8), L=137/10-5-0 (min. 0-1-8), P=141/10-5-0 (min. 0-1-8), Q=99/10-5-0 (min. 0-1-8), R=89/10-5-0 (min. 0-1-8), O=141/10-5-0 (min. 0-1-8), N=99/10-5-0 (min. 0-1-8), M=89/10-5-0 (min. 0-1-8)
Max Horz S=-249(LC 8)
Max Uplift S=-208(LC 6), L=-201(LC 7), Q=-125(LC 10), R=-255(LC 7), N=-126(LC 11), M=-250(LC 6)
Max Grav S=280(LC 18), L=274(LC 17), P=208(LC 20), Q=103(LC 21), R=318(LC 8), O=207(LC 19), N=103(LC 22), M=313(LC 9)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD B-S=-200/144, A-B=0/47, B-C=-180/176, C-D=-97/197, D-E=-218/381, E-F=-127/180, F-G=-127/180, G-H=-218/381, H-I=-97/197, I-J=-175/171, J-K=0/47, J-L=-196/139
BOT CHORD R-S=-133/130, Q-R=-133/130, P-Q=-133/130, O-P=-133/130, N-O=-133/130, M-N=-133/130, L-M=-133/130
WEBS E-P=-277/93, D-Q=-186/227, C-R=-180/166, G-O=-277/93, H-N=-186/227, I-M=-180/166

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) All plates are 1.5x3 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
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 208 lb uplift at joint S, 201 lb uplift at joint L, 125 lb uplift at joint Q , 255 lb uplift at joint R, 126 lb uplift at joint N and 250 lb uplift at joint M.
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	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	PA1	Piggyback	11	1	Job Reference (optional)

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

8.330 s Apr 7 2020 MiTek Industries, Inc. Wed Sep 2 14:15:09 2020 Page 1
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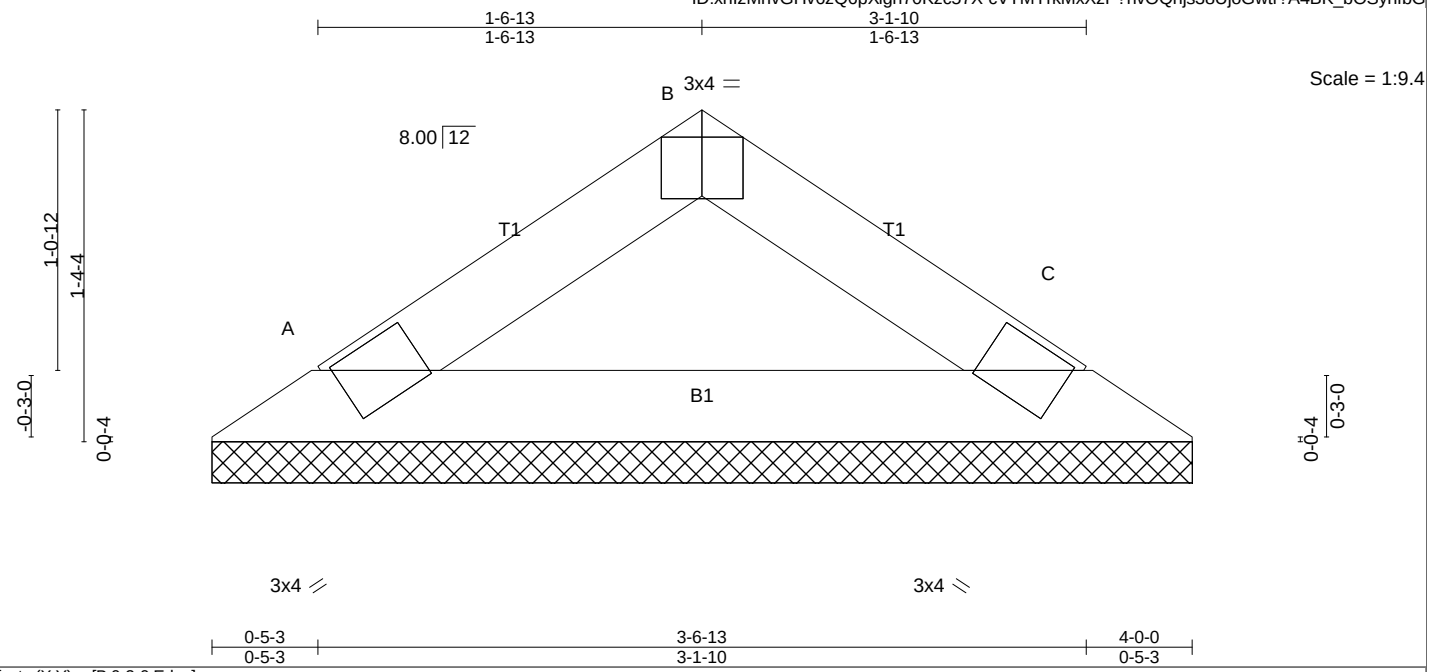

