

PERFORMANCE DATA | 4" LOUVER (NO DAMPER)

LISTED SIZE (H x W)	IP DATA				NC	METRIC SIZE (H x W)	METRIC DATA				OCTAVE BAND, dB						
	DUCT VEL	AIR FLOW	Pt	THROW			DUCT VEL	AIR FLOW	Pt	THROW							
	in.	FPM	CFM	"WG			ft	mm	m/s	L/s	Pa	m	2	3	4	5	6
4" x 9"	300	89	.036	1 - 3 - 11	-	102 x 229	1.52	42	9.1	0.4 - 0.9 - 3.4	22	19	17	-	-	-	
	400	119	.065	2 - 5 - 15	-		2.03	56	16.1	0.7 - 1.6 - 4.6	30	27	25	20	15	-	
	500	148	.101	4 - 8 - 19	16		2.54	70	25.2	1.1 - 2.5 - 5.7	36	33	32	28	24	11	
	600	178	.146	5 - 11 - 23	23		3.05	84	36.3	1.6 - 3.4 - 6.9	41	38	37	34	31	19	
	700	207	.199	7 - 13 - 26	28		3.56	98	49.4	2.2 - 4.0 - 7.9	45	42	42	40	38	26	
	800	237	.259	9 - 15 - 28	33		4.06	112	64.6	2.8 - 4.6 - 8.4	49	46	46	44	43	31	
	1000	296	.405	13 - 19 - 31	41		5.08	140	100.9	3.8 - 5.7 - 9.4	55	52	52	52	52	41	
	1100	326	.490	14 - 21 - 33	44		5.59	154	122.1	4.2 - 6.3 - 9.9	58	55	55	56	56	45	
4" x 12"	300	117	.036	2 - 5 - 15	-	102 x 305	1.52	55	9.1	0.7 - 1.5 - 4.5	22	19	18	11	-	-	
	400	155	.065	4 - 9 - 20	-		2.03	73	16.1	1.2 - 2.7 - 6.0	30	27	26	21	15	-	
	500	194	.101	6 - 12 - 25	17		2.54	92	25.2	1.9 - 3.7 - 7.5	37	34	33	29	24	12	
	600	233	.146	9 - 15 - 28	23		3.05	110	36.3	2.7 - 4.5 - 8.4	42	39	38	35	32	20	
	700	272	.199	12 - 17 - 30	29		3.56	128	49.4	3.5 - 5.2 - 9.0	46	43	43	40	38	26	
	800	311	.259	13 - 20 - 32	34		4.06	147	64.6	4.0 - 6.0 - 9.7	50	47	47	45	44	32	
	1000	389	.405	16 - 25 - 36	42		5.08	183	100.9	5.0 - 7.5 - 10.8	56	53	53	53	53	41	
	1200	466	.584	20 - 28 - 39	48		6.10	220	145.3	6.0 - 8.4 - 11.8	61	58	58	59	60	49	
4" x 18"	300	172	.036	5 - 11 - 22	-	102 x 457	1.52	81	9.1	1.5 - 3.3 - 6.6	24	21	19	12	-	-	
	400	229	.065	9 - 15 - 27	-		2.03	108	16.1	2.6 - 4.4 - 8.3	32	29	27	22	16	-	
	500	287	.101	12 - 18 - 31	18		2.54	135	25.2	3.7 - 5.5 - 9.3	38	35	34	30	25	13	
	600	344	.146	15 - 22 - 33	25		3.05	162	36.3	4.4 - 6.6 - 10.2	43	40	39	36	33	21	
	700	401	.199	17 - 25 - 36	30		3.56	189	49.4	5.2 - 7.7 - 11.0	47	44	44	42	39	27	
	800	459	.259	19 - 27 - 39	35		4.06	216	64.6	5.9 - 8.3 - 11.7	51	48	48	46	45	33	
	1000	573	.405	24 - 31 - 43	43		5.08	271	100.9	7.4 - 9.3 - 13.1	57	54	54	54	54	42	
	1200	688	.584	27 - 33 - 47	49		6.10	325	145.3	8.3 - 10.2 - 14.4	62	59	60	61	61	50	
4" x 24"	300	227	.036	9 - 14 - 27	-	102 x 610	1.52	107	9.1	2.6 - 4.4 - 8.3	25	22	20	13	-	-	
	400	303	.065	13 - 19 - 31	11		2.03	143	16.1	3.9 - 5.8 - 9.5	33	30	28	23	17	-	
	500	379	.101	16 - 24 - 35	19		2.54	179	25.2	4.9 - 7.3 - 10.7	39	36	35	31	26	14	
	600	455	.146	19 - 27 - 38	26		3.05	215	36.3	5.8 - 8.3 - 11.7	44	41	40	37	34	22	
	700	531	.199	22 - 29 - 41	31		3.56	250	49.4	6.8 - 8.9 - 12.6	48	45	45	43	40	28	
	800	606	.259	26 - 31 - 44	36		4.06	286	64.6	7.8 - 9.5 - 13.5	52	49	49	47	46	34	
	1000	758	.405	29 - 35 - 50	44		5.08	358	100.9	8.7 - 10.7 - 15.1	58	55	55	55	55	43	
	1200	910	.584	31 - 38 - 54	50		6.10	429	145.3	9.5 - 11.7 - 16.5	63	60	61	62	62	51	
1300	985	.685	33 - 40 - 57	53	6.60	465	170.5	9.9 - 12.2 - 17.2	66	63	63	64	65	54			

NOTES: Throw values are given for terminal velocities of 150, 100, and 50 FPM (0.75, 0.50, and 0.25 m/s). Throw values are given for isothermal conditions. NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re 10⁻¹² Watts. Sound is based on a 0° spread; for 20° spread, add 4 NC; for 40° spread, add 9 NC. Throw is based on a 15° upward deflection; for 0° deflection, multiply throws by 1.2; for 30° deflection, multiply by 0.8. Dash in space denotes a NC or dB value of less than 10. 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.

PERFORMANCE DATA | 4" LOUVER (NO DAMPER)

LISTED SIZE (H x W)	IP DATA				NC	METRIC SIZE (H x W)	METRIC DATA				OCTAVE BAND, dB						
	DUCT VEL	AIR FLOW	Pt	THROW			DUCT VEL	AIR FLOW	Pt	THROW							
	in.	FPM	CFM	"WG			ft	mm	m/s	L/s	Pa	m	2	3	4	5	6
4" x 30"	300	283	.036	12 - 18 - 30	-	102 x 762	1.52	133	9.1	3.6 - 5.5 - 9.2	25	22	21	14	-	-	
	400	377	.065	16 - 24 - 35	12		2.03	178	16.1	4.8 - 7.3 - 10.6	34	31	29	24	18	-	
	500	471	.101	20 - 28 - 39	20		2.54	222	25.2	6.1 - 8.4 - 11.9	40	37	36	31	27	15	
	600	566	.146	24 - 30 - 43	26		3.05	267	36.3	7.3 - 9.2 - 13.0	45	42	41	38	35	22	
	700	660	.199	27 - 33 - 46	32		3.56	311	49.4	8.1 - 9.9 - 14.1	49	46	46	43	41	29	
	800	754	.259	29 - 35 - 49	37		4.06	356	64.6	8.7 - 10.6 - 15.0	53	50	50	48	46	35	
	1000	943	.405	32 - 39 - 55	44		5.08	445	100.9	9.7 - 11.9 - 16.8	59	56	56	56	55	44	
	1100	1037	.490	33 - 41 - 58	48		5.59	489	122.1	10.2 - 12.5 - 17.6	62	59	59	59	59	48	
	1200	1131	.584	35 - 43 - 61	51		6.10	534	145.3	10.6 - 13.0 - 18.4	64	61	62	62	63	52	
4" x 36"	300	338	.036	14 - 21 - 33	-	102 x 914	1.52	160	9.1	4.3 - 6.5 - 10.1	26	23	21	14	-	-	
	400	451	.065	19 - 27 - 38	13		2.03	213	16.1	5.8 - 8.2 - 11.6	34	31	30	24	19	-	
	500	564	.101	24 - 30 - 43	21		2.54	266	25.2	7.2 - 9.2 - 13.0	40	37	36	32	28	15	
	600	676	.146	27 - 33 - 47	27		3.05	319	36.3	8.2 - 10.1 - 14.2	46	43	42	39	35	23	
	700	789	.199	29 - 36 - 51	32		3.56	372	49.4	8.9 - 10.9 - 15.4	50	47	46	44	42	30	
	800	902	.259	31 - 38 - 54	37		4.06	426	64.6	9.5 - 11.6 - 16.4	54	51	50	49	47	35	
	900	1015	.328	33 - 41 - 57	41		4.57	479	81.7	10.1 - 12.3 - 17.4	57	54	54	53	52	40	
	1100	1240	.490	37 - 45 - 63	49		5.59	585	122.1	11.1 - 13.6 - 19.3	63	60	60	60	60	49	
	1200	1353	.584	38 - 47 - 66	52		6.10	638	145.3	11.6 - 14.2 - 20.1	65	62	62	63	64	52	
4" x 48"	300	449	.036	19 - 27 - 38	-	102 x 1219	1.52	212	9.1	5.8 - 8.2 - 11.6	27	24	23	15	-	-	
	400	599	.065	25 - 31 - 44	14		2.03	283	16.1	7.7 - 9.5 - 13.4	35	32	31	25	20	-	
	500	748	.101	28 - 35 - 49	22		2.54	353	25.2	8.7 - 10.6 - 15.0	42	39	38	33	29	16	
	600	898	.146	31 - 38 - 54	28		3.05	424	36.3	9.5 - 11.6 - 16.4	47	44	43	40	36	24	
	700	1048	.199	34 - 41 - 58	34		3.56	494	49.4	10.2 - 12.5 - 17.7	51	48	48	45	43	31	
	800	1197	.259	36 - 44 - 62	38		4.06	565	64.6	10.9 - 13.4 - 19.0	55	52	51	50	48	36	
	1000	1497	.405	40 - 49 - 70	46		5.08	706	100.9	12.2 - 15.0 - 21.2	61	58	58	58	57	46	
	1100	1646	.490	42 - 52 - 73	50		5.59	777	122.1	12.8 - 15.7 - 22.2	64	61	61	61	61	50	
	1200	1796	.584	44 - 54 - 76	53		6.10	848	145.3	13.4 - 16.4 - 23.2	66	63	63	64	65	53	
4" x 60"	300	560	.036	24 - 30 - 43	-	102 x 1524	1.52	264	9.1	7.2 - 9.2 - 13.0	28	25	23	16	-	-	
	400	746	.065	28 - 35 - 49	15		2.03	352	16.1	8.6 - 10.6 - 15.0	36	33	32	26	21	-	
	500	933	.101	32 - 39 - 55	22		2.54	440	25.2	9.7 - 11.8 - 16.7	43	40	39	34	30	17	
	600	1120	.146	35 - 43 - 60	29		3.05	528	36.3	10.6 - 13.0 - 18.3	48	45	44	41	37	25	
	700	1306	.199	38 - 46 - 65	34		3.56	616	49.4	11.4 - 14.0 - 19.8	52	49	48	46	43	31	
	800	1493	.259	40 - 49 - 70	39		4.06	705	64.6	12.2 - 15.0 - 21.2	56	53	52	51	49	37	
	1000	1866	.405	45 - 55 - 78	47		5.08	881	100.9	13.7 - 16.7 - 23.7	62	59	59	59	58	47	
	1100	2053	.490	47 - 58 - 82	51		5.59	969	122.1	14.3 - 17.5 - 24.8	65	62	62	62	62	51	
	1200	2239	.584	49 - 60 - 85	54		6.10	1057	145.3	15.0 - 18.3 - 25.9	67	64	64	65	66	54	

