



Duct System Summary

Entire House

Perfect Home Hvac Design

Job: 3631
Date: 09/25/2019
By: Dana Morley

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Project Information

For: Richard Fetter
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	Heating	Cooling
External static pressure	0.51 in H2O	0.51 in H2O
Pressure losses	0.34 in H2O	0.34 in H2O
Available static pressure	0.17 in H2O	0.17 in H2O
Supply / return available pressure	0.113 / 0.057 in H2O	0.113 / 0.057 in H2O
Lowest friction rate	0.062 in/100ft	0.062 in/100ft
Actual air flow	600 cfm	600 cfm
Total effective length (TEL)		274 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
Bed2	h 3222	89	64	0.069	6.0	0x0	VIFx	33.0	130.0	st2A
Bed3	h 2575	71	70	0.067	6.0	0x0	VIFx	28.0	140.0	st2A
Bth	c 940	26	45	0.066	5.0	0x0	VIFx	25.1	145.0	st2A
Great	c 1447	65	70	0.082	6.0	0x0	VIFx	28.5	110.0	st2
Great-A	c 1447	65	70	0.081	6.0	0x0	VIFx	29.0	110.0	st3
Ktchn/Dine	c 1392	46	67	0.082	6.0	0x0	VIFx	18.5	120.0	st2
Ktchn/Dine-A	c 1392	46	67	0.082	6.0	0x0	VIFx	18.5	120.0	st3
Lndry	c 742	28	36	0.068	5.0	0x0	VIFx	21.0	145.0	st3A
M.bth	h 1124	31	28	0.067	5.0	0x0	VIFx	24.7	145.0	st3A
M.wic	h 929	26	12	0.071	4.0	0x0	VIFx	28.5	130.0	st3A
Master	h 3892	107	72	0.062	7.0	0x0	VIFx	32.1	150.0	st3A

Supply Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
st3A	Peak AVF	192	147	0.062	493	8.3	8 x 7	ShtMetl	st3
st2A	Peak AVF	186	179	0.066	478	8.1	8 x 7	ShtMetl	st2
st2	Peak AVF	297	316	0.066	542	9.7	7 x 12	ShtMetl	st1
st3	Peak AVF	303	284	0.062	519	9.7	7 x 12	ShtMetl	st1
st1	Peak AVF	600	600	0.062	411	12.5	7 x 30	ShtMetl	

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
rb3	0x0	115	109	69.0	0.083	329	8.0	0x 0		VIFx	rt4
rb4	0x0	71	70	83.0	0.069	362	6.0	0x 0		VIFx	rt4
rb1	0x0	210	178	92.0	0.062	475	9.0	0x 0		VIFx	rt5
rb2	0x0	204	243	91.0	0.063	550	9.0	0x 0		VIFx	rt5

Return Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
rt4	Peak AVF	186	179	0.069	382	7.9	7 x 10	ShtMetl	rt1
rt5	Peak AVF	414	421	0.062	619	10.9	7 x 14	ShtMetl	rt1
rt1	Peak AVF	600	600	0.062	411	12.5	7 x 30	ShtMetl	