Plate Offsets (X,Y)-- [B:0-2-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	C	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 12 lb	FT = 20%

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

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

REACTIONS. (lb/size) A=124/4-0-0 (min. 0-1-8), C=124/4-0-0 (min. 0-1-8)
Max Horz A=-26(LC 6)
Max UpliftA=-13(LC 10), C=-13(LC 11)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=-104/47, B-C=-104/47
BOT CHORD A-C=-14/70

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

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	PA2	Piggyback	6	1	Job Reference (optional)

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

8.330 s Apr 7 2020 MiTek Industries, Inc. Wed Sep 2 14:15:10 2020 Page 1
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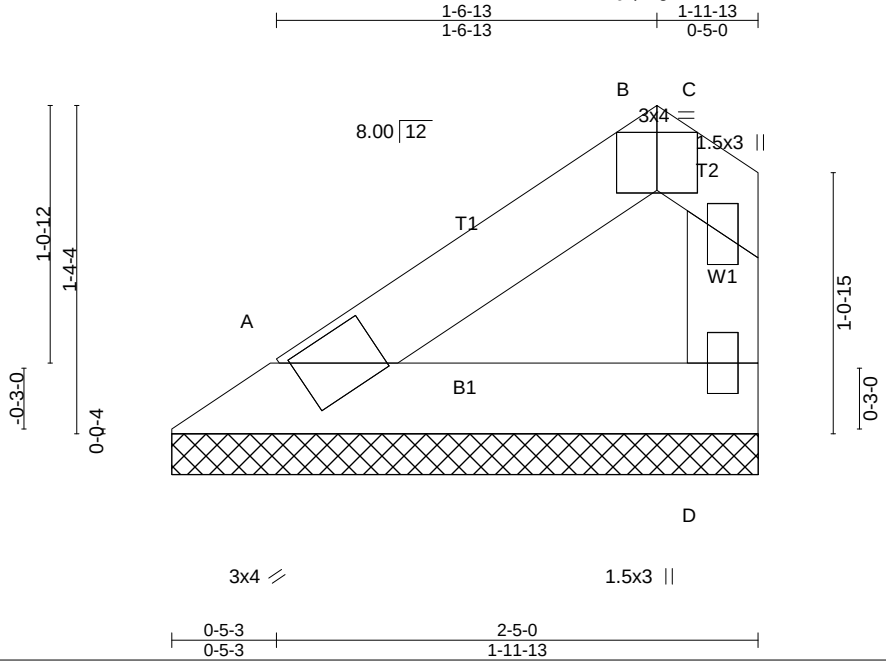

Plate Offsets (X,Y)-- [B:0-2-0,Edge]

LOADING (psf)		**SPACING-** 2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL	20.0	Plate Grip DOL 1.15	TC	0.04	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr YES	WB	0.00	Horz(CT)	0.00	D	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix-R							Weight: 8 lb	FT = 20%

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

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

REACTIONS. (lb/size) A=73/2-5-0 (min. 0-1-8), D=73/2-5-0 (min. 0-1-8)
Max Horz A=37(LC 7)
Max Uplift A=-7(LC 10), D=-15(LC 10)
Max Grav A=73(LC 1), D=74(LC 17)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=-52/16, B-C=-49/33, C-D=-48/23
BOT CHORD A-D=-11/23

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

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	PD	Piggyback	4	1	Job Reference (optional)

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

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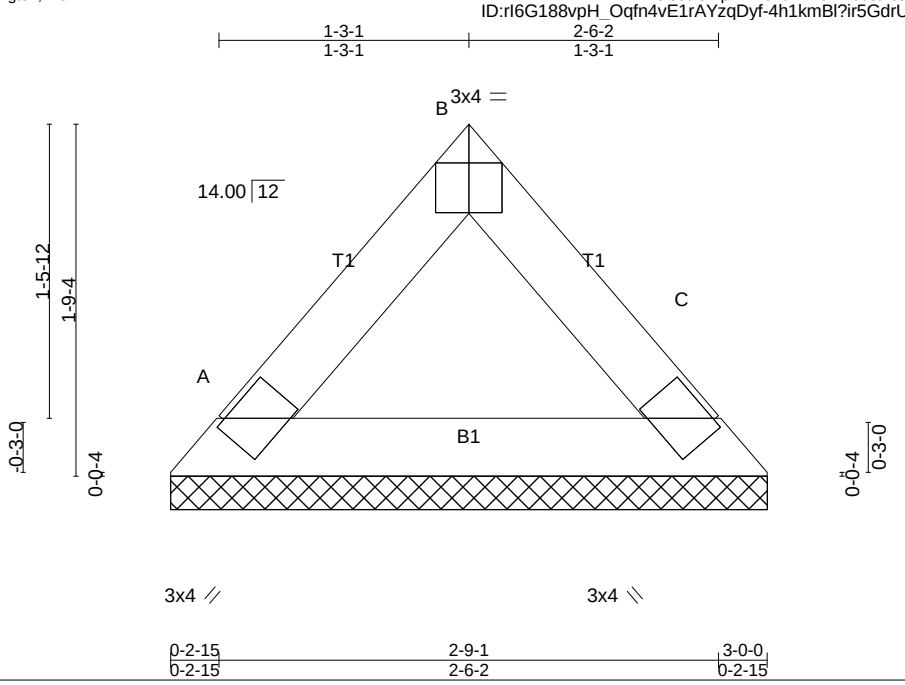

