

Prism | Architectural, Arcuate Plaque Face

Prism Performance Data: Horizontal Throw

IP/METRIC DATA: PRISM, 24"x24" PANEL, SQUARE NECK (NO DAMPER)

ARCHITECTURAL & PLAQUE DIFFUSERS

	IP Data					NC	Metric Data					Octave Band, dB						
	Neck Vel	Air Flow	Pt	Ps	Throw		Neck Vel	Air Flow	Pt	Ps	Throw	2	3	4	5	6	7	
	FPM	CFM	"WG	"WG	ft		m/s	L/s	Pa	Pa	m							
6" x 6"	200	50	.005	0.003	0 - 1 - 4	-	1.02	24	1.3	0.7	0.1 - 0.3 - 1.1	17	-	-	-	-	-	
	300	75	.012	0.006	1 - 2 - 6	-	1.52	35	2.9	1.5	0.3 - 0.7 - 1.7	24	15	12	-	-	-	
	500	125	.033	0.017	3 - 5 - 9	-	2.54	59	8.1	4.3	0.9 - 1.4 - 2.7	33	26	24	19	-	-	
	600	150	.047	0.025	4 - 6 - 10	11	3.05	71	11.7	6.1	1.1 - 1.7 - 3.0	37	30	29	24	13	-	
	700	175	.064	0.034	4 - 7 - 11	16	3.56	83	16.0	8.4	1.3 - 2.0 - 3.2	39	34	32	28	18	-	
	800	200	.084	0.044	5 - 8 - 11	20	4.06	94	20.9	10.9	1.5 - 2.3 - 3.4	42	36	35	32	23	12	
	900	225	.106	0.056	6 - 9 - 12	23	4.57	106	26.4	13.8	1.7 - 2.6 - 3.7	44	39	38	35	27	16	
	1000	250	.131	0.069	6 - 9 - 13	27	5.08	118	32.6	17.1	1.9 - 2.7 - 3.9	45	41	41	38	31	20	
1100	275	.158	0.083	7 - 9 - 13	30	5.59	130	39.4	20.6	2.1 - 2.9 - 4.0	47	43	43	41	34	23		
8" x 8"	200	89	.009	0.006	1 - 1 - 5	-	1.02	42	2.1	1.5	0.2 - 0.4 - 1.5	19	-	-	-	-	-	
	300	133	.019	0.014	1 - 3 - 8	-	1.52	63	4.8	3.4	0.4 - 0.9 - 2.3	26	18	14	-	-	-	
	500	222	.053	0.038	4 - 6 - 12	-	2.54	105	13.3	9.4	1.1 - 1.9 - 3.6	35	29	26	21	-	-	
	600	267	.077	0.054	5 - 8 - 13	14	3.05	126	19.1	13.5	1.5 - 2.3 - 4.0	38	33	31	26	17	-	
	700	311	.104	0.074	6 - 9 - 14	19	3.56	147	26.0	18.4	1.8 - 2.7 - 4.3	41	36	34	30	22	12	
	800	356	.136	0.096	7 - 10 - 15	23	4.06	168	34.0	24.0	2.0 - 3.1 - 4.6	43	39	37	34	27	16	
	900	400	.173	0.122	8 - 11 - 16	26	4.57	189	43.0	30.4	2.3 - 3.4 - 4.9	45	42	40	38	31	21	
	1000	444	.213	0.151	8 - 12 - 17	30	5.08	210	53.1	37.5	2.6 - 3.6 - 5.1	47	44	43	40	35	24	
1100	489	.258	0.182	9 - 13 - 18	33	5.59	231	64.2	45.4	2.8 - 3.8 - 5.4	49	46	45	43	39	28		
10" x 10"	200	139	.013	0.010	1 - 2 - 6	-	1.02	66	3.2	2.6	0.2 - 0.5 - 1.9	20	11	-	-	-	-	
	300	208	.029	0.023	2 - 4 - 9	-	1.52	98	7.1	5.7	0.5 - 1.2 - 2.9	27	20	15	-	-	-	
	500	347	.080	0.064	5 - 8 - 15	-	2.54	164	19.8	16.0	1.4 - 2.4 - 4.5	36	31	28	23	14	-	
	600	417	.115	0.092	6 - 9 - 16	16	3.05	197	28.6	23.0	1.9 - 2.9 - 5.0	39	35	32	28	20	-	
