

PERFORMANCE DATA:

STAINLESS STEEL HEAVY DUTY RETURN GRILLES AND REGISTERS • 45° DEFLECTION

MODELS: 6755H-HD, 6755V-HD

Listed Duct Size (inches)	Alternate Sizes (inches)	Core Area (sq. ft.)	Ak Factor	Core Velocity Velocity Pressure Neg. Static Pressure	100	200	300	400	500	600	700	800	900	1000
					.001 .005	.002 .021	.006 .046	.010 .082	.016 .129	.022 .185	.031 .252	.040 .330	.050 .417	.062 .515
6 x 6	8 x 4 10 x 4	0.20	0.23	CFM Noise Criteria	20 -	40 -	60 -	80 -	100 17	120 22	140 27	160 31	180 35	200 39
8 x 6	10 x 5 12 x 4	0.28	0.30	CFM Noise Criteria	28 -	56 -	84 -	112 -	140 18	168 23	196 28	224 32	252 36	280 40
10 x 6	12 x 5 16 x 4	0.35	0.37	CFM Noise Criteria	35 -	70 -	105 -	140 -	175 19	210 24	245 29	280 33	315 37	350 41
8 x 8	14 x 5	0.38	0.40	CFM Noise Criteria	38 -	76 -	114 -	152 15	190 20	228 25	266 30	304 34	342 38	380 42
12 x 6	18 x 4	0.42	0.45	CFM Noise Criteria	42 -	84 -	126 -	168 16	210 21	252 26	294 30	336 35	378 39	420 43
12 x 8	16 x 6 24 x 4	0.58	0.59	CFM Noise Criteria	58 -	116 -	174 -	232 17	290 22	348 27	406 31	464 36	522 40	580 44
10 x 10	14 x 7 26 x 4	0.61	0.62	CFM Noise Criteria	61 -	122 -	183 -	244 17	305 22	366 27	427 32	488 37	549 40	610 44
18 x 6	14 x 8 30 x 4 28 x 4	0.65	0.67	CFM Noise Criteria	65 -	130 -	195 -	260 18	325 23	390 28	455 33	520 37	585 41	650 44
12 x 10	16 x 8 20 x 6 24 x 5	0.74	0.74	CFM Noise Criteria	74 -	148 -	222 -	296 18	370 23	444 28	518 33	592 38	666 42	740 45
12 x 12	14 x 10 24 x 6 18 x 8 38 x 4	0.90	0.89	CFM Noise Criteria	90 -	180 -	270 -	360 19	450 24	540 29	630 34	720 39	810 42	900 45
14 x 14	16 x 12 24 x 8 20 x 10 34 x 6	1.24	1.22	CFM Noise Criteria	124 -	248 -	372 -	496 19	620 24	744 29	868 34	992 39	1116 43	1240 46
18 x 12	16 x 14 28 x 8 22 x 10 38 x 6	1.37	1.34	CFM Noise Criteria	137 -	274 -	411 16	548 21	685 26	822 31	959 36	1096 41	1233 44	1370 47
24 x 10	20 x 12 30 x 8	1.52	1.49	CFM Noise Criteria	152 -	304 -	456 16	608 21	760 26	912 31	1064 36	1216 42	1368 45	1520 48
16 x 16	18 x 14 30 x 8 22 x 12	1.64	1.58	CFM Noise Criteria	164 -	328 -	492 17	656 22	820 27	984 32	1148 37	1312 42	1476 45	1640 48
24 x 12	18 x 16 30 x 10 20 x 14 36 x 8	1.85	1.78	CFM Noise Criteria	185 -	370 -	555 17	740 22	925 27	1110 32	1295 37	1480 42	1665 45	1850 49
18 x 18	20 x 16 28 x 12 24 x 14 32 x 10	2.10	2.01	CFM Noise Criteria	210 -	420 -	630 17	840 22	1050 27	1260 33	1470 38	1680 43	1890 46	2100 49
30 x 12	20 x 18 26 x 14 22 x 16 36 x 10	2.32	2.23	CFM Noise Criteria	232 -	464 -	696 17	928 23	1160 28	1392 33	1624 38	1856 43	2088 46	2320 50
20 x 20	24 x 18 30 x 14 26 x 16 36 x 12	2.61	2.48	CFM Noise Criteria	261 -	522 -	783 17	1044 23	1305 28	1566 34	1827 39	2088 44	2349 47	2610 50
22 x 22	24 x 20 30 x 16 26 x 18 36 x 14	3.17	3.00	CFM Noise Criteria	317 -	634 -	951 18	1268 24	1585 29	1902 35	2219 39	2536 44	2853 47	3170 51
30 x 18	24 x 22 40 x 14 34 x 16	3.54	3.34	CFM Noise Criteria	354 -	708 -	1062 18	1416 24	1770 29	2124 35	2478 40	2832 45	3186 48	3540 52
24 x 24	26 x 22 32 x 18 28 x 20 36 x 16	3.79	3.56	CFM Noise Criteria	379 -	758 -	1137 18	1516 24	1895 29	2274 35	2653 40	3032 45	3411 48	3790 52
36 x 18	32 x 20 46 x 14 40 x 16	4.27	4.01	CFM Noise Criteria	427 -	854 -	1281 19	1708 26	2135 30	2562 37	2989 42	3416 47	3843 50	4270 54
26 x 26	28 x 24 48 x 14	4.47	4.19	CFM Noise Criteria	447 -	894 -	1341 19	1788 26	2235 31	2682 37	3129 42	3576 47	4023 50	4470 54
30 x 24	28 x 26 36 x 20 32 x 22 40 x 18	4.77	4.46	CFM Noise Criteria	477 -	954 -	1431 20	1908 27	2385 32	2862 38	3339 43	3816 47	4293 51	4770 55
28 x 28	30 x 26 40 x 20 36 x 22	5.20	4.85	CFM Noise Criteria	520 -	1040 -	1560 20	2080 27	2600 32	3120 38	3640 43	4160 48	4680 51	5200 55
36 x 24	30 x 28 44 x 20 40 x 22	5.74	5.35	CFM Noise Criteria	574 -	1148 -	1722 20	2296 27	2870 33	3444 39	4018 43	4592 48	5166 52	5740 56
30 x 30	34 x 26 48 x 20 38 x 24	5.99	5.57	CFM Noise Criteria	599 -	1198 -	1797 20	2396 27	2995 33	3594 39	4193 44	4792 48	5391 52	5990 56