Plate Offsets (X,Y)-- [B:Edge,0-3-1]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	C	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 10 lb	FT = 20%

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

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

REACTIONS. (lb/size) A=96/3-0-0 (min. 0-1-8), C=96/3-0-0 (min. 0-1-8)
Max Horz A=-36(LC 6)
Max UpliftA=-9(LC 11), C=-9(LC 10)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=-70/34, B-C=-70/34
BOT CHORD A-C=-10/39

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

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	PD1	PIGGYBACK	1	1	Job Reference (optional)

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

8.330 s Apr 7 2020 MiTek Industries, Inc. Wed Sep 2 14:15:11 2020 Page 1
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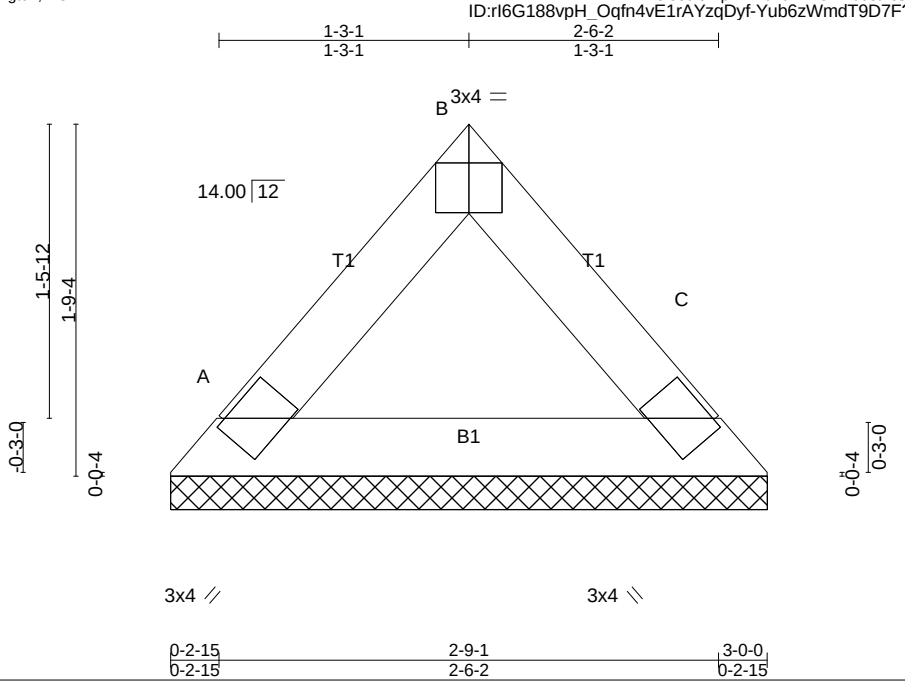

Plate Offsets (X,Y)-- [B:Edge,0-3-1]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	C	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 10 lb	FT = 20%

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

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

REACTIONS. (lb/size) A=96/3-0-0 (min. 0-1-8), C=96/3-0-0 (min. 0-1-8)
Max Horz A=-36(LC 6)
Max UpliftA=-9(LC 11), C=-9(LC 10)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=-70/34, B-C=-70/34
BOT CHORD A-C=-10/39

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

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	V1	GABLE	1	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC — 8.330 s Apr 7 2020 MiTek Industries, Inc. Wed Sep 2 14:15:12 2020 Page 1