	700	486	.156	0.126	7 - 11 - 18	21	3.56	229	38.9	31.3	2.2 - 3.4 - 5.4	42	38	36	32	26	15	
	800	556	.204	0.164	8 - 13 - 19	25	4.06	262	50.8	40.9	2.6 - 3.8 - 5.7	44	41	39	36	31	20	
	900	625	.258	0.208	9 - 14 - 20	29	4.57	295	64.3	51.7	2.9 - 4.3 - 6.1	47	44	42	39	35	24	
	1000	694	.319	0.256	10 - 15 - 21	32	5.08	328	79.4	63.8	3.2 - 4.5 - 6.4	48	46	44	42	39	28	
1100	764	.386	0.310	12 - 16 - 22	35	5.59	361	96.0	77.2	3.5 - 4.8 - 6.7	50	48	47	45	42	31		
12" x 12"	200	200	.018	0.015	1 - 2 - 8	-	1.02	94	4.5	3.8	0.3 - 0.6 - 2.3	21	13	-	-	-	-	
	300	300	.040	0.035	2 - 5 - 11	-	1.52	142	10.0	8.6	0.6 - 1.4 - 3.4	28	22	17	-	-	-	
	500	500	.112	0.096	6 - 9 - 18	12	2.54	236	27.9	24.0	1.7 - 2.9 - 5.4	37	33	29	24	16	-	
	600	600	.161	0.139	8 - 11 - 20	18	3.05	283	40.1	34.6	2.3 - 3.4 - 6.0	40	36	33	29	23	12	
	700	700	.219	0.189	9 - 13 - 21	23	3.56	330	54.6	47.0	2.7 - 4.0 - 6.4	43	40	37	34	28	18	
	800	800	.287	0.247	10 - 15 - 23	27	4.06	378	71.4	61.4	3.1 - 4.6 - 6.9	46	43	40	37	33	23	
	900	900	.363	0.312	11 - 17 - 24	31	4.57	425	90.3	77.8	3.4 - 5.2 - 7.3	48	45	43	41	37	27	
	1000	1000	.448	0.386	13 - 18 - 25	34	5.08	472	111.5	96.0	3.8 - 5.4 - 7.7	49	48	46	44	41	31	
1100	1100	.542	0.466	14 - 19 - 27	37	5.59	519	134.9	116.2	4.2 - 5.7 - 8.1	51	50	48	46	45	34		
14" x 14"	200	272	.024	0.022	1 - 2 - 9	-	1.02	128	6.0	5.4	0.3 - 0.7 - 2.7	22	14	-	-	-	-	
	300	408	.054	0.048	2 - 5 - 13	-	1.52	193	13.5	12.1	0.7 - 1.6 - 4.0	29	23	18	11	-	-	
	500	681	.150	0.135	7 - 11 - 21	14	2.54	321	37.4	33.5	2.0 - 3.4 - 6.4	38	34	30	25	19	-	
	600	817	.216	0.194	9 - 13 - 23	19	3.05	385	53.8	48.2	2.7 - 4.0 - 7.0	41	38	35	31	25	15	
	700	953	.294	0.264	10 - 15 - 25	24	3.56	450	73.3	65.7	3.1 - 4.7 - 7.5	44	41	38	35	31	20	
	800	1089	.384	0.344	12 - 18 - 26	29	4.06	514	95.7	85.8	3.6 - 5.4 - 8.0	46	44	41	39	36	25	
	900	1225	.486	0.436	13 - 20 - 28	32	4.57	578	121.1	108.5	4.0 - 6.0 - 8.5	48	47	44	42	40	29	
	1000	1361	.601	0.538	15 - 21 - 30	36	5.08	642	149.5	134.0	4.5 - 6.4 - 9.0	50	49	47	45	43	33	
1100	1497	.727	0.651	16 - 22 - 31	39	5.59	707	180.9	162.1	4.9 - 6.7 - 9.4	52	51	49	48	47	37		

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 software for performance data not shown, including octave band data.

P R I S M

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