



# Static Pressure and Friction Rate

Zone 1 AH

Jerico Aire

Job: 1  
Date: Dec 05, 2020  
By:

Nassau, Bahamas, Nassau, NP Phone: 000-0000

## Project Information

For: Customer  
Nassau, Bahamas, Nassau, NP SS0000  
Phone: 000-00000

## Available Static Pressure

	Heating (in H2O)	Cooling (in H2O)
External static pressure	0.50	0.50
Pressure losses		
Coil	0.02	0.02
Heat exchanger	0	0
Supply diffusers	0.04	0.04
Return grilles	0.02	0.02
Filter	0.18	0.18
Humidifier	0	0
Balancing damper	0	0
Other device	0	0
Available static pressure	0.24	0.24

## Total Effective Length

	Supply (ft)	Return (ft)
Measured length of run-out	4	29
Measured length of trunk	45	0
Equivalent length of fittings	190	100
Total length	239	129
Total effective length		368

## Friction Rate

	Heating (in/100ft)		Cooling (in/100ft)	
Supply Ducts	0.065	OK	0.065	OK
Return Ducts	0.065	OK	0.065	OK

## Fitting Equivalent Length Details

Supply 4AE=55, 2A3=65, 8B3=20, 8B3=20, 9M=20, 1D=10: TotalEL=190

Return 6F=25, 8B3=20, 11J=15, 5A=40: TotalEL=100



# Duct System Summary

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	Heating	Cooling
External static pressure	0.50 in H2O	0.50 in H2O
Pressure losses	0.26 in H2O	0.26 in H2O
Available static pressure	0.24 in H2O	0.24 in H2O
Supply / return available pressure	0.156 / 0.084 in H2O	0.156 / 0.084 in H2O
Lowest friction rate	0.065 in/100ft	0.065 in/100ft
Actual air flow	1675 cfm	1675 cfm
Total effective length (TEL)		368 ft

## Supply Branch Detail Table

Name	Design (Btuh)	Htg (cfm)	Clg (cfm)	Design FR	Diam (in)	H x W (in)	Duct Matl	Actual Ln (ft)	Ftg.Eqv Ln (ft)	Trunk
Dinning room	c 3961	0	160	0.065	7.0	0x0	VIFx	49.0	190.0	st3
Dinning room-A	c 3961	0	160	0.065	7.0	0x0	VIFx	43.0	195.0	st3
Family room	c 3308	0	134	0.067	7.0	0x0	VIFx	54.0	180.0	st3
Family room-A	c 3307	0	134	0.070	7.0	0x0	VIFx	62.0	160.0	st3
Family room-B	c 3307	0	134	0.068	7.0	0x0	VIFx	58.0	170.0	st3
Kitchen	c 3758	0	152	0.100	7.0	0x0	VIFx	31.0	125.0	st4
Kitchen-A	c 3757	0	152	0.092	7.0	0x0	VIFx	24.0	145.0	st4
Kitchen-B	c 3757	0	152	0.079	7.0	0x0	VIFx	23.0	175.0	st4
Laundry room	c 2589	0	105	0.067	6.0	0x0	VIFx	27.0	205.0	st4
Powder room	c 1972	0	80	0.107	5.0	0x0	VIFx	15.1	130.0	st3
living room	c 3840	0	156	0.094	7.0	0x0	VIFx	31.0	135.0	st4
living room-A	c 3840	0	156	0.087	7.0	0x0	VIFx	24.0	155.0	st4

## Supply Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
st4	Peak AVF	0	872	0.067	748	14.9	12 x 14	RectFbg	st1
st3	Peak AVF	0	803	0.065	803	14.6	12 x 12	RectFbg	st1
st1	Peak AVF	0	1675	0.065	837	7.0	12 x 24	RectFbg	