NOTES: Throw values are given for terminal velocities of 150, 100, and 50 FPM (0.75, 0.50, and 0.25 m/s). Throw values are given for isothermal conditions. NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re 10⁻¹² Watts. Sound is based on a 0° spread; for 20° spread, add 4 NC; for 40° spread, add 9 NC. Throw is based on a 15° upward deflection; for 0° deflection, multiply throws by 1.2; for 30° deflection, multiply by 0.8. Dash in space denotes a NC or dB value of less than 10. 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.

INDUSTRIAL GRILLES & LOUVERS

PERFORMANCE DATA | 6" LOUVER (NO DAMPER)

LISTED SIZE (H x W)	IP DATA				NC	METRIC SIZE (H x W)	METRIC DATA				OCTAVE BAND, dB						
	DUCT VEL	AIR FLOW	Pt	THROW			DUCT VEL	AIR FLOW	Pt	THROW							
	in.	FPM	CFM	"WG ft			mm	m/s	L/s	Pa m	2	3	4	5	6	7	
6" x 9"	300	129	.046	3 - 6 - 16	-	152 x 229	1.52	61	11.4	0.8 - 1.9 - 5.0	22	19	18	11	-	-	
	400	172	.081	5 - 11 - 22	-		2.03	81	20.2	1.5 - 3.3 - 6.6	30	27	26	21	15	-	-
	500	215	.127	8 - 14 - 26	17		2.54	101	31.5	2.3 - 4.1 - 8.0	37	34	33	28	24	12	-
	600	258	.182	11 - 16 - 29	23		3.05	122	45.4	3.3 - 5.0 - 8.8	42	39	38	35	32	19	-
	700	301	.248	13 - 19 - 31	29		3.56	142	61.8	3.9 - 5.8 - 9.5	46	43	43	40	38	26	-
	800	344	.324	15 - 22 - 33	34		4.06	162	80.8	4.4 - 6.6 - 10.2	50	47	47	45	43	32	-
	1000	430	.507	18 - 26 - 37	41		5.08	203	126.2	5.5 - 8.0 - 11.4	56	53	53	53	53	41	-
	1100	473	.613	20 - 28 - 39	45		5.59	223	152.7	6.1 - 8.4 - 11.9	59	56	56	56	56	45	-
1400	602	.993	25 - 31 - 44	53	7.11	284	247.3	7.7 - 9.5 - 13.4	66	63	63	65	66	55	-		
6" x 12"	300	169	.046	5 - 11 - 21	-	152 x 305	1.52	80	11.4	1.4 - 3.2 - 6.5	23	20	18	11	-	-	
	400	226	.081	8 - 14 - 27	-		2.03	106	20.2	2.6 - 4.4 - 8.2	31	28	27	21	16	-	-
	500	282	.127	12 - 18 - 30	18		2.54	133	31.5	3.6 - 5.4 - 9.2	37	34	33	29	25	12	-
	600	338	.182	14 - 21 - 33	24		3.05	160	45.4	4.4 - 6.5 - 10.1	43	40	39	36	32	20	-
	700	395	.248	17 - 25 - 36	29		3.56	186	61.8	5.1 - 7.6 - 10.9	47	44	43	41	39	27	-
	800	451	.324	19 - 27 - 38	34		4.06	213	80.8	5.8 - 8.2 - 11.6	51	48	47	46	44	32	-
	1000	564	.507	24 - 30 - 43	42		5.08	266	126.2	7.3 - 9.2 - 13.0	57	54	54	54	53	42	-
	1200	677	.730	27 - 33 - 47	49		6.10	319	181.7	8.2 - 10.1 - 14.2	62	59	59	60	61	49	-
1400	790	.993	29 - 36 - 51	54	7.11	373	247.3	8.9 - 10.9 - 15.4	66	63	64	65	67	56	-		
6" x 18"	300	250	.046	10 - 16 - 28	-	152 x 457	1.52	118	11.4	3.1 - 4.8 - 8.7	24	21	20	12	-	-	
	400	333	.081	14 - 21 - 33	11		2.03	157	20.2	4.3 - 6.4 - 10.0	33	30	28	22	17	-	-
	500	416	.127	18 - 26 - 37	19		2.54	196	31.5	5.3 - 7.9 - 11.2	39	36	35	30	26	13	-
	600	499	.182	21 - 28 - 40	25		3.05	236	45.4	6.4 - 8.7 - 12.2	44	41	40	37	33	21	-
	700	582	.248	25 - 31 - 43	31		3.56	275	61.8	7.5 - 9.3 - 13.2	48	45	45	42	40	28	-
	800	666	.324	27 - 33 - 46	35		4.06	314	80.8	8.2 - 10.0 - 14.1	52	49	49	47	45	33	-
	1000	832	.507	30 - 37 - 52	43		5.08	393	126.2	9.1 - 11.2 - 15.8	58	55	55	55	54	43	-
	1200	998	.730	33 - 40 - 57	50		6.10	471	181.7	10.0 - 12.2 - 17.3	63	60	61	61	61	50	-
1300	1082	.856	34 - 42 - 59	53	6.60	510	213.3	10.4 - 12.7 - 18.0	66	63	63	64	65	54	-		
6" x 24"	300	330	.046	14 - 21 - 33	-	152 x 610	1.52	156	11.4	4.2 - 6.4 - 9.9	25	22	21	13	-	-	
	400	440	.081	19 - 27 - 38	12		2.03	208	20.2	5.7 - 8.1 - 11.5	34	31	29	23	18	-	-
	500	550	.127	23 - 30 - 42	20		2.54	260	31.5	7.1 - 9.1 - 12.8	40	37	36	31	27	14	-
	600	660	.182	27 - 33 - 46	26		3.05	311	45.4	8.1 - 9.9 - 14.1	45	42	41	38	34	22	-
	700	770	.248	29 - 35 - 50	32		3.56	363	61.8	8.8 - 10.7 - 15.2	49	46	46	43	41	28	-
	800	880	.324	31 - 38 - 53	36		4.06	415	80.8	9.4 - 11.5 - 16.2	53	50	50	48	46	34	-
	1000	1100	.507	34 - 42 - 60	44		5.08	519	126.2	10.5 - 12.8 - 18.2	59	56	56	56	55	44	-
	1200	1320	.730	38 - 46 - 65	51		6.10	623	181.7	11.5 - 14.1 - 19.9	64	61	62	62	63	51	-
1300	1430	.856	39 - 48 - 68	54	6.60	675	213.3	12.0 - 14.6 - 20.7	67	64	64	65	66	55	-		

NOTES: Throw values are given for terminal velocities of 150, 100, and 50 FPM (0.75, 0.50, and 0.25 m/s). Throw values are given for isothermal conditions. NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re 10⁻¹² Watts. Sound is based on a 0° spread; for 20° spread, add 4 NC; for 40° spread, add 9 NC. Throw is based on a 15° upward deflection; for 0° deflection, multiply throws by 1.2; for 30° deflection, multiply by 0.8. Dash in space denotes a NC or dB value of less than 10. 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.