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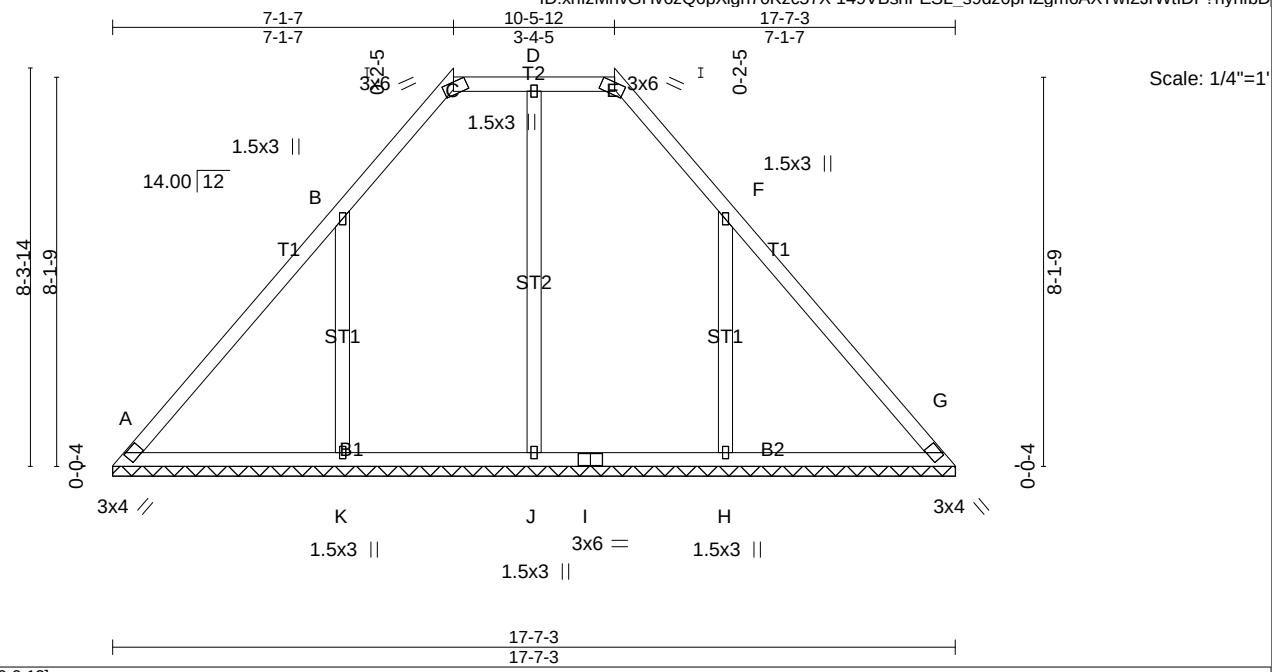

Plate Offsets (X,Y)-- [F:0-1-9,0-0-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.01	G	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-SH							Weight: 89 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-E.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) A=208/17-7-3 (min. 0-2-4), G=208/17-7-3 (min. 0-2-4), K=375/17-7-3 (min. 0-2-4), J=193/17-7-3 (min. 0-2-4), H=375/17-7-3 (min. 0-2-4)
Max Horz A=-203(LC 6)
Max Uplift A=-15(LC 6), G=-3(LC 7), K=-299(LC 10), J=-5(LC 7), H=-297(LC 11)
Max Grav A=245(LC 19), G=239(LC 20), K=513(LC 17), J=323(LC 20), H=511(LC 18)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=-277/174, B-C=-164/81, C-D=-75/76, D-E=-75/76, E-F=-164/81, F-G=-269/175
BOT CHORD A-K=-168/247, J-K=-168/247, I-J=-168/247, H-I=-168/247, G-H=-168/247
WEBS B-K=-380/320, D-J=-136/51, F-H=-380/317

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) 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, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 15 lb uplift at joint A, 3 lb uplift at joint G, 299 lb uplift at joint K, 5 lb uplift at joint J and 297 lb uplift at joint H.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	V2	GABLE	1	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC — 8.330 s Apr 7 2020 MiTek Industries, Inc. Wed Sep 2 14:15:14 2020 Page 1

