

R580RD, R5880RD Supply Performance Data
IP DATA: R580RD, R5880RD

Duct Size in	Duct Area ft ²	Nom. Size in	Duct Vel. FPM	Air Flow CFM	0-Degrees		15-Degrees		30-Degrees		NC	Octave Band					
					Pt	Throw	Pt	Throw	Pt	Throw		2	3	4	5	6	7
					"WG	ft	"WG	ft	"WG	ft							
8	0.349	6	258	90	.019	9 - 13 - 20	.025	8 - 11 - 18	.035	7 - 10 - 16	-	30	20	-	-	-	-
			517	180	.077	16 - 20 - 28	.098	15 - 18 - 25	.141	13 - 16 - 23	16	43	37	32	27	23	14
			689	240	.136	19 - 23 - 32	.175	17 - 21 - 29	.251	15 - 19 - 26	26	49	44	41	37	34	28
			861	300	.213	21 - 25 - 36	.273	19 - 23 - 33	.393	17 - 21 - 30	35	53	49	48	45	43	39
			1032	360	.306	23 - 28 - 39	.392	21 - 25 - 36	.564	19 - 23 - 32	41	57	54	54	51	50	48
10	0.545	8	321	175	.030	12 - 19 - 28	.038	11 - 16 - 25	.055	9 - 14 - 23	-	33	23	13	-	-	-
			550	300	.087	21 - 25 - 36	.111	18 - 23 - 33	.160	16 - 21 - 30	14	44	36	30	26	20	-
			780	425	.175	25 - 30 - 43	.224	22 - 27 - 39	.322	20 - 25 - 35	27	50	45	41	38	34	27
			1009	550	.293	28 - 34 - 49	.375	25 - 31 - 44	.539	23 - 28 - 40	36	55	51	50	46	44	40
			1156	630	.384	30 - 37 - 52	.492	27 - 33 - 47	.708	25 - 30 - 43	41	58	55	54	51	49	47
12	0.785	10	382	300	.042	17 - 25 - 36	.054	14 - 22 - 33	.077	12 - 19 - 30	-	36	26	17	11	-	-
			605	475	.105	26 - 32 - 45	.135	23 - 29 - 41	.194	20 - 26 - 37	15	45	38	31	27	21	11
			828	650	.197	31 - 37 - 53	.252	28 - 34 - 48	.363	25 - 31 - 43	27	51	45	41	37	34	26
			1019	800	.298	34 - 42 - 59	.382	31 - 38 - 53	.550	28 - 34 - 48	34	55	51	48	45	42	37
			1274	1000	.466	38 - 47 - 66	.597	34 - 42 - 60	.859	31 - 38 - 54	42	60	56	55	52	51	48
14	1.068	12	374	400	.040	18 - 27 - 42	.052	16 - 24 - 38	.074	14 - 20 - 34	-	36	25	15	-	-	-
			585	625	.098	29 - 37 - 52	.126	25 - 33 - 47	.181	21 - 30 - 43	13	44	36	29	24	18	-
			796	850	.182	35 - 43 - 61	.233	32 - 39 - 55	.335	29 - 35 - 50	24	51	44	39	35	30	22
			1170	1250	.393	42 - 52 - 74	.504	38 - 47 - 67	.725	35 - 43 - 60	38	58	54	52	48	46	41
			1311	1400	.493	45 - 55 - 78	.632	41 - 50 - 70	.909	37 - 45 - 64	42	60	56	55	52	50	47
16	1.395	14	430	600	.053	23 - 35 - 51	.068	20 - 30 - 46	.098	17 - 26 - 42	-	39	29	19	13	-	-
			627	875	.113	34 - 44 - 62	.145	29 - 39 - 56	.208	25 - 36 - 50	15	46	38	31	26	20	-
			753	1050	.163	39 - 48 - 67	.208	35 - 43 - 61	.300	30 - 39 - 55	21	50	43	37	32	27	18
			1111	1550	.355	47 - 58 - 82	.454	43 - 52 - 74	.653	39 - 47 - 67	35	57	52	49	46	43	37
			1290	1800	.478	51 - 62 - 88	.612	46 - 56 - 80	.881	42 - 51 - 72	40	60	56	54	51	48	44
18	1.766	16	425	750	.052	25 - 38 - 57	.066	22 - 33 - 52	.095	19 - 28 - 47	-	39	29	18	12	-	-
