Lima®

## Recommended NC Criteria

	Communication Environment	Typical Occupancy
< NC 25	Extremely quiet environment; suppressed speech is quite audible; suitable for acute pickup of all sounds.	Broadcasting studios, concert halls, music rooms.
NC 30	Very quiet office; suitable for large conferences; telephone use satisfactory.	Residences, theaters, libraries, executive offices, directors rooms.
NC 35	Quiet office; satisfactory for conference at a 15-foot table; normal voice 10 to 30 feet; telephone use satisfactory.	Private offices, schools, hotel guestrooms, courtrooms, churches, hospital rooms.
NC 40	Satisfactory for conferences at a 6-to 8-foot table; normal voice 6 to 12 feet; telephone use satisfactory.	General office, labs, dining rooms.
NC 45	Satisfactory for conferences at a 4- to 5-foot table; normal voice 3 to 6 feet; raised voice 6 to 12 feet; telephone use occasionally difficult.	Retail stores, cafeterias, lobby areas, large drafting and engineering offices, reception areas.
> NC 50	Unsatisfactory for conference of more than two or three persons; normal voice 1 to 2 feet; raised voice 3 to 6 feet; telephone use slightly difficult.	Computer rooms, stenographic pools, print machine rooms, process areas.

Air Pattern Obtained with Various Deflection Settings
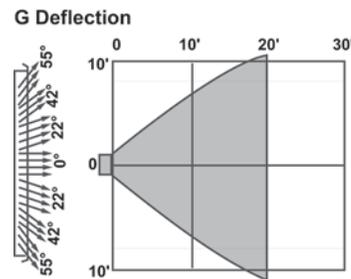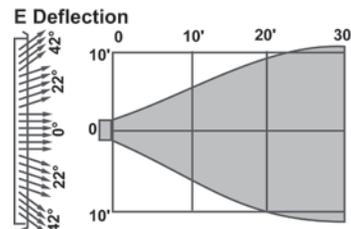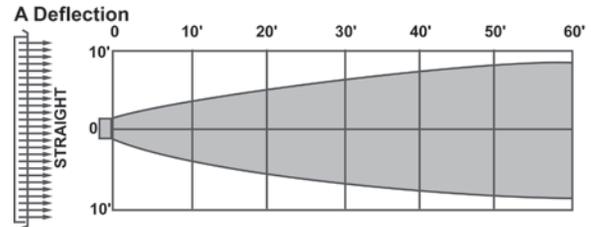
Velocity Limitations for Various Applications

The sound caused by an air outlet in operation is directly proportional to the velocity of the air passing through it. By selecting outlets of proper sizes, face velocities can be controlled within safe sound limits.

The following recommended face velocities are within the safe sound limits for most applications, when NC data are not available.

Application	Recommended Velometer Velocities
Broadcasting Studios	500 FPM
Residences	500 to 750 FPM
Apartments	500 to 750 FPM
Churches	500 to 750 FPM
Hotel Guestrooms	500 to 750 FPM
Legitimate Theaters	500 to 1000 FPM
Private Offices, acoustically treated	500 to 1000 FPM
Private Offices, not treated	1000 to 1250 FPM
Motion Picture Theaters	1000 to 1250 FPM
General Offices	1250 to 1500 FPM
Stores, upper floors	1500 FPM
Stores, main floors	1500 FPM
Industrial Buildings	1500 to 2000 FPM

Recommended Noise Criteria and Face Velocity Ranges are on page 19.

