

# PERFORMANCE DATA

## SDS with 1/2 in. Slot Width (SDS50) and Pressurized Ceiling Plenum (Non-Ducted) – Metric Units

Slots	Total Pressure (Pa)	H V	1 1	5 3	11 7	19 12	29 20	42 36	56 39	72 50
1	Airflow (L/s)/m	H	0.1-0.2-1	0.2-1-2	0.4-1-3	1-1-3	1-2-4	1-3-4	2-3-4	2-3-4
	Throw (m)	V	1	2	3	3	4	4	4	4
	NC		-	-	-	-	16	21	25	29
2	Airflow (L/s)/m	H	0.1-0.3-1	0.4-1-3	1-2-4	2-3-5	3-4-6	3-4-6	4-5-7	4-5-7
	Throw (m)	V	2	3	4	5	5	6	6	7
	NC		-	-	-	21	28	33	38	42
3	Airflow (L/s)/m	H	0.1-0.3-1	1-2-4	2-3-6	3-4-6	4-5-7	4-6-8	5-6-9	5-7-9
	Throw (m)	V	2	4	5	6	7	7	8	8
	NC		-	-	16	25	32	38	43	47
4	Airflow (L/s)/m	H	0.2-1-2	1-2-5	2-4-6	3-5-7	4-6-8	5-6-9	6-7-10	6-7-10
	Throw (m)	V	2	4	6	7	7	8	9	9
	NC		-	-	17	25	32	38	43	47
5	Airflow (L/s)/m	H	0.3-1-2	1-3-5	3-4-7	4-5-8	5-7-9	6-7-10	6-8-11	7-8-12
	Throw (m)	V	2	5	6	7	8	9	10	11
	NC		-	-	19	28	35	41	45	50
6	Airflow (L/s)/m	H	0.5-1-3	2-3-6	3-4-8	4-6-9	5-7-10	6-8-11	7-8-12	7-9-13
	Throw (m)	V	3	5	7	8	9	10	11	11
	NC		-	-	20	29	36	41	46	50
7	Airflow (L/s)/m	H	0.5-1-3	2-3-6	3-5-8	4-6-10	5-8-11	6-8-12	7-9-13	8-10-14
	Throw (m)	V	3	5	8	9	10	11	12	13
	NC		-	-	21	30	37	43	47	51
8	Airflow (L/s)/m	H	1-2-4	2-3-7	3-5-9	5-7-10	6-8-12	7-9-13	8-10-14	8-10-15
	Throw (m)	V	3	6	8	9	10	11	12	13
	NC		-	-	22	31	37	43	48	52

**Performance Notes:**

- Tested in accordance with ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets."
- All pressures are in pascals.
- Throw values are based on a 0.9 m long active section. When only 0.3 m is active the values are 0.6 times those shown. For a 3 m or continuous length the values are 1.8 times those shown.
- Horizontal (H) throw is minimum to a terminal velocity of 0.75 m/s, middle to 0.5 m/s and maximum to 0.25 m/s.
- Throw data is based on supply air and room air being at isothermal conditions.
- Horizontal throw values are based on full-open, one direction.
- Vertical (V) throw is to a terminal velocity of 0.25 m/s.
- The NC / NR values are based on a room absorption of 10 dB, re 10<sup>-12</sup> watts and 3 m active section. The NC / NR values are 11 lower with vertical projection.
- Blanks (-) indicate an NC / NR level below 15.

**NC / NR Correction for Various Diffuser Lengths**

Length, meters	0.3	0.6	1.2	2.4	2.7	3	4.6	6.1	7.6	9.1
Supply	-16	-11	-6	-3	-2	0	+3	+5	+6	+8
Return	-10	-7	-4	-2	-1	0	+2	+3	+4	+5

\* Non-ducted performance tables can be used to approximate performance data when contractor fabricated plenums are supplied. Plenums must be sized to achieve equal velocity along the slot length. Inlets should be sized to reduce additional contribution of sound or pressure drop.