PERFORMANCE DATA | 6" LOUVER (NO DAMPER)

LISTED SIZE (H x W)	IP DATA				NC	METRIC SIZE (H x W)	METRIC DATA				OCTAVE BAND, dB						
	DUCT VEL	AIR FLOW	Pt	THROW			DUCT VEL	AIR FLOW	Pt	THROW							
	in.	FPM	CFM	"WG			ft	mm	m/s	L/s	Pa	m	2	3	4	5	6
6" x 30"	300	410	.046	17 - 26 - 36	-	152 x 762	1.52	194	11.4	5.3 - 7.8 - 11.1	26	23	22	14	-	-	
	400	547	.081	23 - 30 - 42	12		2.03	258	20.2	7.0 - 9.1 - 12.8	34	31	30	24	18	-	
	500	684	.127	27 - 33 - 47	20		2.54	323	31.5	8.3 - 10.1 - 14.3	41	38	37	32	28	15	
	600	821	.182	30 - 36 - 52	27		3.05	387	45.4	9.1 - 11.1 - 15.7	46	43	42	39	35	23	
	700	958	.248	32 - 39 - 56	32		3.56	452	61.8	9.8 - 12.0 - 16.9	50	47	46	44	41	29	
	800	1094	.324	34 - 42 - 60	37		4.06	517	80.8	10.5 - 12.8 - 18.1	54	51	50	49	47	35	
	1000	1368	.507	38 - 47 - 67	45		5.08	646	126.2	11.7 - 14.3 - 20.3	60	57	57	56	56	44	
	1100	1505	.613	40 - 49 - 70	48		5.59	710	152.7	12.3 - 15.0 - 21.2	63	60	60	60	60	48	
	1200	1642	.730	42 - 52 - 73	52		6.10	775	181.7	12.8 - 15.7 - 22.2	65	62	62	63	63	52	
6" x 36"	300	491	.046	21 - 28 - 40	-	152 x 914	1.52	232	11.4	6.3 - 8.6 - 12.1	27	24	22	15	-	-	
	400	654	.081	27 - 33 - 46	13		2.03	309	20.2	8.1 - 9.9 - 14.0	35	32	31	25	19	-	
	500	818	.127	30 - 36 - 52	21		2.54	386	31.5	9.0 - 11.1 - 15.7	41	38	37	33	28	16	
	600	982	.182	33 - 40 - 56	28		3.05	463	45.4	9.9 - 12.1 - 17.2	46	43	43	39	36	23	
	700	1145	.248	35 - 43 - 61	33		3.56	540	61.8	10.7 - 13.1 - 18.5	51	48	47	45	42	30	
	800	1309	.324	38 - 46 - 65	38		4.06	618	80.8	11.4 - 14.0 - 19.8	54	51	51	49	47	36	
	900	1472	.410	40 - 49 - 69	42		4.57	695	102.2	12.1 - 14.9 - 21.0	58	55	55	53	52	41	
	1100	1800	.613	44 - 54 - 76	49		5.59	849	152.7	13.4 - 16.4 - 23.2	63	60	60	61	60	49	
	1200	1963	.730	46 - 56 - 80	52		6.10	927	181.7	14.0 - 17.2 - 24.3	66	63	63	64	64	53	
6" x 48"	300	652	.046	27 - 33 - 46	-	152 x 1219	1.52	308	11.4	8.1 - 9.9 - 14.0	28	25	23	16	-	-	
	400	869	.081	31 - 38 - 53	14		2.03	410	20.2	9.3 - 11.4 - 16.1	36	33	32	26	20	-	
	500	1086	.127	34 - 42 - 59	22		2.54	513	31.5	10.4 - 12.8 - 18.0	42	39	38	34	29	17	
	600	1303	.182	38 - 46 - 65	29		3.05	615	45.4	11.4 - 14.0 - 19.8	48	45	44	40	37	24	
	700	1520	.248	41 - 50 - 70	34		3.56	718	61.8	12.3 - 15.1 - 21.4	52	49	48	46	43	31	
	800	1738	.324	43 - 53 - 75	39		4.06	820	80.8	13.2 - 16.1 - 22.8	56	53	52	50	48	37	
	1000	2172	.507	48 - 59 - 84	47		5.08	1025	126.2	14.7 - 18.0 - 25.5	62	59	59	58	58	46	
	1100	2389	.613	51 - 62 - 88	50		5.59	1128	152.7	15.5 - 18.9 - 26.8	65	62	62	62	62	50	
	1200	2607	.730	53 - 65 - 92	53		6.10	1230	181.7	16.1 - 19.8 - 28.0	67	64	64	65	65	54	
6" x 60"	300	812	.046	30 - 36 - 51	-	152 x 1524	1.52	383	11.4	9.0 - 11.0 - 15.6	29	26	24	17	-	-	
	400	1083	.081	34 - 42 - 59	15		2.03	511	20.2	10.4 - 12.7 - 18.0	37	34	33	27	21	-	
	500	1354	.127	38 - 47 - 66	23		2.54	639	31.5	11.6 - 14.3 - 20.2	43	40	39	35	30	18	
	600	1625	.182	42 - 51 - 73	30		3.05	767	45.4	12.7 - 15.6 - 22.1	48	45	45	41	38	25	
	700	1896	.248	45 - 55 - 78	35		3.56	895	61.8	13.8 - 16.9 - 23.8	53	50	49	47	44	32	
	800	2167	.324	48 - 59 - 84	40		4.06	1022	80.8	14.7 - 18.0 - 25.5	56	53	53	51	49	37	
	1000	2708	.507	54 - 66 - 94	48		5.08	1278	126.2	16.5 - 20.2 - 28.5	63	60	60	59	58	47	
	1100	2979	.613	57 - 70 - 98	51		5.59	1406	152.7	17.3 - 21.1 - 29.9	65	62	62	62	62	51	
	1200	3250	.730	59 - 73 - 103	54		6.10	1534	181.7	18.0 - 22.1 - 31.2	68	65	65	66	66	55	

NOTES: Throw values are given for terminal velocities of 150, 100, and 50 FPM (0.75, 0.50, and 0.25 m/s). Throw values are given for isothermal conditions. NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re 10⁻¹² Watts. Sound is based on a 0° spread; for 20° spread, add 4 NC; for 40° spread, add 9 NC. Throw is based on a 15° upward deflection; for 0° deflection, multiply throws by 1.2; for 30° deflection, multiply by 0.8. Dash in space denotes a NC or dB value of less than 10. 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.

INDUSTRIAL GRILLES & LOUVERS

PERFORMANCE DATA | 8" LOUVER (NO DAMPER)