S90H/S90V, S90HFF/S90VFF, S90HFFI Return Grille

PERFORMANCE BASED ON NOMINAL SIZES SHOWN IN BOLD

Nominal Duct Size (in.)	Nominal Duct Area (ft²)	Core Area (ft²)	Core Velocity / Velocity Pressure / Neg. Static Pressure	100 0.001 0.002	200 0.002 0.008	300 0.006 0.018	400 0.010 0.032	500 0.016 0.051	600 0.022 0.073	700 0.031 0.099	800 0.040 0.130	900 0.050 0.164
6x6	**0.25**	0.19	Airflow, cfm	19	38	57	76	95	114	133	152	171
			NC	-	-	-	-	-	13	19	25	29
8x6	**0.33**	0.26	Airflow, cfm	26	52	78	104	130	156	182	208	234
			NC	-	-	-	-	-	15	20	26	30
10x6	**0.42**	0.34	Airflow, cfm	34	68	102	136	170	204	238	272	306
			NC	-	-	-	-	-	16	21	28	32
8x8	**0.44**	0.37	Airflow, cfm	37	74	111	148	185	222	259	296	333
			NC	-	-	-	-	-	16	22	28	32
12x6	**0.5**	0.41	Airflow, cfm	41	82	123	164	205	246	287	328	369
			NC	-	-	-	-	-	17	22	30	34
14x6	**0.58**	0.48	Airflow, cfm	48	96	144	192	240	288	336	384	432
			NC	-	-	-	-	-	18	24	30	34
16x6 **12x8**	**0.67**	0.57	Airflow, cfm	57	114	171	228	285	342	399	456	513
			NC	-	-	-	-	10	19	25	30	35
10x10	**0.69**	0.59	Airflow, cfm	59	118	177	236	295	354	413	472	531
			NC	-	-	-	-	10	19	25	31	35
18x6	**0.75**	0.63	Airflow, cfm	63	126	189	252	315	378	441	504	567
			NC	-	-	-	-	10	19	25	32	35
20x6 **12x10**	**0.83**	0.72	Airflow, cfm	72	144	216	288	360	432	504	576	648
			NC	-	-	-	-	11	19	25	30	35
22x6	**0.92**	0.77	Airflow, cfm	77	154	231	308	385	462	539	616	693
			NC	-	-	-	-	11	19	25	30	35
24x6 **12x12**	**1**	0.88	Airflow, cfm	88	176	264	352	440	528	616	704	792
			NC	-	-	-	-	11	19	25	30	35
30x6 **18x10**	**1.25**	1.11	Airflow, cfm	111	222	333	444	555	666	777	888	999
			NC	-	-	-	-	12	20	26	32	35
14x14	**1.36**	1.22	Airflow, cfm	122	244	366	488	610	732	854	976	1098
			NC	-	-	-	-	12	20	27	32	35
36x6 **18x12**	**1.5**	1.35	Airflow, cfm	135	270	405	540	675	810	945	1080	1215
			NC	-	-	-	-	13	20	27	32	35
22x10	**1.53**	1.37	Airflow, cfm	137	274	411	548	685	822	959	1096	1233
			NC	-	-	-	-	13	20	27	32	36
30x8 **24x10**	**1.67**	1.49	Airflow, cfm	149	298	447	596	745	894	1043	1192	1341
			NC	-	-	-	-	14	21	27	33	37
42x6 **18x14**	**1.75**	1.59	Airflow, cfm	159	318	477	636	795	954	1113	1272	1431
			NC	-	-	-	-	14	21	27	33	37
16x16	**1.78**	1.62	Airflow, cfm	162	324	486	648	810	972	1134	1296	1458
			NC	-	-	-	-	14	21	27	33	37
24x12 18x16	**2**	1.82	Airflow, cfm	182	364	546	728	910	1092	1274	1456	1638
			NC	-	-	-	-	14	21	28	33	38
18x18	**2.25**	2.07	Airflow, cfm	207	414	621	828	1035	1242	1449	1656	1863
			NC	-	-	-	-	14	21	28	33	38
24x14	**2.33**	2.14	Airflow, cfm	214	428	642	856	1070	1284	1498	1712	1926
			NC	-	-	-	-	14	22	28	33	38
30x12	**2.5**	2.29	Airflow, cfm	229	458	687	916	1145	1374	1603	1832	2061
			NC	-	-	-	-	15	22	28	33	38
24x16	**2.67**	2.46	Airflow, cfm	246	492	738	984	1230	1476	1722	1968	2214
			NC	-	-	-	-	15	22	29	34	39
20x20	**2.78**	2.57	Airflow, cfm	257	514	771	1028	1285	1542	1799	2056	2313
			NC	-	-	-	-	16	23	29	34	39
36x12	**3**	2.75	Airflow, cfm	275	550	825	1100	1375	1650	1925	2200	2475
			NC	-	-	-	-	16	23	29	34	39
30x16 **24x20**	**3.33**	3.11	Airflow, cfm	311	622	933	1244	1555	1866	2177	2488	2799
			NC	-	-	-	-	17	24	30	35	40
22x22	**3.36**	3.14	Airflow, cfm	314	628	942	1256	1570	1884	2198	2512	2826
			NC	-	-	-	-	17	24	30	35	40
42x12 36x14	**3.5**	3.22	Airflow, cfm	322	644	966	1288	1610	1932	2254	2576	2898
			NC	-	-	-	-	17	24	30	36	40
24x22	**3.67**	3.43	Airflow, cfm	343	686	1029	1372	1715	2058	2401	2744	3087
			NC	-	-	-	-	17	24	30	36	40
30x18	**3.75**	3.5	Airflow, cfm	350	700	1050	1400	1750	2100	2450	2800	3150
			NC	-	-	-	-	17	24	30	36	40