# PERFORMANCE DATA

## SDS with 3/4 in. Slot Width (SDS75) and Pressurized Ceiling Plenum (Non-Ducted) – Metric Units

Slots	Total Pressure (Pa)	H V	1 1	4 3	8 6	14 11	23 17	31 24	44 31	57 42
1	Airflow (L/s)/m	H	10	20	30	40	50	60	70	80
	Throw (m)	H	0.1-0.2-1	0.3-1-3	1-2-4	1-3-4	2-3-5	3-4-5	3-4-6	3-4-6
	Throw (m) NC	V	1 -	3 -	3 -	4 20	4 27	5 32	5 37	5 41
2	Airflow (L/s)/m	H	15	35	55	75	95	115	135	155
	Throw (m)	H	0.1-0.2-1	0.5-1-4	1-3-5	2-4-6	3-5-6	4-5-7	4-5-8	5-6-8
	Throw (m) NC	V	1 -	3 -	4 -	5 23	6 30	6 36	7 41	7 45
3	Airflow (L/s)/m	H	25	55	85	115	145	175	205	235
	Throw (m)	H	0.2-0.4-1	1-2-5	2-4-6	3-5-7	4-6-8	5-6-9	5-7-9	6-7-10
	Throw (m) NC	V	2 -	4 -	6 16	6 25	7 32	8 38	9 43	9 47
4	Airflow (L/s)/m	H	40	75	110	145	180	215	250	285
	Throw (m)	H	0.3-1-3	1-3-5	2-4-7	4-5-8	4-6-9	5-7-10	6-7-10	6-8-11
	Throw (m) NC	V	3 -	5 -	6 18	7 26	8 33	9 38	9 43	10 47
5	Airflow (L/s)/m	H	45	90	135	180	225	270	315	360
	Throw (m)	H	0.4-1-3	1-3-6	3-4-8	4-6-9	5-7-10	6-8-11	7-8-12	7-9-13
	Throw (m) NC	V	3 -	5 -	7 19	8 27	9 34	10 40	11 45	11 49
6	Airflow (L/s)/m	H	55	110	165	220	275	330	385	440
	Throw (m)	H	0.5-1-3	2-3-7	3-5-8	4-7-10	5-8-11	7-8-12	7-9-13	8-10-14
	Throw (m) NC	V	3 -	6 -	8 21	9 29	10 36	11 42	12 46	13 51
7	Airflow (L/s)/m	H	65	130	195	260	325	390	455	520
	Throw (m)	H	1-1-4	2-4-7	4-5-9	5-7-11	6-8-12	7-9-13	8-10-14	9-11-15
	Throw (m) NC	V	3 -	6 -	8 21	10 30	11 37	12 43	13 47	14 51
8	Airflow (L/s)/m	H	75	150	225	300	375	450	525	600
	Throw (m)	H	1-2-4	3-4-8	4-6-10	5-8-11	6-9-13	8-10-14	9-11-15	9-11-16
	Throw (m) NC	V	3 -	7 -	9 23	10 32	12 39	13 44	14 49	15 53

**Performance Notes:**

1. Tested in accordance with ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets."
2. All pressures are in pascals.
3. Throw values are based on a 0.9 m long active section. When only 0.3 m is active the values are 0.6 times those shown. For a 3 m or continuous length the values are 1.8 times those shown.
4. Horizontal (H) throw is minimum to a terminal velocity of 0.75 m/s, middle to 0.5 m/s and maximum to 0.25 m/s.
5. Throw data is based on supply air and room air being at isothermal conditions.
6. Horizontal throw values are based on full-open, one direction.
7. Vertical (V) throw is to a terminal velocity of 0.25 m/s.
8. The NC / NR values are based on a room absorption of 10 dB, re 10<sup>-12</sup> watts and 3 m active section. The NC / NR values are 11 lower with vertical projection.
9. Blanks (-) indicate an NC / NR level below 15.

