

1700 Performance Data
IP/METRIC DATA: 1700, 1-WAY (NO DAMPER)

Nom. Duct	IP Data					NC	Nom. Duct	Metric Data					Octave Band, dB						
	Air Flow	Press Pt	Sidewall Throw	Ceiling Throw	mm			Air Flow	Press Pt	Sidewall Throw	Ceiling Throw	2	3	4	5	6	7		
	CFM/ft	"WG	ft	ft				L/s/m	Pa	m	m								
3 1/2"	10	0.001	1 - 2 - 6	2 - 4 - 8	-	93	1.6	0.2	0.3 - 0.6 - 1.7	0.6 - 1.2 - 2.5	-	-	15	-	-	-			
	20	0.003	3 - 6 - 11	5 - 8 - 14	-		3.1	0.8	1.1 - 1.7 - 3.5	1.6 - 2.5 - 4.2	22	24	30	-	-	-			
	30	0.007	6 - 9 - 16	8 - 12 - 17	22		4.7	1.8	1.7 - 2.6 - 4.8	2.5 - 3.7 - 5.2	32	33	38	20	-	-			
	40	0.013	8 - 11 - 18	11 - 14 - 20	29		6.2	3.2	2.3 - 3.5 - 5.5	3.3 - 4.2 - 6.0	38	40	45	29	15	11			
	50	0.020	10 - 14 - 20	13 - 16 - 22	35		7.8	5.1	2.9 - 4.3 - 6.2	3.9 - 4.7 - 6.7	44	46	49	36	24	20			
	60	0.029	11 - 16 - 22	14 - 17 - 24	40		9.3	7.3	3.5 - 4.8 - 6.8	4.2 - 5.2 - 7.3	48	50	53	42	31	28			
	70	0.040	13 - 17 - 24	15 - 18 - 26	44		10.9	9.9	4.1 - 5.2 - 7.3	4.6 - 5.6 - 7.9	52	54	57	47	38	34			
4 1/2"	20	0.002	2 - 4 - 9	4 - 6 - 12	-	111	3.1	0.6	0.5 - 1.1 - 2.7	1.1 - 1.9 - 3.8	16	18	25	-	-	-			
	30	0.005	4 - 7 - 13	6 - 9 - 17	-		4.7	1.3	1.1 - 2.0 - 4.0	1.9 - 2.8 - 5.2	26	28	33	13	-	-			
	40	0.009	6 - 9 - 18	8 - 12 - 20	23		6.2	2.3	1.8 - 2.7 - 5.3	2.5 - 3.8 - 6.0	33	35	39	22	-	-			
	50	0.014	7 - 11 - 20	10 - 16 - 22	29		7.8	3.6	2.2 - 3.3 - 6.2	3.2 - 4.7 - 6.7	38	40	44	29	14	-			
	60	0.021	9 - 13 - 22	12 - 17 - 24	33		9.3	5.1	2.7 - 4.0 - 6.8	3.8 - 5.2 - 7.3	43	44	48	35	22	18			
	70	0.028	10 - 15 - 24	15 - 18 - 26	37		10.9	7.0	3.1 - 4.7 - 7.3	4.4 - 5.6 - 7.9	46	48	51	40	28	24			
	80	0.037	12 - 18 - 26	16 - 20 - 28	41		12.4	9.2	3.6 - 5.3 - 7.8	4.9 - 6.0 - 8.5	50	51	54	44	33	30			
5"	35	0.005	3 - 6 - 13	6 - 9 - 18	-	132	5.4	1.3	0.8 - 1.9 - 3.9	1.8 - 2.7 - 5.5	24	26	32	-	-	-			
	45	0.008	5 - 8 - 16	8 - 12 - 21	-		7.0	2.1	1.4 - 2.5 - 5.0	2.4 - 3.5 - 6.3	30	32	37	18	-	-			
	55	0.012	7 - 10 - 20	9 - 14 - 23	25		8.5	3.1	2.0 - 3.0 - 6.1	2.9 - 4.3 - 7.0	35	37	41	25	-	-			