			566	1000	.092	34 - 47 - 66	.118	29 - 42 - 60	.170	25 - 38 - 54	11	44	36	28	22	16	-
			793	1400	.181	45 - 55 - 78	.231	41 - 50 - 70	.333	35 - 45 - 64	23	51	44	38	34	29	19
			1076	1900	.333	52 - 64 - 91	.426	47 - 58 - 82	.613	43 - 53 - 74	34	57	52	48	44	41	34
			1303	2300	.487	58 - 71 - 100	.624	52 - 64 - 90	.898	47 - 58 - 82	40	61	56	54	51	48	44
20	2.180	18	459	1000	.060	30 - 45 - 66	.077	26 - 38 - 60	.111	22 - 33 - 54	-	41	31	21	15	-	-
			596	1300	.102	39 - 53 - 75	.131	33 - 48 - 68	.188	29 - 43 - 61	12	46	37	29	24	17	-
			734	1600	.155	48 - 59 - 83	.198	41 - 53 - 75	.285	35 - 48 - 68	20	50	42	36	31	25	15
			1124	2450	.363	59 - 73 - 103	.465	54 - 66 - 93	.668	49 - 60 - 84	35	58	53	49	46	42	36
			1376	3000	.544	66 - 81 - 114	.697	60 - 73 - 103	1.002	54 - 66 - 93	42	62	58	56	53	50	46
22	2.638	20	455	1200	.059	32 - 48 - 72	.076	28 - 41 - 65	.110	24 - 36 - 59	-	41	31	21	14	-	-
			607	1600	.106	43 - 59 - 83	.135	37 - 53 - 75	.195	32 - 48 - 68	13	47	38	30	24	18	-
			758	2000	.165	53 - 66 - 93	.212	46 - 60 - 84	.304	40 - 54 - 76	21	51	43	37	32	27	16
			682	1800	.134	48 - 62 - 88	.171	41 - 56 - 80	.246	36 - 51 - 72	17	49	41	34	28	22	11
			1289	3400	.477	70 - 86 - 121	.611	63 - 78 - 110	.879	57 - 70 - 99	40	61	56	54	50	47	42
24	3.139	22	478	1500	.066	36 - 54 - 81	.084	31 - 47 - 73	.121	27 - 40 - 66	-	42	32	22	16	-	-
			637	2000	.117	48 - 66 - 93	.149	42 - 60 - 84	.215	36 - 54 - 76	14	48	39	31	26	20	-
			796	2500	.182	60 - 74 - 104	.233	52 - 67 - 94	.336	45 - 60 - 85	22	52	45	39	34	28	18
			1115	3500	.357	71 - 87 - 123	.457	64 - 79 - 111	.658	58 - 71 - 101	35	59	53	49	45	42	35
			1274	4000	.466	76 - 93 - 132	.597	69 - 84 - 119	.859	62 - 76 - 108	39	62	56	54	50	47	41
26	3.684	24	489	1800	.069	40 - 60 - 88	.088	34 - 51 - 80	.126	30 - 44 - 72	-	43	33	23	17	-	-
			651	2400	.122	53 - 72 - 102	.156	46 - 65 - 92	.225	39 - 59 - 83	15	49	40	32	27	20	-
			814	3000	.190	66 - 81 - 114	.244	57 - 73 - 103	.351	49 - 66 - 93	23	53	46	39	35	29	19
			1086	4000	.339	76 - 93 - 132	.434	69 - 84 - 119	.624	62 - 76 - 108	34	59	53	49	45	41	33
			1303	4800	.488	83 - 102 - 144	.625	75 - 92 - 130	.898	68 - 83 - 118	40	62	57	54	51	48	42

NOTES: NC values are based on octave band 2 - 7 sound power levels minus a room absorption 10dB, re 10⁻¹² Watts. Dash in space denotes a NC value less than 10. Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70. Throw values are given for terminal velocities of 150, 100, and 50 FPM (0.75, 0.50, and 0.25 m/s). Throw data assumes a free jet. For entrained jets, throw increases by approximately 30%.