**NC / NR Correction for Various Diffuser Lengths**

Length, meters	0.3	0.6	1.2	2.4	2.7	3	4.6	6.1	7.6	9.1
Supply	-16	-11	-6	-3	-2	0	+3	+5	+6	+8
Return	-10	-7	-4	-2	-1	0	+2	+3	+4	+5

\* Non-ducted performance tables can be used to approximate performance data when contractor fabricated plenums are supplied. Plenums must be sized to achieve equal velocity along the slot length. Inlets should be sized to reduce additional contribution of sound or pressure drop.

# PERFORMANCE DATA

## SDS with 1 in. Slot Width (SDS100) and Pressurized Ceiling Plenum (Non-Ducted) – Metric Units

Slots	Total Pressure	H V	1 1	4 2	8 5	13 8	19 12	27 16	36 22	46 28
1	cfm / ft	H	15	25	35	45	55	65	75	85
	Throw	H	0.2-0.4-2	0.5-1-3	1-2-4	2-3-4	2-3-5	3-4-5	3-4-6	4-4-6
	ft NC	V	2 -	3 -	4 -	4 19	5 25	5 30	5 34	6 38
2	cfm / ft	H	25	50	75	100	125	150	175	200
	Throw	H	0.2-0.5-2	1-2-5	2-4-6	3-5-7	4-5-7	5-6-8	5-6-9	5-7-9
	ft NC	V	2 -	4 -	5 18	6 27	7 34	7 39	8 44	8 48
3	cfm / ft	H	40	75	110	145	180	215	250	285
	Throw	H	0.4-1-3	1-3-6	3-5-7	4-6-8	5-6-9	6-7-10	6-7-10	6-8-11
	ft NC	V	3 -	5 -	6 20	7 28	8 35	9 40	9 45	10 49
4	cfm / ft	H	50	100	150	200	250	300	350	400
	Throw	H	0.5-1-4	2-4-7	4-5-8	5-7-9	6-7-10	7-8-11	7-9-12	8-9-13
	ft NC	V	3 -	6 -	7 23	8 31	9 38	10 44	11 49	12 53
5	cfm / ft	H	65	125	185	245	305	365	425	485
	Throw	H	1-2-4	2-4-7	4-6-9	5-7-10	6-8-12	7-9-13	8-10-14	8-10-15
	ft NC	V	4 -	7 -	8 24	9 32	10 39	11 44	12 49	13 53
6	cfm / ft	H	70	145	220	295	370	445	520	595
	Throw	H	1-2-4	3-4-8	4-6-10	6-8-11	7-9-13	8-10-14	9-11-15	9-11-16
	ft NC	V	4 -	7 -	9 25	10 34	12 41	13 46	14 51	15 55
7	cfm / ft	H	90	175	260	345	430	515	600	685
	Throw	H	1-2-5	3-5-9	5-7-11	6-9-12	8-10-14	9-11-15	9-11-16	10-12-17
	ft NC	V	4 -	8 -	10 26	11 35	12 41	14 47	15 52	16 56
8	cfm / ft	H	100	200	300	400	500	600	700	800
	Throw	H	1-3-5	3-5-9	5-8-11	7-9-13	8-10-15	9-11-16	10-12-17	11-13-19
	ft NC	V	4 -	8 -	10 27	12 36	13 43	15 48	16 53	17 57

### Performance Notes:

- Tested in accordance with ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets."
- All pressures are in pascals.
- Throw values are based on a 0.9 m long active section. When only 0.3 m is active the values are 0.6 times those shown. For a 3 m or continuous length the values are 1.8 times those shown.
- Horizontal (H) throw is minimum to a terminal velocity of 0.75 m/s, middle to 0.5 m/s and maximum to 0.25 m/s.
- Throw data is based on supply air and room air being at isothermal conditions.
- Horizontal throw values are based on full-open, one direction.
- Vertical (V) throw is to a terminal velocity of 0.25 m/s.
- The NC / NR values are based on a room absorption of 10 dB, re 10<sup>-12</sup> watts and 3 m active section. The NC / NR values are 11 lower with vertical projection.
- Blanks (-) indicate an NC / NR level below 15.