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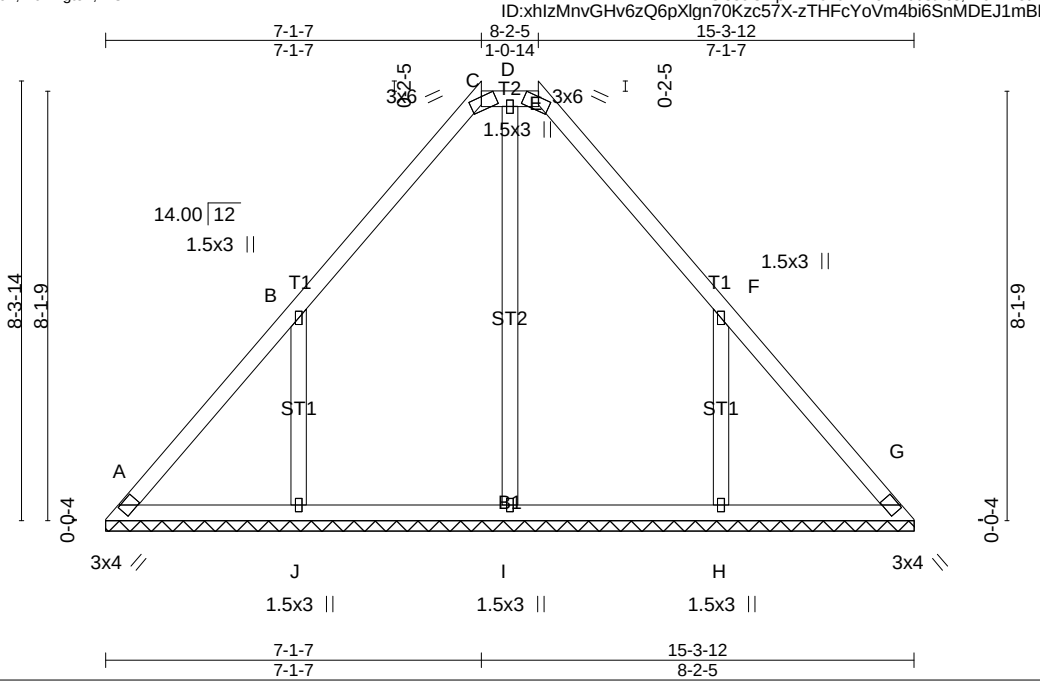

Plate Offsets (X,Y)-- [F:0-0-0,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.00	G	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-SH							Weight: 78 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-E.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) A=171/15-3-12 (min. 0-2-0), G=171/15-3-12 (min. 0-2-0), J=327/15-3-12 (min. 0-2-0), I=183/15-3-12 (min. 0-2-0), H=327/15-3-12 (min. 0-2-0)
Max Horz A=203(LC 7)
Max Uplift A=-52(LC 6), G=-23(LC 7), J=-278(LC 10), H=-277(LC 11)
Max Grav A=207(LC 18), G=187(LC 20), J=464(LC 17), I=354(LC 20), H=463(LC 18)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=-228/159, B-C=-187/161, C-D=-157/163, D-E=-157/163, E-F=-187/161, F-G=-207/121
BOT CHORD A-J=-90/172, I-J=-90/172, H-I=-90/172, G-H=-90/172
WEBS B-J=-359/306, D-I=-139/47, F-H=-359/305

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) 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, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 52 lb uplift at joint A, 23 lb uplift at joint G, 278 lb uplift at joint J and 277 lb uplift at joint H.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	V3	VALLEY	1	1	Job Reference (optional)

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

8.330 s Apr 7 2020 MiTek Industries, Inc. Wed Sep 2 14:15:15 2020 Page 1
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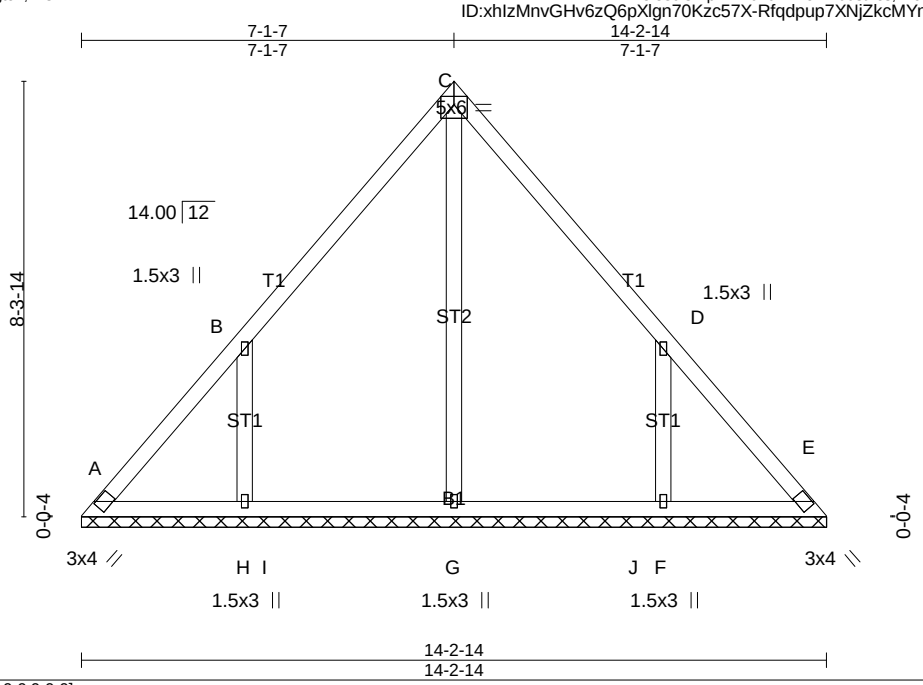

Plate Offsets (X,Y)-- [C:Edge,0-1-14], [D:0-0-0,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.19	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: 73 lb	FT = 20%