	65	0.017	8 - 12 - 23	11 - 17 - 25	29		10.1	4.3	2.4 - 3.6 - 7.1	3.4 - 5.1 - 7.6	39	41	45	30	16	12			
	75	0.023	9 - 14 - 25	13 - 19 - 27	33		11.6	5.8	2.8 - 4.1 - 7.6	3.9 - 5.8 - 8.2	42	44	48	35	21	18			
	85	0.030	10 - 15 - 27	15 - 20 - 29	36		13.2	7.4	3.1 - 4.7 - 8.1	4.4 - 6.2 - 8.7	45	47	51	39	27	23			
	95	0.037	11 - 17 - 28	16 - 21 - 30	39		14.7	9.2	3.5 - 5.2 - 8.5	5.0 - 6.5 - 9.2	48	50	53	42	31	27			
5 3/4"	35	0.004	2 - 4 - 11	4 - 8 - 16	-	149	5.4	1.0	0.6 - 1.3 - 3.4	1.3 - 2.4 - 4.9	20	22	28	-	-	-			
	50	0.008	4 - 8 - 16	8 - 11 - 22	-		7.8	2.0	1.2 - 2.4 - 4.9	2.3 - 3.5 - 6.7	28	30	36	16	-	-			
	65	0.013	7 - 10 - 21	10 - 15 - 25	25		10.1	3.4	2.0 - 3.2 - 6.3	3.0 - 4.5 - 7.6	35	37	41	25	-	-			
	80	0.020	9 - 13 - 26	12 - 18 - 28	30		12.4	5.1	2.6 - 3.9 - 7.8	3.7 - 5.5 - 8.5	40	42	46	31	17	13			
	95	0.029	10 - 15 - 28	14 - 21 - 30	34		14.7	7.2	3.1 - 4.6 - 8.5	4.4 - 6.5 - 9.2	44	46	49	37	24	20			
	110	0.039	12 - 18 - 30	17 - 23 - 33	38		17.1	9.6	3.6 - 5.4 - 9.2	5.1 - 7.0 - 9.9	47	49	52	41	30	26			
	125	0.050	13 - 20 - 32	19 - 25 - 35	41		19.4	12.4	4.1 - 6.1 - 9.8	5.8 - 7.5 - 10.6	51	52	55	45	35	32			
6 1/2"	40	0.004	2 - 4 - 11	4 - 8 - 16	-	170	6.2	1.0	0.5 - 1.2 - 3.5	1.2 - 2.5 - 5.0	19	21	27	-	-	-			
	60	0.009	4 - 9 - 17	8 - 12 - 24	-		9.3	2.2	1.2 - 2.6 - 5.2	2.5 - 3.7 - 7.3	29	30	36	16	-	-			
	80	0.016	7 - 11 - 23	11 - 16 - 28	25		12.4	3.9	2.2 - 3.5 - 7.0	3.3 - 5.0 - 8.5	36	37	42	26	-	-			
	100	0.025	10 - 14 - 29	14 - 20 - 31	31		15.5	6.1	2.9 - 4.4 - 8.7	4.1 - 6.2 - 9.5	41	43	47	33	19	15			
	120	0.036	11 - 17 - 32	16 - 24 - 34	36		18.6	8.9	3.5 - 5.2 - 9.6	5.0 - 7.3 - 10.4	45	47	51	38	26	23			
	140	0.048	13 - 20 - 34	19 - 26 - 37	39		21.7	12.0	4.1 - 6.1 - 10.4	5.8 - 7.9 - 11.2	49	51	54	43	33	29			
	160	0.063	15 - 23 - 36	22 - 28 - 39	43		24.8	15.7	4.7 - 7.0 - 11.1	6.6 - 8.5 - 12.0	52	54	57	48	38	35			
8"	50	0.004	2 - 4 - 12	4 - 9 - 17	-	207	7.8	1.0	0.5 - 1.2 - 3.7	1.2 - 2.7 - 5.3	18	19	26	-	-	-			
	75	0.009	4 - 9 - 18	9 - 13 - 26	-		11.6	2.3	1.2 - 2.7 - 5.6	2.7 - 4.0 - 8.0	28	29	35	15	-	-			