NC-20 ┤

NC-30

NC-40

- Static pressures are negative, in inches of water, measured per ANSI/ASHRAE Standard 70-2006
- NC based on room absorption of 10 dB, re 10^{-12} watts, measured per ANSI/ASHRAE Standard 70-2006

Recommended Noise Criteria and Face Velocity Ranges are on page 19.

S90H/S90V, S90HFF/S90VFF, S90HFFI Return Grille

PERFORMANCE BASED ON NOMINAL SIZES SHOWN IN BOLD

Nominal Duct Size (in.)	Nominal Duct Area (ft²)	Core Area (ft²)	Core Velocity / Velocity Pressure / Neg. Static Pressure	100 / 0.001 / 0.002	200 / 0.002 / 0.008	300 / 0.006 / 0.018	400 / 0.010 / 0.032	500 / 0.016 / 0.051 (NC-20)	600 / 0.022 / 0.073 (NC-30)	700 / 0.031 / 0.099	800 / 0.040 / 0.130 (NC-40)	900 / 0.050 / 0.164
48x12 / 24x24	4	3.75	Airflow, cfm	375	750	1125	1500	1875	2250	2625	3000	3375
			NC	-	-	-	-	18	25	37	38	41
36x18	4.5	4.22	Airflow, cfm	422	844	1266	1688	2110	2532	2954	3376	3798
			NC	-	-	-	-	18	25	31	38	41
36x20 / 30x24	5	4.71	Airflow, cfm	471	942	1413	1884	2355	2826	3297	3768	4239
			NC	-	-	-	-	18	25	31	38	41
42x18	5.25	4.94	Airflow, cfm	494	988	1482	1976	2470	2964	3458	3952	4446
			NC	-	-	-	-	18	25	31	38	41
28x28	5.44	5.16	Airflow, cfm	516	1032	1548	2064	2580	3096	3612	4128	4644
			NC	-	-	-	-	18	25	32	38	41
42x20 / 30x28	5.83	5.51	Airflow, cfm	551	1102	1653	2204	2755	3306	3857	4408	4959
			NC	-	-	-	10	18	26	32	38	41
48x18 / 36x24	6	5.66	Airflow, cfm	566	1132	1698	2264	2830	3396	3962	4528	5094
			NC	-	-	-	10	18	26	32	38	41
30x30	6.25	5.94	Airflow, cfm	594	1188	1782	2376	2970	3564	4158	4752	5346
			NC	-	-	-	10	18	26	32	38	41
42x24 / 36x28	7	6.66	Airflow, cfm	666	1332	1998	2664	3330	3996	4662	5328	5994
			NC	-	-	-	10	19	26	32	38	41
46x22	7.03	6.68	Airflow, cfm	668	1336	2004	2672	3340	4008	4676	5344	6012
			NC	-	-	-	10	19	27	32	38	42
32x32	7.11	6.78	Airflow, cfm	678	1356	2034	2712	3390	4068	4746	5424	6102
			NC	-	-	-	10	19	27	32	38	42
36x30	7.5	7.16	Airflow, cfm	716	1432	2148	2864	3580	4296	5012	5728	6444
			NC	-	-	-	10	19	27	32	38	42
48x24 / 36x32	8	7.63	Airflow, cfm	763	1526	2289	3052	3815	4578	5341	6104	6867
			NC	-	-	-	10	19	27	32	38	42
34x34	8.03	7.68	Airflow, cfm	768	1536	2304	3072	3840	4608	5376	6144	6912
			NC	-	-	-	10	19	27	32	38	42
36x34	8.5	8.14	Airflow, cfm	814	1628	2442	3256	4070	4884	5698	6512	7326
			NC	-	-	-	11	19	27	32	38	42
42x30	8.75	8.38	Airflow, cfm	838	1676	2514	3352	4190	5028	5866	6704	7542
			NC	-	-	-	11	20	27	32	38	42
36x36	9	8.63	Airflow, cfm	863	1726	2589	3452	4315	5178	6041	6904	7767
			NC	-	-	-	11	20	27	33	38	43
42x34 / **48x30**	10	9.6	Airflow, cfm	960	1920	2880	3840	4800	5760	6720	7680	8640
			NC	-	-	-	11	20	27	33	38	43
38x38	10.03	9.64	Airflow, cfm	964	1928	2892	3856	4820	5784	6748	7712	8676
			NC	-	-	-	11	20	27	33	38	43
42x36	10.5	10.1	Airflow, cfm	1010	2020	3030	4040	5050	6060	7070	8080	9090
			NC	-	-	-	11	20	27	33	38	43
46x34	10.86	10.45	Airflow, cfm	1045	2090	3135	4180	5225	6270	7315	8360	9405
			NC	-	-	-	11	20	27	33	38	43
42x38	11.08	10.67	Airflow, cfm	1067	2134	3201	4268	5335	6402	7469	8536	9603
			NC	-	-	-	11	20	27	33	38	43
40x40	11.11	10.7	Airflow, cfm	1070	2140	3210	4280	5350	6420	7490	8560	9630
			NC	-	-	-	11	20	27	33	38	43
48x36	12	11.57	Airflow, cfm	1157	2314	3471	4628	5785	6942	8099	9256	10413
			NC	-	-	-	11	20	27	33	39	44
42x42	12.25	11.82	Airflow, cfm	1182	2364	3546	4728	5910	7092	8274	9456	10638
			NC	-	-	-	11	20	27	33	39	44
44x44	13.44	12.99	Airflow, cfm	1299	2598	3897	5196	6495	7794	9093	10392	11691
			NC	-	-	-	12	21	28	34	39	44
48x42	14	13.54	Airflow, cfm	1354	2708	4062	5416	6770	8124	9478	10832	12186
			NC	-	-	-	12	21	28	34	40	45
46x46	14.69	14.22	Airflow, cfm	1422	2844	4266	5688	7110	8532	9954	11376	12798
			NC	-	-	-	12	21	28	35	40	45
48x46	15.33	14.85	Airflow, cfm	1485	2970	4455	5940	7425	8910	10395	11880	13365
			NC	-	-	-	12	22	28	35	40	45
48x48	16	15.5	Airflow, cfm	1550	3100	4650	6200	7750	9300	10850	12400	13950
			NC	-	-	-	13	22	29	35	40	45