LISTED SIZE (H x W)	IP DATA				NC	METRIC SIZE (H x W)	METRIC DATA				OCTAVE BAND, dB						
	DUCT VEL	AIR FLOW	Pt	THROW			DUCT VEL	AIR FLOW	Pt	THROW							
	in.	FPM	CFM	"WG ft			mm	m/s	L/s	Pa	m	2	3	4	5	6	7
8" x 9"	300	169	.038	5 - 11 - 21	-	203 x 229	1.52	80	9.4	1.4 - 3.2 - 6.5	23	20	18	11	-	-	
	400	225	.067	8 - 14 - 27	-		2.03	106	16.7	2.5 - 4.3 - 8.2	31	28	27	21	16	-	-
	500	282	.105	12 - 18 - 30	17		2.54	133	26.1	3.6 - 5.4 - 9.2	37	34	33	29	25	12	-
	600	338	.151	14 - 21 - 33	24		3.05	160	37.6	4.3 - 6.5 - 10.1	43	40	39	36	32	20	-
	700	395	.205	17 - 25 - 36	29		3.56	186	51.2	5.1 - 7.6 - 10.9	47	44	43	41	39	26	-
	800	451	.268	19 - 27 - 38	34		4.06	213	66.8	5.8 - 8.2 - 11.6	51	48	47	46	44	32	-
	1000	564	.419	24 - 30 - 43	42		5.08	266	104.4	7.2 - 9.2 - 13.0	57	54	54	54	53	42	-
	1400	789	.822	29 - 36 - 51	54		7.11	372	204.6	8.9 - 10.9 - 15.4	66	63	64	65	67	56	-
8" x 12"	300	222	.038	8 - 14 - 27	-	203 x 305	1.52	105	9.4	2.4 - 4.3 - 8.2	24	21	19	12	-	-	
	400	296	.067	12 - 19 - 31	-		2.03	140	16.7	3.8 - 5.7 - 9.4	32	29	28	22	16	-	-
	500	370	.105	16 - 23 - 35	18		2.54	174	26.1	4.7 - 7.1 - 10.5	38	35	34	30	25	13	-
	600	444	.151	19 - 27 - 38	25		3.05	209	37.6	5.7 - 8.2 - 11.5	43	40	40	36	33	21	-
	700	518	.205	22 - 29 - 41	30		3.56	244	51.2	6.6 - 8.8 - 12.5	48	45	44	42	39	27	-
	800	591	.268	25 - 31 - 44	35		4.06	279	66.8	7.6 - 9.4 - 13.3	51	48	48	46	45	33	-
	1000	739	.419	28 - 35 - 49	43		5.08	349	104.4	8.6 - 10.5 - 14.9	58	55	55	54	54	42	-
	1400	1035	.822	33 - 41 - 58	55		7.11	488	204.6	10.2 - 12.5 - 17.6	67	64	65	66	67	56	-
8" x 18"	300	327	.038	14 - 21 - 33	-	203 x 457	1.52	154	9.4	4.2 - 6.3 - 9.9	25	22	21	13	-	-	
	400	436	.067	18 - 27 - 38	11		2.03	206	16.7	5.6 - 8.1 - 11.4	33	30	29	23	17	-	-
	500	545	.105	23 - 30 - 42	19		2.54	257	26.1	7.0 - 9.0 - 12.8	40	37	36	31	26	14	-
	600	654	.151	27 - 33 - 46	26		3.05	309	37.6	8.1 - 9.9 - 14.0	45	42	41	37	34	22	-
	700	763	.205	29 - 35 - 50	31		3.56	360	51.2	8.7 - 10.7 - 15.1	49	46	45	43	40	28	-
	800	873	.268	31 - 38 - 53	36		4.06	412	66.8	9.3 - 11.4 - 16.2	53	50	49	48	46	34	-
	1000	1091	.419	34 - 42 - 59	44		5.08	515	104.4	10.4 - 12.8 - 18.1	59	56	56	55	55	43	-
	1400	1309	.604	38 - 46 - 65	50		6.10	618	150.3	11.4 - 14.0 - 19.8	64	61	61	62	62	51	-
8" x 24"	300	433	.038	18 - 26 - 37	-	203 x 610	1.52	204	9.4	5.5 - 8.1 - 11.4	26	23	22	14	-	-	
	400	577	.067	24 - 31 - 43	12		2.03	272	16.7	7.4 - 9.3 - 13.2	34	31	30	24	18	-	-
	500	721	.105	28 - 34 - 48	20		2.54	340	26.1	8.5 - 10.4 - 14.7	41	38	37	32	27	15	-
	600	865	.151	31 - 37 - 53	27		3.05	408	37.6	9.3 - 11.4 - 16.1	46	43	42	38	35	22	-
	700	1009	.205	33 - 40 - 57	32		3.56	476	51.2	10.0 - 12.3 - 17.4	50	47	46	44	41	29	-
	800	1154	.268	35 - 43 - 61	37		4.06	544	66.8	10.7 - 13.2 - 18.6	54	51	50	48	47	35	-
	1000	1442	.419	39 - 48 - 68	45		5.08	681	104.4	12.0 - 14.7 - 20.8	60	57	57	56	56	44	-
	1400	1730	.604	43 - 53 - 75	51		6.10	817	150.3	13.2 - 16.1 - 22.8	65	62	62	63	63	52	-
1300	1875	.709	45 - 55 - 78	54	6.60	885	176.4	13.7 - 16.8 - 23.7	67	64	65	66	66	55	-		

NOTES: Throw values are given for terminal velocities of 150, 100, and 50 FPM (0.75, 0.50, and 0.25 m/s). Throw values are given for isothermal conditions. NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re 10⁻¹² Watts. Sound is based on a 0° spread; for 20° spread, add 4 NC; for 40° spread, add 9 NC. Throw is based on a 15° upward deflection; for 0° deflection, multiply throws by 1.2; for 30° deflection, multiply by 0.8. Dash in space denotes a NC or dB value of less than 10. 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.

PERFORMANCE DATA | 8" LOUVER (NO DAMPER)

LISTED SIZE (H x W)	IP DATA				NC	METRIC SIZE (H x W)	METRIC DATA				OCTAVE BAND, dB						
	DUCT VEL	AIR FLOW	Pt	THROW			DUCT VEL	AIR FLOW	Pt	THROW							
	in.	FPM	CFM	"WG			ft	mm	m/s	L/s	Pa	m	2	3	4	5	6
8" x 30"	300	538	.038	23-30-42	-	203 x 762	1.52	254	9.4	6.9-9.0-12.7	27	24	22	15	-	-	
	400	717	.067	28-34-48	13		2.03	339	16.7	8.5-10.4-14.7	35	32	31	25	19	-	-
	500	897	.105	31-38-54	21		2.54	423	26.1	9.5-11.6-16.4	41	38	37	33	28	15	-
	600	1076	.151	34-42-59	28		3.05	508	37.6	10.4-12.7-18.0	46	43	43	39	36	23	-
	700	1255	.205	37-45-64	33		3.56	592	51.2	11.2-13.7-19.4	51	48	47	45	42	30	-
	800	1435	.268	39-48-68	38		4.06	677	66.8	12.0-14.7-20.7	55	52	51	49	47	35	-
	1000	1793	.419	44-54-76	46		5.08	846	104.4	13.4-16.4-23.2	61	58	58	57	56	45	-
	1100	1973	.507	46-57-80	49		5.59	931	126.3	14.0-17.2-24.3	63	60	61	60	60	49	-
	1200	2152	.604	48-59-84	52		6.10	1016	150.3	14.7-18.0-25.4	66	63	63	64	64	53	-
8" x 36"	300	643	.038	26-32-46	-	203 x 914	1.52	304	9.4	8.0-9.8-13.9	28	25	23	15	-	-	
	400	858	.067	30-37-53	14		2.03	405	16.7	9.3-11.3-16.0	36	33	31	26	20	-	
	500	1072	.105	34-42-59	22		2.54	506	26.1	10.4-12.7-17.9	42	39	38	33	29	16	
	600	1287	.151	37-46-65	28		3.05	607	37.6	11.3-13.9-19.6	47	44	43	40	36	24	
	700	1501	.205	40-49-70	34		3.56	709	51.2	12.3-15.0-21.2	52	49	48	45	43	30	
	800	1716	.268	43-53-75	38		4.06	810	66.8	13.1-16.0-22.7	55	52	52	50	48	36	
	900	1930	.340	46-56-79	43		4.57	911	84.6	13.9-17.0-24.1	59	56	55	54	53	41	
	1100	2359	.507	51-62-88	50		5.59	1113	126.3	15.4-18.8-26.6	64	61	61	61	61	50	
	1200	2574	.604	53-65-91	53		6.10	1215	150.3	16.0-19.6-27.8	67	64	64	64	65	53	
8" x 48"	300	854	.038	30-37-53	-	203 x 1219	1.52	403	9.4	9.2-11.3-16.0	29	26	24	17	-	-	
	400	1139	.067	35-43-61	15		2.03	538	16.7	10.7-13.1-18.5	37	34	33	27	21	-	
	500	1424	.105	39-48-68	23		2.54	672	26.1	11.9-14.6-20.7	43	40	39	35	30	17	
	600	1708	.151	43-53-74	29		3.05	806	37.6	13.1-16.0-22.6	48	45	45	41	37	25	
	700	1993	.205	46-57-80	35		3.56	941	51.2	14.1-17.3-24.5	53	50	49	46	44	31	
	800	2278	.268	50-61-86	40		4.06	1075	66.8	15.1-18.5-26.1	56	53	53	51	49	37	
	1000	2847	.419	56-68-96	47		5.08	1344	104.4	16.9-20.7-29.2	63	60	60	59	58	47	
	1100	3132	.507	58-71-101	51		5.59	1478	126.3	17.7-21.7-30.7	65	62	62	62	62	51	
	1200	3417	.604	61-74-105	54		6.10	1613	150.3	18.5-22.6-32.0	68	65	65	65	66	54	
8" x 60"	300	1065	.038	34-42-59	-	203 x 1524	1.52	503	9.4	10.3-12.6-17.9	30	27	25	17	-	-	
	400	1420	.067	39-48-68	16		2.03	670	16.7	11.9-14.6-20.6	38	35	33	28	22	-	
	500	1775	.105	44-54-76	24		2.54	838	26.1	13.3-16.3-23.1	44	41	40	35	31	18	
	600	2130	.151	48-59-83	30		3.05	1005	37.6	14.6-17.9-25.3	49	46	45	42	38	26	
	700	2485	.205	52-64-90	36		3.56	1173	51.2	15.8-19.3-27.3	54	51	50	47	44	32	
	800	2840	.268	55-68-96	40		4.06	1340	66.8	16.9-20.6-29.2	57	54	54	52	50	38	
	1000	3550	.419	62-76-107	48		5.08	1675	104.4	18.8-23.1-32.6	64	61	60	60	59	47	
	1100	3905	.507	65-80-113	52		5.59	1843	126.3	19.8-24.2-34.2	66	63	63	63	63	51	
	1200	4260	.604	68-83-118	55		6.10	2011	150.3	20.6-25.3-35.7	69	66	66	66	66	55	

NOTES: Throw values are given for terminal velocities of 150, 100, and 50 FPM (0.75, 0.50, and 0.25 m/s). Throw values are given for isothermal conditions. NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re 10⁻¹² Watts. Sound is based on a 0° spread; for 20° spread, add 4 NC; for 40° spread, add 9 NC. Throw is based on a 15° upward deflection; for 0° deflection, multiply throws by 1.2; for 30° deflection, multiply by 0.8. Dash in space denotes a NC or dB value of less than 10. 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.