	100	0.017	7 - 12 - 25	12 - 17 - 31	24		15.5	4.2	2.1 - 3.7 - 7.5	3.5 - 5.3 - 9.5	35	36	41	24	-	-			
	125	0.026	10 - 15 - 31	15 - 22 - 35	29		19.4	6.5	3.1 - 4.7 - 9.4	4.4 - 6.6 - 10.6	40	42	46	31	17	13			
	150	0.038	12 - 18 - 35	17 - 26 - 38	34		23.3	9.3	3.7 - 5.6 - 10.7	5.3 - 8.0 - 11.6	44	46	50	37	25	21			
	175	0.051	14 - 22 - 38	20 - 29 - 41	38		27.2	12.7	4.4 - 6.6 - 11.6	6.2 - 8.8 - 12.5	48	50	53	42	31	27			
	200	0.067	16 - 25 - 41	23 - 31 - 44	41		31.1	16.6	5.0 - 7.5 - 12.4	7.1 - 9.5 - 13.4	51	53	56	46	36	33			
9 1/2"	60	0.004	2 - 4 - 13	4 - 9 - 19	-	246	9.3	1.1	0.5 - 1.2 - 4.0	1.2 - 2.7 - 5.6	16	18	25	-	-	-			
	90	0.010	4 - 9 - 20	9 - 14 - 28	-		14.0	2.4	1.2 - 2.7 - 6.0	2.7 - 4.2 - 8.4	26	28	33	13	-	-			
	120	0.017	7 - 13 - 26	12 - 19 - 34	22		18.6	4.2	2.1 - 4.0 - 7.9	3.8 - 5.6 - 10.4	33	35	40	22	-	-			
	150	0.026	11 - 16 - 33	15 - 23 - 38	28		23.3	6.6	3.3 - 5.0 - 9.9	4.7 - 7.0 - 11.6	39	40	44	30	15	11			
	180	0.038	13 - 20 - 39	19 - 28 - 42	32		27.9	9.5	4.0 - 6.0 - 11.7	5.6 - 8.4 - 12.7	43	45	48	35	22	19			
	210	0.052	15 - 23 - 42	22 - 32 - 45	36		32.6	12.9	4.6 - 6.9 - 12.7	6.6 - 9.7 - 13.7	47	48	52	40	29	25			
	240	0.068	17 - 26 - 45	25 - 34 - 48	40		37.3	16.9	5.3 - 7.9 - 13.6	7.5 - 10.4 - 14.7	50	52	54	44	34	31			
11 3/4"	80	0.005	2 - 5 - 15	5 - 11 - 22	-	302	12.4	1.2	0.6 - 1.4 - 4.6	1.4 - 3.2 - 6.6	17	18	25	-	-	-			
	120	0.011	5 - 10 - 23	11 - 16 - 32	-		18.6	2.8	1.4 - 3.2 - 6.9	3.2 - 4.9 - 9.8	26	28	34	14	-	-			
	160	0.020	8 - 15 - 30	14 - 22 - 39	22		24.8	5.0	2.5 - 4.6 - 9.2	4.4 - 6.6 - 12.0	33	35	40	23	-	-			
	200	0.031	13 - 19 - 38	18 - 27 - 44	28		31.1	7.8	3.8 - 5.8 - 11.5	5.5 - 8.2 - 13.4	39	40	45	30	15	12			
	240	0.045	15 - 23 - 45	22 - 32 - 48	32		37.3	11.2	4.6 - 6.9 - 13.6	6.6 - 9.8 - 14.7	43	45	48	36	23	19			
	280	0.061	18 - 27 - 48	25 - 37 - 52	36		43.5	15.2	5.4 - 8.1 - 14.6	7.6 - 11.2 - 15.8	47	49	52	41	29	25			
	320	0.080	20 - 30 - 51	29 - 39 - 56	40		49.7	19.9	6.2 - 9.2 - 15.7	8.7 - 12.0 - 16.9	50	52	55	45	34	31			