R580RD, R5880RD Supply Performance Data

METRIC DATA: R580RD, R5880RD

Duct Size	Duct Area	Nom. Size	Duct Vel.	Air Flow	0-Degrees		15-Degrees		30-Degrees		NC	Octave Band					
					Pt	Throw	Pt	Throw	Pt	Throw		2	3	4	5	6	7
					Pa	m	Pa	m	Pa	m							
20	0.032	15	1.31	43	4.8	2.7 - 4.0 - 6.0	6.1	2.3 - 3.5 - 5.4	8.8	2.0 - 3.0 - 4.9	-	30	20	-	-	-	-
			2.63	85	19.1	4.9 - 6.0 - 8.5	24.5	4.4 - 5.4 - 7.7	35.2	4.0 - 4.9 - 7.0	16	43	37	32	27	23	14
			3.50	113	34.0	5.7 - 6.9 - 9.8	43.5	5.1 - 6.3 - 8.9	62.6	4.6 - 5.7 - 8.0	26	49	44	41	37	34	28
			4.38	142	53.1	6.3 - 7.8 - 11.0	68.0	5.7 - 7.0 - 9.9	97.8	5.2 - 6.3 - 9.0	35	53	49	48	45	43	39
			5.24	170	76.2	6.9 - 8.5 - 12.0	97.6	6.3 - 7.7 - 10.9	140.4	5.7 - 6.9 - 9.8	41	57	54	54	51	50	48
25	0.051	20	1.63	83	7.4	3.8 - 5.7 - 8.4	9.4	3.2 - 4.9 - 7.6	13.6	2.8 - 4.2 - 6.9	-	33	23	13	-	-	-
			2.80	142	21.7	6.3 - 7.7 - 11.0	27.8	5.6 - 7.0 - 9.9	39.9	4.8 - 6.3 - 9.0	14	44	36	30	26	20	-
			3.96	201	43.5	7.5 - 9.2 - 13.0	55.7	6.8 - 8.3 - 11.8	80.1	6.2 - 7.5 - 10.7	27	50	45	41	38	34	27
			5.13	260	72.8	8.6 - 10.5 - 14.8	93.3	7.7 - 9.5 - 13.4	134.2	7.0 - 8.6 - 12.1	36	55	51	50	46	44	40
			5.87	297	95.6	9.2 - 11.2 - 15.9	122.5	8.3 - 10.2 - 14.4	176.2	7.5 - 9.2 - 13.0	41	58	55	54	51	49	47
30	0.073	25	1.94	142	10.5	5.1 - 7.6 - 11.0	13.4	4.4 - 6.5 - 9.9	19.3	3.8 - 5.6 - 9.0	-	36	26	17	11	-	-
			3.07	224	26.2	8.0 - 9.7 - 13.8	33.6	6.9 - 8.8 - 12.5	48.3	6.0 - 8.0 - 11.3	15	45	38	31	27	21	11
			4.21	307	49.1	9.3 - 11.4 - 16.1	62.8	8.4 - 10.3 - 14.6	90.4	7.6 - 9.3 - 13.2	27	51	45	41	37	34	26
			5.18	378	74.3	10.3 - 12.6 - 17.9	95.2	9.3 - 11.4 - 16.2	136.9	8.5 - 10.4 - 14.6	34	55	51	48	45	42	37
			6.47	472	116.1	11.5 - 14.1 - 20.0	148.7	10.4 - 12.8 - 18.1	214.0	9.5 - 11.6 - 16.4	42	60	56	55	52	51	48
36	.0999	30	1.90	189	10.0	5.5 - 8.3 - 12.6	12.8	4.8 - 7.2 - 11.4	18.5	4.1 - 6.2 - 10.4	-	36	25	15	-	-	-
			2.97	295	24.5	8.7 - 11.2 - 15.8	31.4	7.5 - 10.1 - 14.3	45.1	6.4 - 9.2 - 12.9	13	44	36	29	24	18	-