INDUSTRIAL GRILLES & LOUVERS

PERFORMANCE DATA | 10" LOUVER (NO DAMPER)

LISTED SIZE (H x W)	IP DATA				NC	METRIC SIZE (H x W)	METRIC DATA				OCTAVE BAND, dB						
	DUCT VEL	AIR FLOW	Pt	THROW			DUCT VEL	AIR FLOW	Pt	THROW							
	in.	FPM	CFM	"WG			ft	mm	m/s	L/s	Pa	m	2	3	4	5	6
10" x 20"	300	438	.031	18 - 27 - 38	-	254 x 508	1.52	207	7.6	5.6 - 8.1 - 11.5	26	23	21	13	-	-	
	400	584	.055	25 - 31 - 44	11		2.03	275	13.6	7.5 - 9.4 - 13.2	34	31	29	23	17	-	-
	500	730	.085	28 - 34 - 49	19		2.54	344	21.2	8.5 - 10.5 - 14.8	40	37	36	31	26	14	-
	600	875	.123	31 - 38 - 53	26		3.05	413	30.6	9.4 - 11.5 - 16.2	45	42	41	38	34	21	-
	700	1021	.167	33 - 41 - 58	31		3.56	482	41.6	10.1 - 12.4 - 17.5	49	46	46	43	40	28	-
	800	1167	.218	36 - 44 - 62	36		4.06	551	54.3	10.8 - 13.2 - 18.7	53	50	50	48	46	34	-
	1000	1459	.341	40 - 49 - 69	44		5.08	689	84.9	12.1 - 14.8 - 20.9	59	56	56	56	55	43	-
	1200	1751	.491	44 - 53 - 75	51		6.10	826	122.2	13.2 - 16.2 - 22.9	64	61	62	62	62	51	-
	1400	2043	.668	47 - 58 - 81	56		7.11	964	166.3	14.3 - 17.5 - 24.8	69	66	66	67	68	57	-
10" x 25"	300	544	.031	23 - 30 - 42	-	254 x 635	1.52	257	7.6	7.0 - 9.0 - 12.8	26	23	22	14	-	-	
	400	725	.055	28 - 34 - 49	12		2.03	342	13.6	8.5 - 10.4 - 14.7	34	31	30	24	18	-	
	500	906	.085	31 - 38 - 54	20		2.54	428	21.2	9.5 - 11.7 - 16.5	41	38	37	32	27	14	
	600	1088	.123	34 - 42 - 59	27		3.05	513	30.6	10.4 - 12.8 - 18.1	46	43	42	38	35	22	
	700	1269	.167	37 - 45 - 64	32		3.56	599	41.6	11.3 - 13.8 - 19.5	50	47	47	44	41	29	
	800	1450	.218	40 - 49 - 69	37		4.06	684	54.3	12.0 - 14.7 - 20.9	54	51	50	48	46	34	
	1000	1813	.341	44 - 54 - 77	45		5.08	856	84.9	13.5 - 16.5 - 23.3	60	57	57	56	55	44	
	1200	2175	.491	49 - 59 - 84	51		6.10	1027	122.2	14.7 - 18.1 - 25.5	65	62	62	63	63	51	
	1400	2538	.668	52 - 64 - 91	57		7.11	1198	166.3	15.9 - 19.5 - 27.6	70	67	67	68	69	58	
10" x 30"	300	650	.031	27 - 32 - 46	-	254 x 762	1.52	307	7.6	8.1 - 9.9 - 14.0	27	24	22	15	-	-	
	400	867	.055	31 - 38 - 53	13		2.03	409	13.6	9.3 - 11.4 - 16.1	35	32	31	25	19	-	
	500	1083	.085	34 - 42 - 59	21		2.54	511	21.2	10.4 - 12.7 - 18.0	41	38	37	33	28	15	
	600	1300	.123	38 - 46 - 65	27		3.05	614	30.6	11.4 - 14.0 - 19.7	47	44	43	39	35	23	
	700	1517	.167	41 - 50 - 70	33		3.56	716	41.6	12.3 - 15.1 - 21.3	51	48	47	44	41	29	
	800	1733	.218	43 - 53 - 75	38		4.06	818	54.3	13.2 - 16.1 - 22.8	55	52	51	49	47	35	
	1000	2167	.341	48 - 59 - 84	45		5.08	1023	84.9	14.7 - 18.0 - 25.5	61	58	58	57	56	44	
	1200	2600	.491	53 - 65 - 92	52		6.10	1227	122.2	16.1 - 19.7 - 27.9	66	63	63	63	63	52	
	1300	2817	.576	55 - 68 - 96	55		6.60	1329	143.4	16.8 - 20.6 - 29.1	68	65	65	66	67	56	
10" x 35"	300	756	.031	29 - 35 - 50	-	254 x 889	1.52	357	7.6	8.7 - 10.6 - 15.1	28	25	23	15	-	-	
	400	1008	.055	33 - 40 - 57	13		2.03	476	13.6	10.0 - 12.3 - 17.4	36	33	31	25	19	-	
	500	1260	.085	37 - 45 - 64	21		2.54	595	21.2	11.2 - 13.7 - 19.4	42	39	38	33	28	16	
	600	1512	.123	40 - 50 - 70	28		3.05	714	30.6	12.3 - 15.1 - 21.3	47	44	43	39	36	23	
	700	1764	.167	44 - 54 - 76	33		3.56	833	41.6	13.3 - 16.3 - 23.0	51	48	48	45	42	30	
	800	2016	.218	47 - 57 - 81	38		4.06	952	54.3	14.2 - 17.4 - 24.6	55	52	52	50	47	35	
	1000	2520	.341	52 - 64 - 90	46		5.08	1189	84.9	15.9 - 19.4 - 27.5	61	58	58	57	57	45	
	1200	3024	.491	57 - 70 - 99	53		6.10	1427	122.2	17.4 - 21.3 - 30.1	66	63	64	64	64	53	
	1300	3276	.576	60 - 73 - 103	55		6.60	1546	143.4	18.1 - 22.2 - 31.4	69	66	66	67	67	56	

NOTES: Throw values are given for terminal velocities of 150, 100, and 50 FPM (0.75, 0.50, and 0.25 m/s). Throw values are given for isothermal conditions. NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re 10⁻¹² Watts. Sound is based on a 0° spread; for 20° spread, add 4 NC; for 40° spread, add 9 NC. Throw is based on a 15° upward deflection; for 0° deflection, multiply throws by 1.2; for 30° deflection, multiply by 0.8. Dash in space denotes a NC or dB value of less than 10. 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.

PERFORMANCE DATA | 10" LOUVER (NO DAMPER)