LINEAR BAR GRILLES

1700

NOTE: See page K1-48 for correction factors and notes.

1700 Performance Data

IP/METRIC DATA: 1700, 2-WAY (NO DAMPER)

Nominal Duct in.	IP Data				NC	Nominal Duct mm	Metric Data			Octave Band, dB						
	Air Flow	Press Pt	Throw	CEILING			Air Flow	Press Pt	Throw	2	3	4	5	6	7	
	CFM/ft	"WG	ft				L/s/m	Pa	m							
6 1/4"	20	0.001	2 - 4 - 8	-	159	3.1	0.3	0.7 - 1.2 - 2.3	-	29	-	-	-	-		
	35	0.004	4 - 7 - 13	-		5.4	0.9	1.3 - 2.0 - 3.8	24	40	19	-	-	-		
	50	0.008	6 - 9 - 15	23		7.8	1.9	1.9 - 2.9 - 4.6	33	46	30	17	11	-		
	65	0.013	8 - 12 - 17	29		10.1	3.2	2.5 - 3.7 - 5.2	40	51	38	27	20	17		
	80	0.020	10 - 13 - 19	34		12.4	4.9	3.1 - 4.1 - 5.8	46	55	45	34	27	24		
	95	0.028	12 - 15 - 21	39		14.7	6.9	3.6 - 4.4 - 6.3	50	59	50	40	33	30		
110	0.037	13 - 16 - 22	42	17.1	9.3	3.9 - 4.8 - 6.8	54	61	55	45	38	35				
7 3/4"	30	0.002	3 - 5 - 9	-	197	4.7	0.5	0.8 - 1.4 - 2.8	12	30	-	-	-	-		
	50	0.005	5 - 8 - 15	-		7.8	1.2	1.5 - 2.3 - 4.6	25	40	21	-	-	-		
	70	0.010	7 - 11 - 18	23		10.9	2.4	2.2 - 3.2 - 5.4	34	47	31	18	12	-		
	90	0.016	9 - 14 - 20	30		14.0	4.0	2.8 - 4.1 - 6.1	41	51	39	28	21	18		
	110	0.024	11 - 16 - 22	35		17.1	6.0	3.4 - 4.8 - 6.8	46	55	45	35	28	25		
	130	0.034	13 - 17 - 24	39		20.2	8.4	4.0 - 5.2 - 7.4	50	58	51	41	34	31		
150	0.045	15 - 18 - 26	42	23.3	11.2	4.6 - 5.6 - 7.9	54	61	55	46	39	36				
9 1/4"	40	0.002	3 - 5 - 10	-	235	6.2	0.6	0.9 - 1.6 - 3.2	12	31	-	-	-	-		
	65	0.006	6 - 8 - 17	-		10.1	1.5	1.7 - 2.6 - 5.1	25	40	21	-	-	-		
	90	0.011	8 - 12 - 20	24		14.0	2.8	2.4 - 3.6 - 6.1	34	46	31	19	12	-		
	115	0.019	10 - 15 - 23	30		17.9	4.6	3.0 - 4.5 - 6.9	40	51	39	28	21	18		
	140	0.028	12 - 18 - 25	34		21.7	6.9	3.7 - 5.4 - 7.6	45	55	45	35	27	24		
	165	0.038	14 - 19 - 27	39		25.6	9.5	4.3 - 5.9 - 8.3	50	58	50	40	33	30		
190	0.051	16 - 21 - 29	42	29.5	12.6	5.0 - 6.3 - 8.9	54	60	55	46	38	35				
10 3/4"	50	0.003	3 - 6 - 12	-	273	7.8	0.6	1.0 - 1.8 - 3.5	13	31	-	-	-	-		
	80	0.007	6 - 9 - 19	-		12.4	1.7	1.9 - 2.8 - 5.6	25	40	21	-	-	-		
	110	0.013	8 - 13 - 22	23		17.1	3.1	2.6 - 3.9 - 6.8	33	46	31	18	11	-		
	140	0.020	11 - 16 - 25	29		21.7	5.1	3.3 - 4.9 - 7.6	40	50	39	27	20	17		
	170	0.030	13 - 20 - 28	34		26.4	7.5	4.0 - 5.9 - 8.4	45	54	45	34	27	24		
	200	0.042	15 - 21 - 30	38		31.1	10.4	4.7 - 6.4 - 9.1	49	57	50	40	33	30		
230	0.055	18 - 23 - 32	42	35.7	13.7	5.4 - 6.9 - 9.8	53	60	54	45	38	35				
12 1/4"	60	0.003	3 - 6 - 13	-	311	9.3	0.7	1.1 - 1.9 - 3.8	12	30	-	-	-	-		
	95	0.007	7 - 10 - 20	-		14.7	1.8	2.0 - 3.0 - 6.1	24	39	21	-	-	-		
	130	0.014	9 - 14 - 24	23		20.2	3.4	2.8 - 4.2 - 7.4	33	45	30	18	11	-		
	165	0.022	12 - 17 - 27	29		25.6	5.4	3.5 - 5.3 - 8.3	39	50	38	27	19	16		
	200	0.032	14 - 21 - 30	33		31.1	8.0	4.3 - 6.4 - 9.1	44	53	44	33	26	23		
	235	0.044	16 - 23 - 33	37		36.5	11.0	5.0 - 7.0 - 9.9	48	56	49	39	32	29		
270	0.058	19 - 25 - 35	41	41.9	14.6	5.8 - 7.5 - 10.6	52	59	53	44	37	34				

NOTES: Throw values are given for isothermal conditions and terminal velocities of 150, 100, and 50 FPM (0.75, 0.50, and 0.25 m/s). NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re 10⁻¹² Watts. Dash in space denotes a NC or dB value of less than 10. Nominal duct is duct width. Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70, ISO Standard 5219, and ISO Standard 3741. See Krueger's selection program for performance data not shown, including octave band data.

LENGTH & NC CORRECTION FACTORS

Active Length	2	4	8	10	12
Throw Correction (Multiply)	0.72	1.0	1.5	1.7	1.8
Active Length	2	4	6	8	10
NC Throw Correction (Add)	-3.0	0.0	2.0	3.0	5.0

NOTES: When the diffuser is used as a return, increase the NC by (4) and the negative static pressure, which is (0.8) times the listed total pressure shown.

LINEAR BAR GRILLES

1700

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