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

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

REACTIONS. (lb/size) A=124/14-2-13 (min. 0-1-14), E=124/14-2-13 (min. 0-1-14), G=206/14-2-13 (min. 0-1-14), H=318/14-2-13 (min. 0-1-14), F=318/14-2-13 (min. 0-1-14)
Max Horz A=206(LC 9)
Max Uplift A=-59(LC 6), E=-29(LC 7), H=-280(LC 10), F=-280(LC 11)
Max Grav A=180(LC 19), E=166(LC 20), G=356(LC 20), H=439(LC 17), F=438(LC 18)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=-229/171, B-C=-183/146, C-D=-164/141, D-E=-204/131
BOT CHORD A-H=-98/173, H-I=-98/173, G-I=-98/173, G-J=-98/173, F-J=-98/173, E-F=-98/173
WEBS C-G=-141/6, B-H=-374/318, D-F=-374/318

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, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 59 lb uplift at joint A, 29 lb uplift at joint E, 280 lb uplift at joint H and 280 lb uplift at joint F.
6) Non Standard bearing condition. Review required.
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	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	V4	Valley	1	1	Job Reference (optional)

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

8.330 s Apr 7 2020 MiTek Industries, Inc. Wed Sep 2 14:15:16 2020 Page 1
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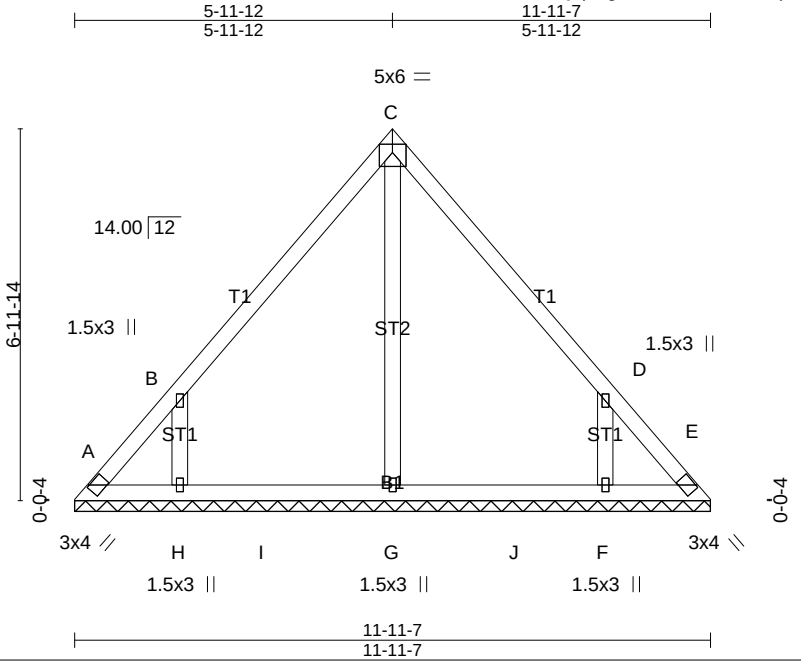

Plate Offsets (X,Y)-- [C:Edge,0-1-14]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	E	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-SH							Weight: 58 lb	FT = 20%

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

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

REACTIONS. (lb/size) A=62/11-11-6 (min. 0-1-8), E=62/11-11-6 (min. 0-1-8), G=211/11-11-6 (min. 0-1-8), H=286/11-11-6 (min. 0-1-8), F=286/11-11-6 (min. 0-1-8)
Max Horz A=-171(LC 6)
Max Uplift A=-96(LC 8), E=-71(LC 9), H=-259(LC 10), F=-258(LC 11)
Max Grav A=171(LC 10), E=155(LC 11), G=320(LC 20), H=380(LC 17), F=380(LC 18)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=-231/164, B-C=-181/123, C-D=-163/120, D-E=-210/131
BOT CHORD A-H=-71/136, H-I=-71/136, G-I=-71/136, G-J=-71/136, F-J=-71/136, E-F=-71/136
WEBS C-G=-125/0, B-H=-365/322, D-F=-365/322

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, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 96 lb uplift at joint A, 71 lb uplift at joint E, 259 lb uplift at joint H and 258 lb uplift at joint F.
6) Non Standard bearing condition. Review required.
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	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	V5	Valley	1	1	Job Reference (optional)