LISTED SIZE (H x W)	IP DATA				NC	METRIC SIZE (H x W)	METRIC DATA				OCTAVE BAND, dB						
	DUCT VEL	AIR FLOW	Pt	THROW			DUCT VEL	AIR FLOW	Pt	THROW							
	in.	FPM	CFM	"WG			ft	mm	m/s	L/s	Pa	m	2	3	4	5	6
10" x 40"	300	862	.031	31 - 37 - 53	-	254 x 1016	1.52	407	7.6	9.3 - 11.4 - 16.1	28	25	23	16	-	-	
	400	1150	.055	35 - 43 - 61	14		2.03	543	13.6	10.7 - 13.1 - 18.6	36	33	32	26	20	-	-
	500	1437	.085	39 - 48 - 68	22		2.54	678	21.2	12.0 - 14.7 - 20.8	43	40	38	34	29	16	-
	600	1724	.123	43 - 53 - 75	28		3.05	814	30.6	13.1 - 16.1 - 22.7	48	45	44	40	36	24	-
	700	2012	.167	47 - 57 - 81	34		3.56	949	41.6	14.2 - 17.4 - 24.6	52	49	48	45	42	30	-
	800	2299	.218	50 - 61 - 86	39		4.06	1085	54.3	15.2 - 18.6 - 26.3	56	53	52	50	48	36	-
	1000	2874	.341	56 - 68 - 97	47		5.08	1356	84.9	17.0 - 20.8 - 29.4	62	59	59	58	57	45	-
	1100	3161	.412	58 - 72 - 101	50		5.59	1492	102.7	17.8 - 21.8 - 30.8	65	62	62	61	61	49	-
	1200	3449	.491	61 - 75 - 106	53		6.10	1628	122.2	18.6 - 22.7 - 32.2	67	64	64	64	65	53	-
10" x 50"	300	1074	.031	34 - 42 - 59	-	254 x 1270	1.52	507	7.6	10.4 - 12.7 - 18.0	29	26	24	16	-	-	
	400	1433	.055	39 - 48 - 68	15		2.03	676	13.6	12.0 - 14.7 - 20.7	37	34	33	27	20	-	
	500	1791	.085	44 - 54 - 76	23		2.54	845	21.2	13.4 - 16.4 - 23.2	43	40	39	34	30	17	
	600	2149	.123	48 - 59 - 84	29		3.05	1014	30.6	14.7 - 18.0 - 25.4	48	45	45	41	37	25	
	700	2507	.167	52 - 64 - 90	35		3.56	1183	41.6	15.8 - 19.4 - 27.4	53	50	49	46	43	31	
	800	2865	.218	56 - 68 - 96	39		4.06	1352	54.3	16.9 - 20.7 - 29.3	57	54	53	51	49	37	
	900	3223	.276	59 - 72 - 102	44		4.57	1521	68.7	18.0 - 22.0 - 31.1	60	57	57	55	54	42	
	1100	3940	.412	65 - 80 - 113	51		5.59	1859	102.7	19.8 - 24.3 - 34.4	65	62	62	62	62	50	
	1200	4298	.491	68 - 84 - 118	54		6.10	2028	122.2	20.7 - 25.4 - 35.9	68	65	65	65	65	54	
10" x 60"	300	1287	.031	37 - 46 - 65	-	254 x 1524	1.52	607	7.6	11.3 - 13.9 - 19.6	30	27	25	17	-	-	
	400	1716	.055	43 - 53 - 75	16		2.03	810	13.6	13.1 - 16.0 - 22.7	38	35	33	27	21	-	
	500	2145	.085	48 - 59 - 83	23		2.54	1012	21.2	14.6 - 17.9 - 25.4	44	41	40	35	30	18	
	600	2573	.123	53 - 65 - 91	30		3.05	1215	30.6	16.0 - 19.6 - 27.8	49	46	45	42	38	25	
	700	3002	.167	57 - 70 - 99	35		3.56	1417	41.6	17.3 - 21.2 - 30.0	54	51	50	47	44	32	
	800	3431	.218	61 - 75 - 106	40		4.06	1619	54.3	18.5 - 22.7 - 32.1	57	54	54	52	49	38	
	1000	4289	.341	68 - 83 - 118	48		5.08	2024	84.9	20.7 - 25.4 - 35.9	64	61	60	60	59	47	
	1100	4718	.412	71 - 88 - 124	51		5.59	2227	102.7	21.7 - 26.6 - 37.6	66	63	63	63	63	51	
	1200	5147	.491	75 - 91 - 129	55		6.10	2429	122.2	22.7 - 27.8 - 39.3	69	66	66	66	66	55	
10" x 70"	300	1499	.031	40 - 49 - 70	-	254 x 1778	1.52	707	7.6	12.2 - 15.0 - 21.2	30	27	26	18	-	-	
	400	1999	.055	47 - 57 - 81	16		2.03	943	13.6	14.1 - 17.3 - 24.5	39	36	34	28	22	-	
	500	2498	.085	52 - 64 - 90	24		2.54	1179	21.2	15.8 - 19.4 - 27.4	45	42	41	36	31	18	
	600	2998	.123	57 - 70 - 99	31		3.05	1415	30.6	17.3 - 21.2 - 30.0	50	47	46	42	38	26	
	700	3498	.167	62 - 75 - 107	36		3.56	1651	41.6	18.7 - 22.9 - 32.4	54	51	51	48	45	32	
	800	3997	.218	66 - 81 - 114	41		4.06	1886	54.3	20.0 - 24.5 - 34.6	58	55	54	52	50	38	
	1000	4996	.341	74 - 90 - 127	49		5.08	2358	84.9	22.4 - 27.4 - 38.7	64	61	61	60	59	48	
	1100	5496	.412	77 - 94 - 134	52		5.59	2594	102.7	23.4 - 28.7 - 40.6	67	64	64	64	63	52	
	1200	5996	.491	81 - 99 - 140	55		6.10	2830	122.2	24.5 - 30.0 - 42.4	69	66	66	67	67	55	

NOTES: Throw values are given for terminal velocities of 150, 100, and 50 FPM (0.75, 0.50, and 0.25 m/s). Throw values are given for isothermal conditions. NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re 10⁻¹² Watts. Sound is based on a 0° spread; for 20° spread, add 4 NC; for 40° spread, add 9 NC. Throw is based on a 15° upward deflection; for 0° deflection, multiply throws by 1.2; for 30° deflection, multiply by 0.8. Dash in space denotes a NC or dB value of less than 10. 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.

INDUSTRIAL GRILLES & LOUVERS

PERFORMANCE DATA | 12" LOUVER (NO DAMPER)