### NC / NR Correction for Various Diffuser Lengths

Length, meters	0.3	0.6	1.2	2.4	2.7	3	4.6	6.1	7.6	9.1
Supply	-16	-11	-6	-3	-2	0	+3	+5	+6	+8
Return	-10	-7	-4	-2	-1	0	+2	+3	+4	+5

\* Non-ducted performance tables can be used to approximate performance data when contractor fabricated plenums are supplied.

Plenums must be sized to achieve equal velocity along the slot length.

Inlets should be sized to reduce additional contribution of sound or pressure drop.

# PERFORMANCE DATA

## SDS with 1 1/2 in. Slot Width (SDS150) and Pressurized Ceiling Plenum (Non-Ducted) – Metric Units

Slots	Total Pressure	H V	4	9	14	21	30	40	54	67
			2	4	7	11	15	21	30	38
1	cfm / ft		6	10	13	16	19	23	27	31
	Throw	H	0-1-3	1-2-4	2-3-4	2-3-4	3-3-5	3-4-5	3-4-6	4-4-6
	ft	V	2	3	3	4	4	4	5	5
2	cfm / ft		12	19	24	30	36	43	50	57
	Throw	H	0-1-3	1-2-4	2-3-5	2-4-6	3-4-6	3-5-7	4-5-8	4-6-8
	ft	V	2	4	4	5	5	6	6	7
3	cfm / ft		17	27	34	43	52	61	72	82
	Throw	H	0-1-3	1-2-5	2-3-6	3-4-7	3-5-7	4-5-8	4-6-9	5-7-9
	ft	V	2	4	5	6	6	7	8	8
4	cfm / ft		22	35	44	55	67	79	93	106
	Throw	H	0-1-3	1-3-5	2-3-7	3-4-7	3-5-8	4-6-9	5-7-9	5-7-10
	ft	V	1	3	5	5	7	8	9	9
5	cfm / ft		26	42	54	67	81	96	114	129
	Throw	H	0-1-3	1-3-5	2-4-7	3-4-8	4-5-8	4-6-9	5-7-10	6-8-11
	ft	V	1	2	4	5	7	8	9	10
6	cfm / ft		31	49	64	79	95	113	134	152
	Throw	H	0-1-4	1-3-6	2-4-7	3-5-8	4-6-9	4-7-10	5-7-10	6-8-11
	ft	V	1	2	3	5	6	8	9	10
7	cfm / ft		35	57	73	91	109	130	153	174
	Throw	H	0-1-4	1-3-6	2-4-7	3-5-8	4-6-9	5-7-10	6-7-11	6-8-11
	ft	V	1	2	3	4	6	8	9	10
8	cfm / ft		40	64	82	102	123	146	172	196
	Throw	H	0-1-4	1-3-6	2-4-7	3-5-8	4-6-9	5-7-10	6-8-11	7-8-11
	ft	V	0	1	2	4	5	7	9	10
	NC		-	17	25	31	36	41	46	50

**Performance Notes:**

- Tested in accordance with ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets."
- All pressures are in w.g.
- Throw values are based on a 0.9 m long active section. When only 0.3 m is active the values are 0.94 times those shown. For a 3 m or continuous length the values are 1.33 times those shown.
- Horizontal (H) throw is minimum to a terminal velocity of 0.75 m/s, middle to 0.5 m/s and maximum to 0.25 m/s.
- Throw data is based on supply air and room air being at isothermal conditions.
- Horizontal throw values are based on full-open, one direction.
- Vertical (V) throw is to a terminal velocity of 0.25 m/s.
- The NC values are based on a room absorption of 10 dB, re 10<sup>-12</sup> watts and 3 m active section. The NC values are 11 lower with vertical projection.
- Blanks (-) indicate an NC level below 15.