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

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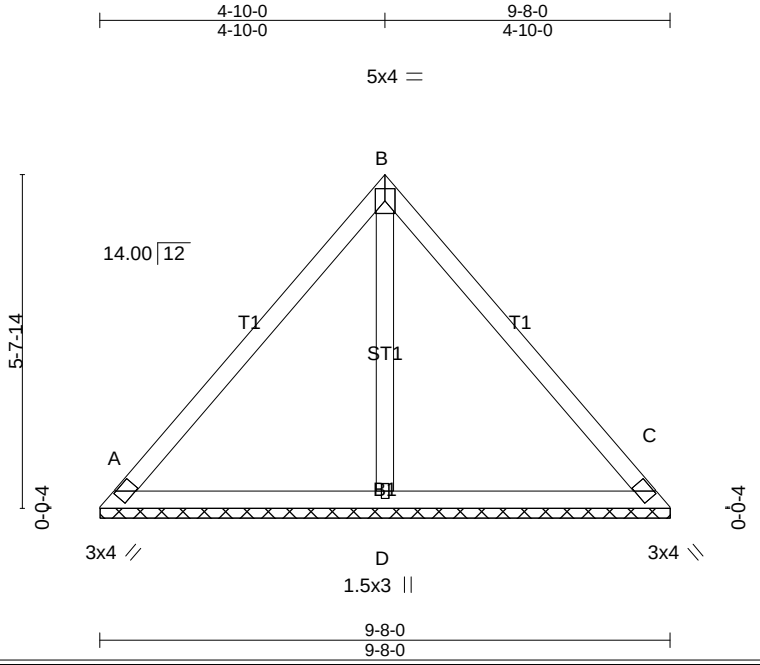


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	C	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-SH							Weight: 43 lb	FT = 20%

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

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

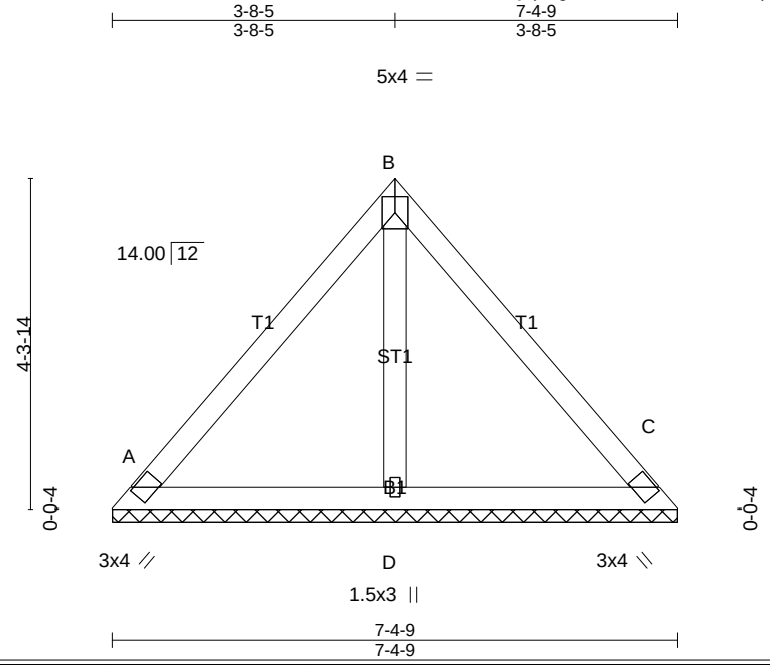
REACTIONS. (lb/size) A=205/9-7-15 (min. 0-1-8), C=205/9-7-15 (min. 0-1-8), D=316/9-7-15 (min. 0-1-8)
Max Horz A=-137(LC 6)
Max UpliftA=-36(LC 11), C=-23(LC 10), D=-24(LC 10)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=-196/96, B-C=-179/81
BOT CHORD A-D=-46/97, C-D=-46/97
WEBS B-D=-156/44

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 36 lb uplift at joint A, 23 lb uplift at joint C and 24 lb uplift at joint D.
6) Non Standard bearing condition. Review required.
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	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	V6	Valley	1	1	Job Reference (optional)



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	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	0.04	Horz(CT)	0.00	C	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-SH							Weight: 32 lb	FT = 20%

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

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

REACTIONS. (lb/size) A=153/7-4-9 (min. 0-1-8), C=153/7-4-9 (min. 0-1-8), D=236/7-4-9 (min. 0-1-8)
Max Horz A=-102(LC 6)
Max UpliftA=-27(LC 11), C=-17(LC 10), D=-18(LC 10)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=-146/71, B-C=-134/64
BOT CHORD A-D=-34/73, C-D=-34/73
WEBS B-D=-117/36

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 27 lb uplift at joint A, 17 lb uplift at joint C and 18 lb uplift at joint D.
6) Non Standard bearing condition. Review required.
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	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	V7	Valley	1	1	Job Reference (optional)