For performance data notes, see F165.

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Listed Duct Size (inches)	Alternate Sizes (inches)	Core Area (sq. ft.)	Ak Factor	Core Velocity Velocity Pressure Neg. Static Pressure	100	200	300	400	500	600	700	800	900	1000
					.001 .005	.002 .019	.006 .042	.010 .075	.016 .117	.022 .169	.031 .230	.040 .300	.050 .380	.062 .469
32 x 32	36 x 30 46 x 22 38 x 28	6.84	6.34	CFM	684	1368	2052	2736	3420	4104	4788	5472	6156	6840
				Noise Criteria	-	16	21	28	34	40	44	49	53	57
48 x 24	34 x 34 38 x 30 36 x 32 48 x 28	7.69	7.13	CFM	769	1538	2307	3076	3845	4614	5383	6152	6921	7690
				Noise Criteria	-	17	22	28	34	40	45	49	53	57
36 x 36	38 x 34 46 x 28 42 x 30 48 x 26	8.69	8.02	CFM	869	1738	2607	3476	4345	5214	6083	6952	7821	8690
				Noise Criteria	-	18	22	29	34	41	46	50	54	58
38 x 38	42 x 34 48 x 30 44 x 34	9.70	8.94	CFM	970	1940	2910	3880	4850	5820	6790	7760	8730	9700
				Noise Criteria	-	19	23	29	35	41	46	50	54	58
40 x 40	42 x 36 48 x 32 46 x 34	10.77	9.90	CFM	1077	2154	3231	4308	5385	6462	7539	8616	9693	10770
				Noise Criteria	-	19	24	30	36	42	48	51	56	60
42 x 42	44 x 40 48 x 36 46 x 38	11.89	10.92	CFM	1189	2378	3567	4756	5945	7134	8323	9512	10701	11890
				Noise Criteria	15	20	25	31	37	43	48	52	56	60
44 x 44	46 x 42	13.07	11.98	CFM	1307	2614	3921	5228	6535	7842	9149	10456	11763	13070
				Noise Criteria	15	20	25	31	37	43	48	52	56	60
46 x 46		14.30	13.10	CFM	1430	2860	4290	5720	7150	8580	10010	11440	12870	14300
				Noise Criteria	16	21	26	32	38	44	49	53	57	61
48 x 48		15.59	14.26	CFM	1559	3118	4677	6236	7795	9354	10913	12472	14031	15590
				Noise Criteria	16	21	26	32	38	44	49	53	57	61

Performance Notes:

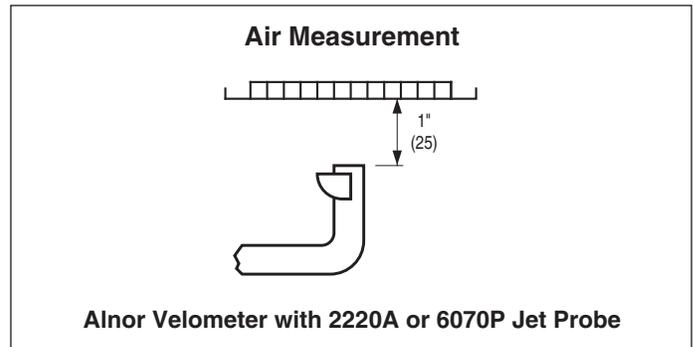
1. All pressures are in inches w.g..
2. Core Velocity is in feet per minute.
3. Performance data is for grille with opposed blade damper. Apply the following correction factors for grille without damper.

Neg. Static Pressure Listed Value x 0.91.

Noise Criteria Listed value - 4.

4. Noise Criteria (NC) values are based upon 10dB room absorption, re 10⁻¹² watts. Dash (-) in space indicates an Noise Criteria of less than 15.

5. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 - 2023.



Airflow Measurements

1. Balancing factors are applicable with or without dampers, providing uniform airflow exists into grille or register.
 2. Take velocity readings at a number of locations on the inlet face (a minimum of 4), while positioning probe as shown above, one inch out from the face.
 3. Total the various velocity readings and divide by the number of readings taken to arrive at an average inlet velocity (Vk in FPM).
 4. Calculate the airflow (CFM) by multiplying the average velocity by the appropriate Ak factor.
- Airflow (CFM) = Average velocity (Vk) x Ak.