- Static pressures are negative, in inches of water, measured per ANSI/ASHRAE Standard 70-2006

- NC based on room absorption of 10 dB, re 10^{-12} watts, measured per ANSI/ASHRAE Standard 70-2006

Recommended Noise Criteria and Face Velocity Ranges are on page 19.

Lima®

S90H/S90V, S90HFF/S90VFF, S90HFFI Return Grille

PERFORMANCE BASED ON NOMINAL SIZES SHOWN IN BOLD

Nominal Duct Size (in.)	Nominal Duct Area (ft²)	Core Area (ft²)	Core Velocity / Velocity Pressure / Neg. Static Pressure	300 0.006 0.012	400 0.010 0.022	500 0.016 0.034	NC-10 600 0.022 0.049	NC-20 700 0.031 0.067	900 0.050 0.111	NC-30 1100 0.075 0.165	1300 0.105 0.231	NC-40 1500 0.140 0.307
6x6	**0.25**	0.19	Airflow, cfm / NC	57 / -	76 / -	95 / -	114 / -	133 / 13	171 / 20	209 / 26	247 / 31	285 / 35
8x6	**0.33**	0.26	Airflow, cfm / NC	78 / -	104 / -	130 / -	156 / -	182 / 14	234 / 22	286 / 27	338 / 32	390 / 36
10x6	**0.42**	0.34	Airflow, cfm / NC	102 / -	136 / -	170 / -	204 / 11	238 / 16	306 / 23	374 / 28	442 / 33	510 / 37
8x8	**0.44**	0.37	Airflow, cfm / NC	111 / -	148 / -	185 / -	222 / 12	259 / 16	333 / 23	407 / 29	481 / 34	555 / 38
12x6	**0.5**	0.41	Airflow, cfm / NC	123 / -	164 / -	205 / -	246 / 12	287 / 16	369 / 24	451 / 29	533 / 34	615 / 38
14x6	**0.58**	0.48	Airflow, cfm / NC	144 / -	192 / -	240 / -	288 / 13	336 / 17	432 / 24	528 / 30	624 / 35	720 / 39
16x6 **12x8**	**0.67**	0.57	Airflow, cfm / NC	171 / -	228 / -	285 / -	342 / 13	399 / 18	513 / 25	627 / 31	741 / 36	855 / 40
10x10	**0.69**	0.59	Airflow, cfm / NC	177 / -	236 / -	295 / -	354 / 14	413 / 18	531 / 25	649 / 31	767 / 36	885 / 40
18x6	**0.75**	0.63	Airflow, cfm / NC	189 / -	252 / -	315 / -	378 / 14	441 / 18	567 / 25	693 / 31	819 / 36	945 / 40
20x6 **12x10**	**0.83**	0.72	Airflow, cfm / NC	216 / -	288 / -	360 / -	432 / 14	504 / 19	648 / 26	792 / 32	936 / 37	1080 / 41
22x6	**0.92**	0.77	Airflow, cfm / NC	231 / -	308 / -	385 / -	462 / 15	539 / 19	693 / 26	847 / 32	1001 / 37	1155 / 41
24x6 **12x12**	**1**	0.88	Airflow, cfm / NC	264 / -	352 / -	440 / -	528 / 15	616 / 20	792 / 27	968 / 33	1144 / 37	1320 / 42
30x6 **18x10**	**1.25**	1.11	Airflow, cfm / NC	333 / -	444 / -	555 / 11	666 / 16	777 / 21	999 / 28	1221 / 34	1443 / 38	1665 / 43