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

8.330 s Apr 7 2020 MiTek Industries, Inc. Wed Sep 2 14:15:19 2020 Page 1
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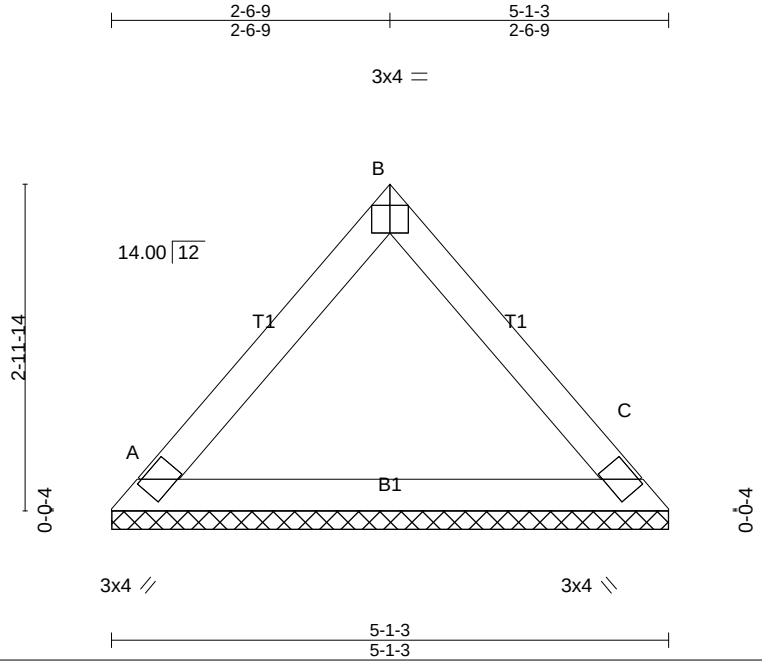

Plate Offsets (X,Y)-- [B:Edge,0-3-1]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.10	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	0.00	Horz(CT)	0.00	C	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-SH							Weight: 18 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 5-1-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) A=180/5-1-2 (min. 0-1-8), C=180/5-1-2 (min. 0-1-8)
Max Horz A=-68(LC 6)
Max UpliftA=-18(LC 11), C=-18(LC 10)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=-139/64, B-C=-139/64
BOT CHORD A-C=-13/87

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 18 lb uplift at joint A and 18 lb uplift at joint C.
6) Non Standard bearing condition. Review required.
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	Truss	Truss Type	Qty	Ply	THE NELSON II LH ROOF
20083567	V8	Valley	1	1	Job Reference (optional)

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

8.330 s Apr 7 2020 MiTek Industries, Inc. Wed Sep 2 14:15:20 2020 Page 1
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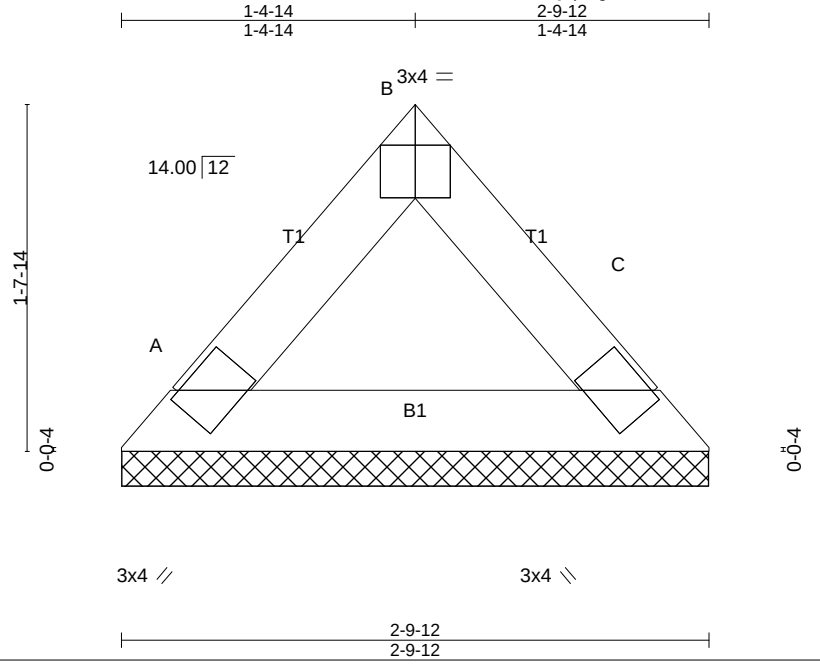

Plate Offsets (X,Y)-- [B:Edge,0-3-1]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL	20.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	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: 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 2-10-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) A=88/2-9-11 (min. 0-1-8), C=88/2-9-11 (min. 0-1-8)
Max Horz A=-33(LC 6)
Max UpliftA=-9(LC 11), C=-9(LC 10)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD A-B=-64/31, B-C=-64/31
BOT CHORD A-C=-9/36

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 9 lb uplift at joint A and 9 lb uplift at joint C.
6) Non Standard bearing condition. Review required.
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