*Bold/italic values have been manually overridden*



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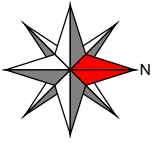
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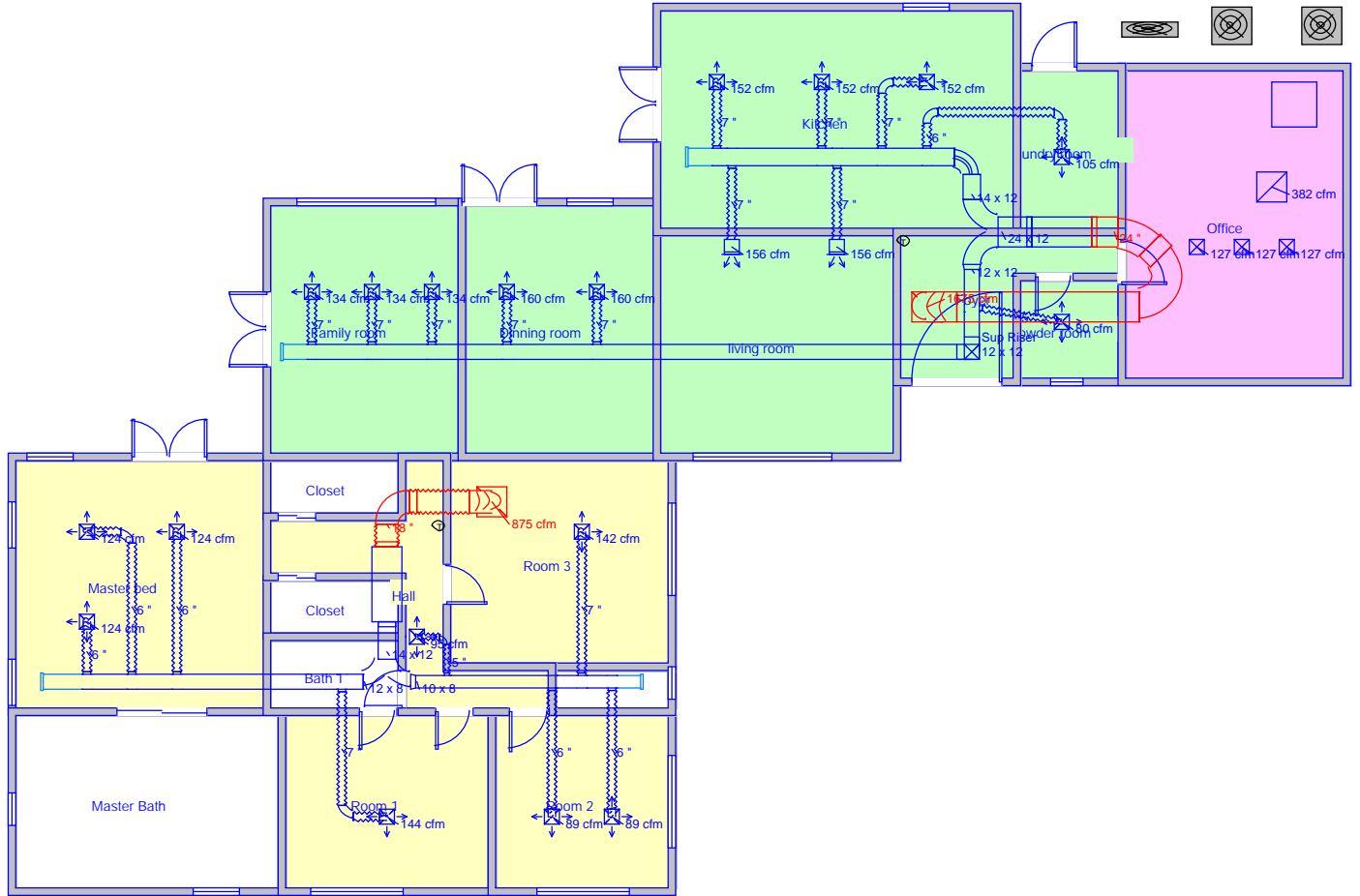
## Return Branch Detail Table

Name	Grille Size (in)	Htg (cfm)	Clg (cfm)	TEL (ft)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Stud/Joist Opening (in)	Duct Matl	Trunk
rb2	30x 26	0	1675	129.1	0.065	533	24.0	0x 0		RtFg	





Level 1



**Job #: 1**  
**Performed for:**  
 Customer  
 Nassau, Bahamas  
 Nassau, NP SS0000  
 Phone: 000-00000

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