14x14	**1.36**	1.22	Airflow, cfm / NC	366 / -	488 / -	610 / 11	732 / 17	854 / 21	1098 / 28	1342 / 34	1586 / 39	1830 / 43
36x6 **18x12**	**1.5**	1.35	Airflow, cfm / NC	405 / -	540 / -	675 / 12	810 / 17	945 / 22	1215 / 29	1485 / 35	1755 / 39	2025 / 43
22x10	**1.53**	1.37	Airflow, cfm / NC	411 / -	548 / -	685 / 12	822 / 17	959 / 22	1233 / 29	1507 / 35	1781 / 39	2055 / 43
30x8 **24x10**	**1.67**	1.49	Airflow, cfm / NC	447 / -	596 / -	745 / 12	894 / 18	1043 / 22	1341 / 29	1639 / 35	1937 / 40	2235 / 44
42x6 **18x14**	**1.75**	1.59	Airflow, cfm / NC	477 / -	636 / -	795 / 13	954 / 18	1113 / 22	1431 / 29	1749 / 35	2067 / 40	2385 / 44
16x16	**1.78**	1.62	Airflow, cfm / NC	486 / -	648 / -	810 / 13	972 / 18	1134 / 22	1458 / 30	1782 / 35	2106 / 40	2430 / 44
24x12 18x16	**2**	1.82	Airflow, cfm / NC	546 / -	728 / -	910 / 13	1092 / 18	1274 / 23	1638 / 30	2002 / 36	2366 / 41	2730 / 45
18x18	**2.25**	2.07	Airflow, cfm / NC	621 / -	828 / -	1035 / 14	1242 / 19	1449 / 23	1863 / 31	2277 / 36	2691 / 41	3105 / 45
24x14	**2.33**	2.14	Airflow, cfm / NC	642 / -	856 / -	1070 / 14	1284 / 19	1498 / 24	1926 / 31	2354 / 37	2782 / 41	3210 / 45
30x12	**2.5**	2.29	Airflow, cfm / NC	687 / -	916 / -	1145 / 14	1374 / 19	1603 / 24	2061 / 31	2519 / 37	2977 / 42	3435 / 46
24x16	**2.67**	2.46	Airflow, cfm / NC	738 / -	984 / -	1230 / 15	1476 / 20	1722 / 24	2214 / 31	2706 / 37	3198 / 42	3690 / 46
20x20	**2.78**	2.57	Airflow, cfm / NC	771 / -	1028 / -	1285 / 15	1542 / 20	1799 / 24	2313 / 32	2827 / 37	3341 / 42	3855 / 46
36x12	**3**	2.75	Airflow, cfm / NC	825 / -	1100 / -	1375 / 15	1650 / 20	1925 / 25	2475 / 32	3025 / 38	3575 / 42	4125 / 47
30x16 **24x20**	**3.33**	3.11	Airflow, cfm / NC	933 / -	1244 / -	1555 / 16	1866 / 21	2177 / 25	2799 / 32	3421 / 38	4043 / 43	4665 / 47
22x22	**3.36**	3.14	Airflow, cfm / NC	942 / -	1256 / -	1570 / 16	1884 / 21	2198 / 25	2826 / 32	3454 / 38	4082 / 43	4710 / 47
42x12 36x14	**3.5**	3.22	Airflow, cfm / NC	966 / -	1288 / -	1610 / 16	1932 / 21	2254 / 25	2898 / 33	3542 / 38	4186 / 43	4830 / 47
24x22	**3.67**	3.43	Airflow, cfm / NC	1029 / -	1372 / -	1715 / 16	2058 / 21	2401 / 26	3087 / 33	3773 / 39	4459 / 43	5145 / 47
30x18	**3.75**	3.5	Airflow, cfm / NC	1050 / -	1400 / -	1750 / 16	2100 / 21	2450 / 26	3150 / 33	3850 / 39	4550 / 43	5250 / 48