			4.04	401	45.3	10.6 - 13.0 - 18.4	58.0	9.6 - 11.8 - 16.7	83.4	8.7 - 10.7 - 15.1	24	51	44	39	35	30	22
			5.94	590	97.9	12.9 - 15.8 - 22.4	125.5	11.7 - 14.3 - 20.2	180.5	10.6 - 12.9 - 18.3	38	58	54	52	48	46	41
			6.66	661	122.9	13.7 - 16.7 - 23.7	157.4	12.4 - 15.1 - 21.4	226.4	11.2 - 13.7 - 19.4	42	60	56	55	52	50	47
41	0.130	36	2.18	283	13.2	7.1 - 10.6 - 15.5	16.9	6.1 - 9.1 - 14.0	24.4	5.3 - 7.9 - 12.7	-	39	29	19	13	-	-
			3.19	413	28.1	10.3 - 13.2 - 18.7	36.0	8.9 - 12.0 - 16.9	51.8	7.7 - 10.8 - 15.3	15	46	38	31	26	20	-
			3.82	496	40.5	11.8 - 14.5 - 20.5	51.9	10.7 - 13.1 - 18.5	74.6	9.2 - 11.9 - 16.8	21	50	43	37	32	27	18
			5.64	732	88.3	14.4 - 17.6 - 24.9	113.1	13.0 - 15.9 - 22.5	162.7	11.8 - 14.4 - 20.4	35	57	52	49	46	43	37
			6.55	850	119.1	15.5 - 19.0 - 26.8	152.5	14.0 - 17.2 - 24.3	219.4	12.7 - 15.5 - 22.0	40	60	56	54	51	48	44
46	0.164	41	2.16	354	12.9	7.7 - 11.5 - 17.3	16.5	6.6 - 9.9 - 15.7	23.8	5.7 - 8.6 - 14.2	-	39	29	18	12	-	-
			2.88	472	22.9	10.2 - 14.1 - 20.0	29.4	8.8 - 12.8 - 18.1	42.3	7.6 - 11.4 - 16.4	11	44	36	28	22	16	-
			4.03	661	45.0	13.7 - 16.7 - 23.7	57.6	12.4 - 15.1 - 21.4	82.8	10.7 - 13.7 - 19.4	23	51	44	38	34	29	19
			5.47	897	82.8	15.9 - 19.5 - 27.6	106.1	14.4 - 17.6 - 24.9	152.6	13.0 - 16.0 - 22.6	34	57	52	48	44	41	34
			6.62	1085	121.4	17.5 - 21.4 - 30.3	155.4	15.8 - 19.4 - 27.4	223.6	14.3 - 17.6 - 24.8	40	61	56	54	51	48	44
51	0.203	46	2.33	472	15.1	9.0 - 13.6 - 20.0	19.3	7.8 - 11.7 - 18.1	27.7	6.7 - 10.1 - 16.4	-	41	31	21	15	-	-
			3.03	614	25.4	11.8 - 16.1 - 22.8	32.6	10.1 - 14.6 - 20.6	46.9	8.7 - 13.1 - 18.7	12	46	37	29	24	17	-
			3.73	755	38.5	14.5 - 17.9 - 25.3	49.4	12.5 - 16.2 - 22.9	71.0	10.8 - 14.6 - 20.7	20	50	42	36	31	25	15
			5.71	1156	90.3	18.1 - 22.1 - 31.3	115.7	16.4 - 20.0 - 28.3	166.5	14.8 - 18.1 - 25.6	35	58	53	49	46	42	36
			6.99	1416	135.5	20.0 - 24.5 - 34.6	173.5	18.1 - 22.2 - 31.3	249.6	16.4 - 20.1 - 28.4	42	62	58	56	53	50	46
56	0.245	51	2.31	566	14.8	9.7 - 14.6 - 21.9	19.0	8.4 - 12.6 - 19.8	27.3	7.2 - 10.8 - 17.9	-	41	31	21	14	-	-
