



SPIRAL DUCT GRILLES

S2H, US2V, US2H Double Deflection Diffuser and S1H,
US1V, US1H Single Deflection Diffuser

Average Face Velocity		300	400	500	600	700	800	900	1000	1100	1200
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12x4 Ak .23	CFM	70	90	115	140	160	185	205	230	255	275
	Total Pressure	.008	.015	.023	.033	.045	.059	.075	.093	.112	.134
	Horizontal Throw	3-5	4-7	4-9	5-10	6-12	14-7	16-8	17-9	19-9	21-10
	Noise Criteria	-	-	-	-	-	-	-	<20	20	25

12x6 Ak .33	CFM	100	130	165	200	230	265	295	330	365	395
	Total Pressure	.008	.015	.023	.033	.045	.059	.075	.093	.112	.133
	Horizontal Throw	3-6	4-8	5-10	6-12	14-7	16-8	18-9	20-10	21-11	23-12
	Noise Criteria	-	-	-	-	-	-	-	<20	20	25

14x8 18x6 Ak .52	CFM	155	210	260	310	365	415	470	520	570	625
	Total Pressure	.008	.014	.023	.032	.044	.058	.073	.090	.109	.130
	Horizontal Throw	4-7	5-10	6-12	14-7	17-8	19-10	22-11	24-12	27-13	29-14
	Noise Criteria	-	-	-	-	-	-	<20	20	25	30

16x8 20x6 Ak .59	CFM	175	235	295	355	415	470	530	590	650	710
	Total Pressure	.008	.014	.022	.032	.044	.057	.072	.089	.108	.128
	Horizontal Throw	4-8	5-10	13-6	15-8	18-9	20-10	23-11	26-13	28-14	31-15
	Noise Criteria	-	-	-	-	-	<20	20	25	25	30

24x6 18x8 Ak .67	CFM	200	270	335	400	470	535	605	670	735	805
	Total Pressure	.008	.014	.022	.032	.044	.057	.072	.089	.108	.128
	Horizontal Throw	4-8	5-11	14-7	17-8	19-10	22-11	25-12	28-14	30-15	33-16
	Noise Criteria	-	-	-	-	<20	20	25	30	30	35

20 x 8 16 x 10 Ak .74	CFM	220	295	370	445	520	590	665	740	815	890
	Total Pressure	.008	.014	.022	.032	.043	.057	.072	.089	.107	.128
	Horizontal Throw	4-9	6-11	14-7	17-8	20-10	23-11	26-13	28-14	31-15	34-17
	Noise Criteria	-	-	-	<20	20	20	25	25	30	35

18x10 Ak .82	CFM	245	330	410	490	575	655	740	820	900	985
	Total Pressure	.008	.014	.022	.031	.042	.055	.070	.087	.105	.124
	Horizontal Throw	4-9	6-12	15-7	18-9	21-10	24-12	27-13	30-15	32-16	35-17
	Noise Criteria	-	-	-	<20	20	25	30	30	35	40

20 x 10 24 x 8 Ak .93	CFM	280	370	465	560	650	745	835	930	1025	1115
	Total Pressure	.008	.014	.022	.031	.042	.055	.070	.086	.100	.123
	Horizontal Throw	5-10	13-6	16-8	19-9	22-11	25-12	29-14	32-16	35-17	38-19
	Noise Criteria	-	-	<20	20	25	30	35	40	40	45

SD

SPIRAL DUCT GRILLES

ENGINEERING DATA

S2V, S2H, US2V, US2H Double Deflection Diffuser and
S1V, S1H, US1V, US1H Single Deflection Diffuser

Average Face Velocity		300	400	500	600	700	800	900	1000	1100	1200
24 x 10 20 x 12 Ak 1.11	CFM	335	445	555	665	775	890	1000	1110	1220	1330
	Total Pressure	.008	.014	.022	.032	.043	.055	.071	.086	.104	.123
	Horizontal Throw	10-5	14-7	17-8	21-10	24-12	28-14	31-15	34-17	38-19	41-20
	Noise Criteria	-	<20	20	25	30	30	35	40	45	45
24 x 12 Ak 1.35	CFM	405	540	675	810	945	1080	1215	1350	1485	1620
	Total Pressure	.008	.014	.022	.031	.043	.054	.071	.086	.104	.122
	Horizontal Throw	11-6	15-7	19-9	23-11	27-13	30-15	34-17	38-19	42-21	46-11
	Noise Criteria	-	<20	20	25	30	35	35	40	45	>45
30 x 12 Ak 1.67	CFM	500	670	835	1000	1170	1335	1505	1670	1835	2005
	Total Pressure	.008	.014	.022	.031	.043	.054	.071	.086	.104	.122
	Horizontal Throw	13-6	17-8	21-10	25-12	29-14	33-16	38-19	42-21	46-23	50-25
	Noise Criteria	-	20	25	30	35	40	40	45	>45	>45

NOTES

1. Total Pressure in inches water column.
2. Throw data are in feet at terminal velocities of 75 and 150 fpm, respectively.
3. Noise Criteria based on a 10 dB room attenuation (Re: 10 watts).