- Static pressures are negative, in inches of water, measured per ANSI/ASHRAE Standard 70-2006
- NC based on room absorption of 10 dB, re 10^{-12} watts, measured per ANSI/ASHRAE Standard 70-2006

Recommended Noise Criteria and Face Velocity Ranges are on page 19.

S90H/S90V, S90HFF/S90VFF, S90HFFI Return Grille

PERFORMANCE BASED ON NOMINAL SIZES SHOWN IN BOLD

NC-10   NC-20   NC-30   NC-40

Nominal Duct Size (in.)	Nominal Duct Area (ft²)	Core Area (ft²)	Core Velocity / Velocity Pressure / Neg. Static Pressure	300 / 0.006 / 0.012	400 / 0.010 / 0.022	500 / 0.016 / 0.034	600 / 0.022 / 0.049	700 / 0.031 / 0.067	900 / 0.050 / 0.111	1100 / 0.075 / 0.165	1300 / 0.105 / 0.231	1500 / 0.140 / 0.307
48x12 / **24x24**	**4**	3.75	Airflow, cfm	1125	1500	1875	2250	2625	3375	4125	4875	5625
			NC	-	-	16	22	26	33	39	44	48
36x18	4.5	4.22	Airflow, cfm	1266	1688	2110	2532	2954	3798	4642	5486	6330
			NC	-	-	17	22	27	34	39	44	48
36x20 / 30x24	**5**	4.71	Airflow, cfm	1413	1884	2355	2826	3297	4239	5181	6123	7065
			NC	-	11	17	23	27	34	40	45	49
42x18	5.25	4.94	Airflow, cfm	1482	1976	2470	2964	3458	4446	5434	6422	7410
			NC	-	11	18	23	27	34	40	45	49
28x28	5.44	5.16	Airflow, cfm	1548	2064	2580	3096	3612	4644	5676	6708	7740
			NC	-	11	18	23	27	35	40	45	49
42x20 / 30x28	5.83	5.51	Airflow, cfm	1653	2204	2755	3306	3857	4959	6061	7163	8265
			NC	-	12	18	23	28	35	41	45	50
48x18 / 36x24	**6**	5.66	Airflow, cfm	1698	2264	2830	3396	3962	5094	6226	7358	8490
			NC	-	12	18	23	28	35	41	46	50
30x30	6.25	5.94	Airflow, cfm	1782	2376	2970	3564	4158	5346	6534	7722	8910
			NC	-	12	18	24	28	35	41	46	50
42x24 / 36x28	**7**	6.66	Airflow, cfm	1998	2664	3330	3996	4662	5994	7326	8658	9990
			NC	-	12	19	24	28	36	41	46	50
46x22	7.03	6.68	Airflow, cfm	2004	2672	3340	4008	4676	6012	7348	8684	10020
			NC	-	12	19	24	29	36	41	46	50
32x32	7.11	6.78	Airflow, cfm	2034	2712	3390	4068	4746	6102	7458	8814	10170
			NC	-	13	19	24	29	36	42	46	50
36x30	7.5	7.16	Airflow, cfm	2148	2864	3580	4296	5012	6444	7876	9308	10740
			NC	-	13	19	24	29	36	42	47	51
48x24 / 36x32	**8**	7.63	Airflow, cfm	2289	3052	3815	4578	5341	6867	8393	9919	11445
			NC	-	13	19	25	29	36	42	47	51