LISTED SIZE (H x W)	IP DATA				NC	METRIC SIZE (H x W)	METRIC DATA				OCTAVE BAND, dB					
	DUCT VEL	AIR FLOW	Pt	THROW			DUCT VEL	AIR FLOW	Pt	THROW						
	in.	FPM	CFM	"WG ft			mm	m/s	L/s	Pa	m	2	3	4	5	6
12" x 20"	300	524	.029	22 - 29 - 41	-	305 x 508	1.52	247	7.1	6.7 - 8.9 - 12.5	26	23	22	14	-	-
	400	698	.051	27 - 34 - 48	12		2.03	330	12.7	8.4 - 10.2 - 14.5	34	31	30	24	18	-
	500	873	.080	31 - 38 - 53	20		2.54	412	19.8	9.3 - 11.4 - 16.2	41	38	37	32	27	14
	600	1047	.115	34 - 41 - 58	27		3.05	494	28.6	10.2 - 12.5 - 17.7	46	43	42	38	34	22
	700	1222	.156	36 - 45 - 63	32		3.56	577	38.9	11.1 - 13.5 - 19.1	50	47	46	44	41	29
	800	1396	.204	39 - 48 - 67	37		4.06	659	50.8	11.8 - 14.5 - 20.5	54	51	50	48	46	34
	1000	1746	.319	43 - 53 - 75	45		5.08	824	79.4	13.2 - 16.2 - 22.9	60	57	57	56	55	44
	1200	2095	.459	48 - 58 - 82	51		6.10	989	114.3	14.5 - 17.7 - 25.1	65	62	62	63	63	51
1400	2444	.625	51 - 63 - 89	57	7.11	1153	155.5	15.6 - 19.1 - 27.1	69	66	67	68	69	58		
12" x 30"	300	778	.029	29 - 36 - 50	-	305 x 762	1.52	367	7.1	8.8 - 10.8 - 15.3	28	25	23	15	-	-
	400	1037	.051	33 - 41 - 58	14		2.03	489	12.7	10.2 - 12.5 - 17.6	36	33	31	25	19	-
	500	1296	.080	37 - 46 - 65	22		2.54	612	19.8	11.4 - 13.9 - 19.7	42	39	38	33	28	16
	600	1555	.115	41 - 50 - 71	28		3.05	734	28.6	12.5 - 15.3 - 21.6	47	44	43	40	36	23
	700	1814	.156	44 - 54 - 77	33		3.56	856	38.9	13.5 - 16.5 - 23.3	52	49	48	45	42	30
	800	2074	.204	47 - 58 - 82	38		4.06	979	50.8	14.4 - 17.6 - 24.9	55	52	52	50	48	36
	1000	2592	.319	53 - 65 - 92	46		5.08	1223	79.4	16.1 - 19.7 - 27.9	62	59	58	58	57	45
	1200	3110	.459	58 - 71 - 100	53		6.10	1468	114.3	17.6 - 21.6 - 30.5	67	64	64	64	64	53
1400	3629	.625	63 - 77 - 109	58	7.11	1713	155.5	19.0 - 23.3 - 33.0	71	68	68	69	70	59		
12" x 40"	300	1031	.029	33 - 41 - 58	-	305 x 1016	1.52	487	7.1	10.2 - 12.4 - 17.6	29	26	24	16	-	-
	400	1375	.051	39 - 47 - 67	15		2.03	649	12.7	11.7 - 14.4 - 20.3	37	34	33	26	20	-
	500	1719	.080	43 - 53 - 75	23		2.54	811	19.8	13.1 - 16.1 - 22.7	43	40	39	34	29	17
	600	2063	.115	47 - 58 - 82	29		3.05	974	28.6	14.4 - 17.6 - 24.9	48	45	44	41	37	24
	700	2407	.156	51 - 62 - 88	35		3.56	1136	38.9	15.5 - 19.0 - 26.9	53	50	49	46	43	31
	800	2751	.204	55 - 67 - 94	39		4.06	1298	50.8	16.6 - 20.3 - 28.7	56	53	53	51	49	37
	1000	3438	.319	61 - 75 - 106	47		5.08	1623	79.4	18.5 - 22.7 - 32.1	63	60	59	59	58	46
	1200	4126	.459	67 - 82 - 116	54		6.10	1947	114.3	20.3 - 24.9 - 35.2	68	65	65	65	65	54
1300	4470	.539	70 - 85 - 120	57	6.60	2110	134.1	21.1 - 25.9 - 36.6	70	67	67	68	68	57		
12" x 50"	300	1285	.029	37 - 46 - 65	-	305 x 1270	1.52	607	7.1	11.3 - 13.9 - 19.6	30	27	25	17	-	-
	400	1714	.051	43 - 53 - 75	16		2.03	809	12.7	13.1 - 16.0 - 22.7	38	35	33	27	21	-
	500	2142	.080	48 - 59 - 83	23		2.54	1011	19.8	14.6 - 17.9 - 25.4	44	41	40	35	30	18
	600	2571	.115	53 - 65 - 91	30		3.05	1213	28.6	16.0 - 19.6 - 27.8	49	46	45	42	38	25
	700	2999	.156	57 - 70 - 99	35		3.56	1415	38.9	17.3 - 21.2 - 30.0	54	51	50	47	44	32
	800	3428	.204	61 - 75 - 105	40		4.06	1618	50.8	18.5 - 22.7 - 32.1	57	54	54	52	49	37
	1000	4285	.319	68 - 83 - 118	48		5.08	2022	79.4	20.7 - 25.4 - 35.9	64	61	60	60	59	47
	1200	5142	.459	75 - 91 - 129	55		6.10	2427	114.3	22.7 - 27.8 - 39.3	69	66	66	66	66	55
1300	5570	.539	78 - 95 - 134	57	6.60	2629	134.1	23.6 - 28.9 - 40.9	71	68	68	69	69	58		
12" x 60"	300	1539	.029	41 - 50 - 71	-	305 x 1524	1.52	726	7.1	12.4 - 15.2 - 21.5	31	28	26	18	-	-
	400	2052	.051	47 - 58 - 82	16		2.03	969	12.7	14.3 - 17.5 - 24.8	39	36	34	28	22	-
	500	2566	.080	53 - 65 - 91	24		2.54	1211	19.8	16.0 - 19.6 - 27.7	45	42	41	36	31	18
	600	3079	.115	58 - 71 - 100	31		3.05	1453	28.6	17.5 - 21.5 - 30.4	50	47	46	42	38	26
	700	3592	.156	62 - 76 - 108	36		3.56	1695	38.9	19.0 - 23.2 - 32.8	54	51	51	48	45	33
	800	4105	.204	67 - 82 - 115	41		4.06	1937	50.8	20.3 - 24.8 - 35.1	58	55	55	52	50	38
	1000	5131	.319	75 - 91 - 129	49		5.08	2422	79.4	22.7 - 27.7 - 39.2	64	61	61	60	59	48
	1100	5644	.386	78 - 96 - 135	52		5.59	2664	96.0	23.8 - 29.1 - 41.1	67	64	64	64	63	52
1200	6157	.459	82 - 100 - 141	55	6.10	2906	114.3	24.8 - 30.4 - 43.0	69	66	66	67	67	55		
12" x 70"	300	1793	.029	44 - 54 - 76	-	305 x 1778	1.52	846	7.1	13.4 - 16.4 - 23.2	31	28	26	18	11	-
	400	2391	.051	51 - 62 - 88	17		2.03	1128	12.7	15.5 - 18.9 - 26.8	39	36	35	29	22	-
	500	2989	.080	57 - 70 - 98	25		2.54	1411	19.8	17.3 - 21.2 - 29.9	45	42	41	36	32	19
	600	3586	.115	62 - 76 - 108	31		3.05	1693	28.6	18.9 - 23.2 - 32.8	51	48	47	43	39	27
	700	4184	.156	67 - 82 - 117	37		3.56	1975	38.9	20.5 - 25.1 - 35.4	55	52	51	48	45	33
	800	4782	.204	72 - 88 - 125	41		4.06	2257	50.8	21.9 - 26.8 - 37.9	59	56	55	53	51	39
	900	5380	.258	76 - 93 - 132	46		4.57	2539	64.3	23.2 - 28.4 - 40.2	62	59	59	57	56	44
	1100	6575	.386	84 - 103 - 146	53		5.59	3103	96.0	25.6 - 31.4 - 44.4	68	65	65	64	64	52
1200	7173	.459	88 - 108 - 153	56	6.10	3385	114.3	26.8 - 32.8 - 46.4	70	67	67	67	67	56		

NOTES: See notes on the next page.

PERFORMANCE DATA | 15" LOUVER (NO DAMPER)

LISTED SIZE (H x W)	IP DATA				NC	METRIC SIZE (H x W)	METRIC DATA				OCTAVE BAND, dB						
	DUCT VEL	AIR FLOW	Pt	THROW			DUCT VEL	AIR FLOW	Pt	THROW	2	3	4	5	6	7	
	in.	FPM	CFM	"WG			ft	mm	m/s	L/s	Pa	m					
15" x 15"	300	494	.024	19 - 28 - 40	-	381 x 381	1.52	233	6.0	5.7 - 8.6 - 12.2	26	23	21	14	-	-	
	400	659	.043	25 - 33 - 46	12		2.03	311	10.7	7.6 - 9.9 - 14.1	34	31	30	24	18	-	
	500	824	.067	30 - 37 - 52	20		2.54	389	16.7	9.1 - 11.1 - 15.7	41	38	36	32	27	14	
	600	989	.097	33 - 40 - 57	27		3.05	467	24.1	9.9 - 12.2 - 17.2	46	43	42	38	34	22	
	700	1154	.132	35 - 43 - 61	32		3.56	544	32.8	10.7 - 13.2 - 18.6	50	47	46	44	41	29	
	800	1318	.172	38 - 46 - 65	37		4.06	622	42.9	11.5 - 14.1 - 19.9	54	51	50	48	46	34	
	1000	1648	.269	42 - 52 - 73	45		5.08	778	67.0	12.8 - 15.7 - 22.2	60	57	57	56	55	44	
	1200	1978	.387	46 - 57 - 80	51		6.10	933	96.4	14.1 - 17.2 - 24.4	65	62	62	63	63	51	
	1400	2307	.527	50 - 61 - 87	57		7.11	1089	131.3	15.2 - 18.6 - 26.3	69	66	67	68	69	58	
15" x 20"	300	653	.024	25 - 33 - 46	-	381 x 508	1.52	308	6.0	7.6 - 9.9 - 14.0	27	24	22	15	-	-	
	400	870	.043	31 - 38 - 53	13		2.03	411	10.7	9.3 - 11.4 - 16.2	35	32	31	25	19	-	
	500	1088	.067	34 - 42 - 59	21		2.54	513	16.7	10.4 - 12.8 - 18.1	42	39	37	33	28	15	
	600	1305	.097	38 - 46 - 65	27		3.05	616	24.1	11.4 - 14.0 - 19.8	47	44	43	39	35	23	
	700	1523	.132	41 - 50 - 70	33		3.56	719	32.8	12.3 - 15.1 - 21.4	51	48	47	44	42	29	
	800	1740	.172	43 - 53 - 75	38		4.06	821	42.9	13.2 - 16.2 - 22.8	55	52	51	49	47	35	
	1000	2175	.269	49 - 59 - 84	46		5.08	1027	67.0	14.7 - 18.1 - 25.5	61	58	58	57	56	45	
	1200	2610	.387	53 - 65 - 92	52		6.10	1232	96.4	16.2 - 19.8 - 28.0	66	63	63	63	64	52	
	1400	3045	.527	57 - 70 - 99	58		7.11	1437	131.3	17.5 - 21.4 - 30.2	70	67	68	69	70	59	
15" x 25"	300	811	.024	30 - 36 - 51	-	381 x 635	1.52	383	6.0	9.0 - 11.0 - 15.6	28	25	23	15	-	-	
	400	1081	.043	34 - 42 - 59	14		2.03	510	10.7	10.4 - 12.7 - 18.0	36	33	32	26	19	-	
	500	1351	.067	38 - 47 - 66	22		2.54	638	16.7	11.6 - 14.2 - 20.1	42	39	38	33	29	16	
	600	1622	.097	42 - 51 - 73	28		3.05	765	24.1	12.7 - 15.6 - 22.1	47	44	44	40	36	24	
	700	1892	.132	45 - 55 - 78	34		3.56	893	32.8	13.8 - 16.8 - 23.8	52	49	48	45	42	30	
	800	2162	.172	48 - 59 - 84	38		4.06	1020	42.9	14.7 - 18.0 - 25.5	55	52	52	50	48	36	
	1000	2703	.269	54 - 66 - 94	46		5.08	1276	67.0	16.4 - 20.1 - 28.5	62	59	59	58	57	45	
	1200	3243	.387	59 - 73 - 103	53		6.10	1531	96.4	18.0 - 22.1 - 31.2	67	64	64	64	64	53	
	1300	3513	.455	62 - 76 - 107	56		6.60	1658	113.2	18.7 - 23.0 - 32.5	69	66	66	67	68	56	
15" x 30"	300	969	.024	32 - 40 - 56	-	381 x 762	1.52	457	6.0	9.8 - 12.1 - 17.0	29	26	24	16	-	-	
	400	1292	.043	37 - 46 - 65	14		2.03	610	10.7	11.4 - 13.9 - 19.7	37	34	32	26	20	-	
	500	1615	.067	42 - 51 - 72	22		2.54	762	16.7	12.7 - 15.6 - 22.0	43	40	39	34	29	17	
	600	1938	.097	46 - 56 - 79	29		3.05	915	24.1	13.9 - 17.0 - 24.1	48	45	44	40	37	24	
	700	2261	.132	49 - 61 - 86	34		3.56	1067	32.8	15.0 - 18.4 - 26.0	52	49	49	46	43	31	
	800	2584	.172	53 - 65 - 92	39		4.06	1220	42.9	16.1 - 19.7 - 27.8	56	53	53	51	48	36	
	1000	3230	.269	59 - 72 - 102	47		5.08	1524	67.0	18.0 - 22.0 - 31.1	62	59	59	58	58	46	
	1200	3876	.387	65 - 79 - 112	53		6.10	1829	96.4	19.7 - 24.1 - 34.1	67	64	65	65	65	54	
	1300	4199	.455	67 - 83 - 117	56		6.60	1982	113.2	20.5 - 25.1 - 35.5	70	67	67	68	68	57	