**NC / NR Correction for Various Diffuser Lengths**

Length, meters	0.3	0.6	1.2	2.4	2.7	3	4.6	6.1	7.6	9.1
Supply	-18	-13	-8	-4	-2	0	+5	+7	+8	+9
Return	-12	-9	-7	-3	-1	0	+4	+5	+6	+7

\* Non-ducted performance tables can be used to approximate performance data when contractor fabricated plenums are supplied.

Plenums must be sized to achieve equal velocity along the slot length.

Inlets should be sized to reduce additional contribution of sound or pressure drop.

# PERFORMANCE DATA

## SDR50 – Metric Units

Slots	Negative SP	3	7	14	23	35	49	65	83	46
1	(L/s)/m	15	25	35	45	55	65	75	85	10
	NC	-	-	17	24	30	34	38	41	38
2	(L/s)/m	30	45	60	75	90	120	150	180	200
	NC	-	-	16	22	27	35	41	46	48
3	(L/s)/m	45	70	95	120	145	190	235	280	285
	NC	-	-	19	26	31	38	44	49	49
4	(L/s)/m	65	95	125	155	185	245	305	365	400
	NC	-	-	20	26	31	39	45	50	53
5	(L/s)/m	75	115	155	195	235	310	385	460	485
	NC	-	-	21	27	32	40	46	51	53
6	(L/s)/m	95	140	185	230	275	370	465	560	595
	NC	-	-	22	28	33	41	47	52	55
7	(L/s)/m	110	165	220	275	330	435	540	645	685
	NC	-	15	23	29	34	42	48	52	56
8	(L/s)/m	120	185	250	315	380	500	620	740	800
	NC	-	15	23	30	35	42	48	53	57

## SDR75 – Metric Units

Slots	Negative SP	2	6	14	26	40	58	79	103	46
1	(L/s)/m	15	30	45	60	75	90	105	120	10
	NC	-	-	17	25	31	36	40	44	38
2	(L/s)/m	30	60	90	120	150	180	210	240	200
	NC	-	-	20	28	34	39	43	47	48
3	(L/s)/m	45	90	135	180	225	270	315	360	285
	NC	-	-	22	30	36	41	45	49	49
4	(L/s)/m	65	125	185	245	305	365	425	485	400
	NC	-	-	24	32	38	43	47	50	53
5	(L/s)/m	70	155	230	315	390	465	540	615	485
	NC	-	-	25	34	39	44	48	52	53
6	(L/s)/m	90	185	280	375	470	565	660	755	595
	NC	-	-	26	34	40	45	50	53	55
7	(L/s)/m	105	215	325	435	545	655	765	875	685
	NC	-	15	27	35	41	46	50	54	56
8	(L/s)/m	125	250	375	500	625	750	875	1000	800
	NC	-	16	28	35	41	46	51	54	57

## SDR75 – Metric Units

Slots	Negative SP	4	9	17	26	37	51	66	84	46
1	(L/s)/m	30	45	60	75	90	105	120	135	10
	NC	-	-	18	24	29	33	37	40	38
2	(L/s)/m	65	95	125	155	185	215	245	275	200
	NC	-	-	22	28	33	37	41	44	48
3	(L/s)/m	95	140	185	230	275	320	365	410	285
	NC	-	16	24	30	34	39	42	45	49
4	(L/s)/m	125	185	245	305	365	425	485	545	400
	NC	-	17	25	31	36	40	43	47	53
5	(L/s)/m	155	235	315	395	475	555	635	715	485
	NC	-	18	27	33	38	42	46	49	53
6	(L/s)/m	185	280	375	470	565	660	755	850	595
	NC	-	19	27	33	38	43	46	49	55
7	(L/s)/m	220	330	440	550	660	770	880	990	685
	NC	-	20	28	34	39	43	47	50	56
8	(L/s)/m	250	375	500	625	750	875	1000	1125	800
	NC	-	21	28	34	39	44	47	51	57

**Performance Notes:**

- All pressures are in Pascals
- Noise criteria (NC / NR) values are based on a room absorption of 10 dB, re 10-12 watts and 3 m active section.
- Tested in accordance with ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets."
- Blanks (-) indicate an NC / NR level below 15.