

TABLE 3: SYSTEM SELECTION CHART

AORTA Size	CWE			Curtain Lin Ft	System 31			System 42			System 53			System 64		
	L, ft	W, ft	Min		Max	CUBE ACH Min	Min	Max	CUBE ACH Min	Min	Max	CUBE ACH Min	Min	Max	CUBE ACH Min	
																Min
0408	4	8	28	945	1250	60	1260	1880	79	1890	2510	118	2520	3360	158	
0508	5	8	30	1013	1340	51	1350	2015	68	2025	2415	102	2700	3600	135	
0410	4	10	32	1080	1430	54	1440	2150	72	2160	2580	108	2880	3840	144	
0608	6	8	32	1080	1430	45	1440	2150	60	2160	2580	90	2880	3840	120	
0510	5	10	34	1148	1520	46	1530	2285	61	2295	2745	92	3060	4080	122	
0512	5	12	34	1148	1520	38	1530	2285	51	2295	2745	77	3060	4080	102	
0412	4	12	36	1215	1610	51	1620	2420	68	2430	2895	101	3240	4320	135	
0610	6	10	36	1215	1610	41	1620	2420	54	2430	2895	81	3240	4320	108	
0808	8	8	36	1215	1610	38	1620	2420	51	2430	2895	76	3240	4320	101	
0612	6	12	36	1215	1610	34	1620	2420	45	2430	2895	68	3240	4320	90	
0810	8	10	40	1350	1790	34	1800	2690	45	2700	3225	68	3600	4800	90	
0812	8	12	44	1485	1970	31	1980	2960	41	2970	3555	62	3960	5280	83	
1010	10	10	44	1485	1970	30	1980	2960	40	2970	3555	59	3960	5280	79	
0814	8	14	48	1620	2150	29	2160	3230	39	3240	3870	58	4320	5760	77	
1012	10	12	48	1620	2150	27	2160	3230	36	3240	3870	54	4320	5760	72	
1212	12	12	48	1620	2150	23	2160	3230	30	3240	3870	45	4320	5760	60	
1014	10	14	52	1755	2330	25	2340	3500	33	3510	4200	50	4680	6240	67	
1214	12	14	52	1755	2330	21	2340	3500	28	3510	4200	42	4680	6240	56	
1414	14	14	56	1890	2510	19	2520	3770	26	3780	4515	39	5040	6720	51	

- CWE is the Critical Work Envelope that defines an area of significance within a clean space based on activities and occupancy
- AORTA size is the Length x Width of the Critical Work Envelope. Geometrically, the size is the nominal dimension to the inside of the Model MVC perimeter air curtains.
- The CUBE is defined as the volume of space within the perimeter air curtains from floor to ceiling.
- CUBE ACH Min is the Air Change Rate / Hour for the CUBE area, based on the Min Room CFM shown. These air change rates will increase when Room CFM air flow rates are selected above the minimum shown.

- The Room CFM is proportioned with 2/3 feeding the Model MVC perimeter air curtain diffusers, and the remaining 1/3 providing the central Laminar flow panels, Models MV-2, MV-HEP, or MV-1.
- Systems 31, 42, 53, & 64 provide flexibility in design capacities to meet the required velocities for proper system operation.

TABLE 4: MODEL MVC PERIMETER AIR CURTAINS / PERFORMANCE DATA

NC	System 31			System 42				System 53				System 64		
	CFM / Lin ft	CFM / Lin ft	CFM / Lin ft	CFM / Lin ft	CFM / Lin ft	CFM / Lin ft	CFM / Lin ft	CFM / Lin ft	CFM / Lin ft	CFM / Lin ft	CFM / Lin ft	CFM / Lin ft	CFM / Lin ft	
<30	22	25	30	30	35	40	45	45	50	55	60	60	70	80
30	6"	7"	8"	7"	8"	9"	12x6	12x6	18x6	18x6	24x6	24x6	24x6	24x6
35			7"		7"	8"	9"	9"	12x6	12x6	18x6	18x6	18x6	
40			6"		6"	7"	8"	8"	9"	9"	12x6	12x6	12x6	18x6
45						6"	7"	7"	8"	8"	9"	9"	9"	12x6
Ps	0.04	0.04	0.06	0.06	0.07	0.09	0.13	0.11	0.14	0.15	0.15	0.12	0.15	0.19

- The data table above relates inlet size, system size, and flow/lineal foot of air curtain with space NC.
- Suggested inlet sizes shown are round, top collars for simplified duct connections OR rectangular side connections to meet capacity, sound, and pressure levels shown. AORTA systems are highly customizable to solve challenging installations and are designed for the application.

Test Standard
• ANSI / ASHRAE standard 70

Sound Levels

- NC is noise criteria curve that will not be exceeded at the operating point. This is determined by assuming a 10dB (ref: 10⁻¹² watts) room attenuation that is subtracted from the power levels in each of the 2nd thru 7th octave bands
- The NC values shown have been adjusted to reflect the additive sound of the MVC perimeter air curtain diffusers. The proper selection of the central Laminar flow panels will not influence the resultant NC.

Pressure

- P_s represents Static Pressure, inches of water for each MVC curtain air diffuser.