			3.08	755	26.3	13.0 - 17.9 - 25.3	33.7	11.2 - 16.2 - 22.9	48.5	9.6 - 14.5 - 20.7	13	47	38	30	24	18	-
			3.85	944	41.1	16.2 - 20.0 - 28.3	52.7	14.0 - 18.1 - 25.6	75.8	12.1 - 16.4 - 23.2	21	51	43	37	32	27	16
			3.47	850	33.3	14.6 - 19.0 - 26.8	42.7	12.6 - 17.2 - 24.3	61.4	10.8 - 15.5 - 22.0	17	49	41	34	28	22	11
			6.55	1605	118.8	21.3 - 26.1 - 36.9	152.2	19.3 - 23.6 - 33.4	219.0	17.4 - 21.4 - 30.2	40	61	56	54	50	47	42
61	0.292	56	2.43	708	16.3	11.0 - 16.5 - 24.5	20.9	9.5 - 14.2 - 22.2	30.1	8.2 - 12.3 - 20.1	-	42	32	22	16	-	-
			3.24	944	29.0	14.7 - 20.0 - 28.3	37.2	12.7 - 18.1 - 25.6	53.5	10.9 - 16.4 - 23.2	14	48	39	31	26	20	-
			4.05	1180	45.4	18.3 - 22.4 - 31.6	58.1	15.8 - 20.2 - 28.6	83.6	13.6 - 18.3 - 25.9	22	52	45	39	34	28	18
			5.66	1652	88.9	21.6 - 26.5 - 37.4	113.9	19.5 - 23.9 - 33.9	163.8	17.7 - 21.7 - 30.6	35	59	53	49	45	42	35
			6.47	1888	116.1	23.1 - 28.3 - 40.0	148.7	20.9 - 25.6 - 36.2	214.0	18.9 - 23.2 - 32.8	39	62	56	54	50	47	41
66	0.342	61	2.48	850	17.1	12.1 - 18.1 - 26.8	21.9	10.4 - 15.6 - 24.3	31.5	9.0 - 13.5 - 22.0	-	43	33	23	17	-	-
			3.31	1133	30.4	16.1 - 21.9 - 31.0	38.9	13.9 - 19.8 - 28.0	55.9	12.0 - 17.9 - 25.4	15	49	40	32	27	20	-
			4.14	1416	47.4	20.0 - 24.5 - 34.6	60.7	17.4 - 22.2 - 31.3	87.4	15.0 - 20.1 - 28.4	23	53	46	39	35	29	19
			5.52	1888	84.3	23.1 - 28.3 - 40.0	108.0	20.9 - 25.6 - 36.2	155.3	18.9 - 23.2 - 32.8	34	59	53	49	45	41	33
			6.62	2265	121.4	25.3 - 31.0 - 43.8	155.5	22.9 - 28.0 - 39.7	223.7	20.7 - 25.4 - 35.9	40	62	57	54	51	48	42

NOTES: NC values are based on octave band 2 - 7 sound power levels minus a room absorption 10dB, re 10⁻¹² Watts. Dash in space denotes a NC value less than 10. Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70. Throw values are given for terminal velocities of 150, 100, and 50 FPM (0.75, 0.50, and 0.25 m/s). Throw data assumes a free jet. For entrained jets, throw increases by approximately 30%.

AIR NOZZLES & ROUND GRILLES

R580RD - R5880RD