34x34	8.03	7.68	Airflow, cfm	2304	3072	3840	4608	5376	6912	8448	9984	11520
			NC	-	13	19	25	29	36	42	47	51
36x34	8.5	8.14	Airflow, cfm	2442	3256	4070	4884	5698	7326	8954	10582	12210
			NC	-	13	20	25	29	37	42	47	51
42x30	8.75	8.38	Airflow, cfm	2514	3352	4190	5028	5866	7542	9218	10894	12570
			NC	-	13	20	25	29	37	42	47	51
36x36	**9**	8.63	Airflow, cfm	2589	3452	4315	5178	6041	7767	9493	11219	12945
			NC	-	14	20	25	30	37	43	47	51
42x34 / **48x30**	**10**	9.6	Airflow, cfm	2880	3840	4800	5760	6720	8640	10560	12480	14400
			NC	-	14	20	26	30	37	43	48	52
38x38	10.03	9.64	Airflow, cfm	2892	3856	4820	5784	6748	8676	10604	12532	14460
			NC	-	14	20	26	30	37	43	48	52
42x36	10.5	10.1	Airflow, cfm	3030	4040	5050	6060	7070	9090	11110	13130	15150
			NC	-	14	21	26	30	38	43	48	52
46x34	10.86	10.45	Airflow, cfm	3135	4180	5225	6270	7315	9405	11495	13585	15675
			NC	-	14	21	26	30	38	43	48	52
42x38	11.08	10.67	Airflow, cfm	3201	4268	5335	6402	7469	9603	11737	13871	16005
			NC	-	14	21	26	31	38	44	48	52
40x40	11.11	10.7	Airflow, cfm	3210	4280	5350	6420	7490	9630	11770	13910	16050
			NC	-	15	21	26	31	38	44	48	52
48x36	**12**	11.57	Airflow, cfm	3471	4628	5785	6942	8099	10413	12727	15041	17355
			NC	-	15	21	26	31	38	44	49	53
42x42	12.25	11.82	Airflow, cfm	3546	4728	5910	7092	8274	10638	13002	15366	17730
			NC	-	15	21	27	31	38	44	49	53
44x44	13.44	12.99	Airflow, cfm	3897	5196	6495	7794	9093	11691	14289	16887	19485
			NC	-	15	22	27	31	39	44	49	53
48x42	**14**	13.54	Airflow, cfm	4062	5416	6770	8124	9478	12186	14894	17602	20310
			NC	-	16	22	27	32	39	45	49	53
46x46	14.69	14.22	Airflow, cfm	4266	5688	7110	8532	9954	12798	15642	18486	21330
			NC	-	16	22	27	32	39	45	50	54
48x46	15.33	14.85	Airflow, cfm	4455	5940	7425	8910	10395	13365	16335	19305	22275
			NC	-	16	22	28	32	39	45	50	54
48x48	**16**	15.5	Airflow, cfm	4650	6200	7750	9300	10850	13950	17050	20150	23250
			NC	-	16	23	28	32	39	45	50	54

NC-50

- Static pressures are negative, in inches of water, measured per ANSI/ASHRAE Standard 70-2006
- NC based on room absorption of 10 dB, re 10⁻¹² watts, measured per ANSI/ASHRAE Standard 70-2006

Recommended Noise Criteria and Face Velocity Ranges are on page 19.