NOTES: Throw values are given for terminal velocities of 150, 100, and 50 FPM (0.75, 0.50, and 0.25 m/s). Throw values are given for isothermal conditions. NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re 10⁻¹² Watts. Sound is based on a 0° spread; for 20° spread, add 4 NC; for 40° spread, add 9 NC. Throw is based on a 15° upward deflection; for 0° deflection, multiply throws by 1.2; for 30° deflection, multiply by 0.8. Dash in space denotes a NC or dB value of less than 10. 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.

INDUSTRIAL GRILLES & LOUVERS

PERFORMANCE DATA | 15" LOUVER (NO DAMPER)

LISTED SIZE (H x W)	IP DATA				NC	METRIC SIZE (H x W)	METRIC DATA				OCTAVE BAND, dB						
	DUCT VEL	AIR FLOW	Pt	THROW			DUCT VEL	AIR FLOW	Pt	THROW							
	in.	FPM	CFM	"WG			ft	mm	m/s	L/s	Pa	m	2	3	4	5	6
15" x 40"	300	1285	.024	37 - 46 - 65	-	381 x 1016	1.52	607	6.0	11.3 - 13.9 - 19.6	30	27	25	17	-	-	
	400	1714	.043	43 - 53 - 75	16		2.03	809	10.7	13.1 - 16.0 - 22.7	38	35	33	27	21	-	-
	500	2142	.067	48 - 59 - 83	23		2.54	1011	16.7	14.6 - 17.9 - 25.4	44	41	40	35	30	18	-
	600	2571	.097	53 - 65 - 91	30		3.05	1213	24.1	16.0 - 19.6 - 27.8	49	46	45	42	38	25	-
	700	2999	.132	57 - 70 - 99	35		3.56	1415	32.8	17.3 - 21.2 - 30.0	54	51	50	47	44	32	-
	800	3428	.172	61 - 75 - 105	40		4.06	1618	42.9	18.5 - 22.7 - 32.1	57	54	54	52	49	37	-
	1000	4285	.269	68 - 83 - 118	48		5.08	2022	67.0	20.7 - 25.4 - 35.9	64	61	60	60	59	47	-
	1100	4713	.325	71 - 87 - 124	51		5.59	2224	81.0	21.7 - 26.6 - 37.6	66	63	63	63	62	51	-
	1200	5142	.387	75 - 91 - 129	55		6.10	2427	96.4	22.7 - 27.8 - 39.3	69	66	66	66	66	55	-
15" x 50"	300	1602	.024	42 - 51 - 72	-	381 x 1270	1.52	756	6.0	12.7 - 15.5 - 21.9	31	28	26	18	-	-	
	400	2136	.043	48 - 59 - 83	16		2.03	1008	10.7	14.6 - 17.9 - 25.3	39	36	34	28	22	-	
	500	2670	.067	54 - 66 - 93	24		2.54	1260	16.7	16.3 - 20.0 - 28.3	45	42	41	36	31	18	
	600	3204	.097	59 - 72 - 102	31		3.05	1512	24.1	17.9 - 21.9 - 31.0	50	47	46	42	39	26	
	700	3738	.132	64 - 78 - 110	36		3.56	1764	32.8	19.3 - 23.7 - 33.5	54	51	51	48	45	33	
	800	4271	.172	68 - 83 - 118	41		4.06	2016	42.9	20.7 - 25.3 - 35.8	58	55	55	53	50	38	
	900	4805	.218	72 - 88 - 125	45		4.57	2268	54.2	21.9 - 26.8 - 38.0	61	58	58	57	55	43	
	1100	5873	.325	80 - 98 - 138	52		5.59	2772	81.0	24.2 - 29.7 - 42.0	67	64	64	64	63	52	
	1200	6407	.387	83 - 102 - 144	55		6.10	3024	96.4	25.3 - 31.0 - 43.8	69	66	67	67	67	55	
15" x 60"	300	1918	.024	46 - 56 - 79	-	381 x 1524	1.52	905	6.0	13.8 - 17.0 - 24.0	31	28	27	19	11	-	
	400	2558	.043	53 - 64 - 91	17		2.03	1207	10.7	16.0 - 19.6 - 27.7	39	36	35	29	23	-	
	500	3197	.067	59 - 72 - 102	25		2.54	1509	16.7	17.9 - 21.9 - 31.0	46	43	42	37	32	19	
	600	3836	.097	64 - 79 - 112	31		3.05	1811	24.1	19.6 - 24.0 - 33.9	51	48	47	43	39	27	
	700	4476	.132	70 - 85 - 121	37		3.56	2112	32.8	21.2 - 25.9 - 36.6	55	52	51	49	46	33	
	800	5115	.172	74 - 91 - 129	42		4.06	2414	42.9	22.6 - 27.7 - 39.2	59	56	55	53	51	39	
	1000	6394	.269	83 - 102 - 144	50		5.08	3018	67.0	25.3 - 31.0 - 43.8	65	62	62	61	60	48	
	1100	7033	.325	87 - 107 - 151	53		5.59	3319	81.0	26.5 - 32.5 - 45.9	68	65	65	64	64	52	
	1200	7673	.387	91 - 112 - 158	56		6.10	3621	96.4	27.7 - 33.9 - 48.0	70	67	67	68	68	56	
15" x 70"	300	2235	.024	49 - 60 - 85	-	381 x 1778	1.52	1055	6.0	14.9 - 18.3 - 25.9	32	29	27	19	11	-	
	400	2979	.043	57 - 70 - 98	18		2.03	1406	10.7	17.3 - 21.1 - 29.9	40	37	36	29	23	-	
	500	3724	.067	63 - 78 - 110	26		2.54	1758	16.7	19.3 - 23.6 - 33.4	46	43	42	37	32	20	
	600	4469	.097	70 - 85 - 120	32		3.05	2109	24.1	21.1 - 25.9 - 36.6	51	48	48	44	40	27	
	700	5214	.132	75 - 92 - 130	38		3.56	2461	32.8	22.8 - 28.0 - 39.5	56	53	52	49	46	34	
	800	5959	.172	80 - 98 - 139	42		4.06	2812	42.9	24.4 - 29.9 - 42.3	60	57	56	54	52	40	
	1000	7449	.269	90 - 110 - 155	50		5.08	3515	67.0	27.3 - 33.4 - 47.3	66	63	63	62	61	49	
	1100	8194	.325	94 - 115 - 163	54		5.59	3867	81.0	28.6 - 35.1 - 49.6	68	65	65	65	65	53	
	1200	8938	.387	98 - 120 - 170	57		6.10	4218	96.4	29.9 - 36.6 - 51.8	71	68	68	68	68	57	

NOTES: Throw values are given for terminal velocities of 150, 100, and 50 FPM (0.75, 0.50, and 0.25 m/s). Throw values are given for isothermal conditions. NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re 10⁻¹² Watts. Sound is based on a 0° spread; for 20° spread, add 4 NC; for 40° spread, add 9 NC. Throw is based on a 15° upward deflection; for 0° deflection, multiply throws by 1.2; for 30° deflection, multiply by 0.8. Dash in space denotes a NC or dB value of less than 10. 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.