

# PERFORMANCE DATA

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

Slots	Total Pressure (in. w.g.)	H V	0.005 0.003	0.019 0.012	0.043 0.029	0.075 0.050	0.117 0.080	0.170 0.144	0.225 0.155	0.290 0.200
1	Airflow (cfm/ft)		5	10	15	20	25	30	35	40
	Throw (ft.)	H V	1-1-2 2	1-2-9 6	2-5-11 9	4-9-13 11	7-10-14 12	9-10-15 14	9-11-16 15	10-12-18 16
	Sound (NC)		-	-	-	17	23	29	33	38
2	Airflow (cfm/ft)		10	20	30	40	50	60	70	80
	Throw (ft.)	H V	1-1-4 4	2-4-12 8	5-9-15 13	8-12-17 16	10-14-19 17	12-15-21 19	13-16-23 20	14-17-24 22
	Sound (NC)		-	-	-	22	28	34	38	43
3	Airflow (cfm/ft)		15	30	45	60	75	90	105	120
	Throw (ft.)	H V	1-2-7 5	3-7-15 10	7-11-18 15	10-15-21 19	13-16-23 21	15-18-25 23	16-19-27 25	27-21-29 27
	Sound (NC)		-	-	16	25	31	37	41	46
4	Airflow (cfm/ft)		20	40	60	80	100	120	140	160
	Throw (ft.)	H V	1-2-9 7	4-9-17 12	9-13-21 18	12-17-24 22	15-19-27 25	17-21-29 27	19-23-32 29	20-24-34 31
	Sound (NC)		-	-	18	27	33	39	43	48
5	Airflow (cfm/ft)		25	50	75	100	125	150	175	200
	Throw (ft.)	H V	1-3-10 7	6-10-19 14	10-15-23 20	13-19-27 25	17-22-30 28	20-24-33 30	21-26-35 32	23-27-38 35
	Sound (NC)		-	-	19	28	34	40	44	49
6	Airflow (cfm/ft)		30	60	90	120	150	180	210	240
	Throw (ft.)	H V	2-4-11 7	7-11-21 16	11-16-26 22	15-21-29 27	18-24-33 30	21-26-36 33	23-28-39 35	24-30-42 38
	Sound (NC)		-	-	20	29	35	41	45	50
7	Airflow (cfm/ft)		35	70	105	140	175	210	245	280
	Throw (ft.)	H V	3-6-16 8	8-11-23 16	12-18-28 24	16-23-32 29	20-26-36 32	23-28-39 35	25-30-42 38	26-32-45 41
	Sound (NC)		-	-	21	30	36	42	46	51
8	Airflow (cfm/ft)		40	80	120	160	200	240	280	320
	Throw (ft.)	H V	3-6-13 8	8-12-24 17	13-19-29 26	17-25-34 31	22-27-38 35	24-30-42 38	26-32-45 41	28-35-48 43
	Sound (NC)		-	-	22	31	37	43	47	52

\* 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.

### NC Correction for Various Diffuser Lengths

Length, ft	1	2	4	8	9	10	15	20	25	30
Supply	-16	-11	-6	-3	-2	0	+3	+5	+6	+8
Return	-10	-7	-4	-2	-1	0	+2	+3	+4	+5

### Example:

A model SDS 75 diffuser 4 slots wide and 15 feet long is selected for 1800 cfm of supply air. 1800 " 15 = 120 cfm per foot. From the performance chart, the NC value is 34. The NC correction for 15 feet of length for supply service is +3. The corrected NC value is 34 + 3 = 37.

### 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 in. w.g.
3. Throw values are based on a 3 ft long active section. When only 1 ft is active the values are 0.6 times those shown. For a 10 ft or continuous length the values are 1.8 times those shown.
4. Horizontal (H) throw is minimum to a terminal velocity of 150 fpm, middle to 100 fpm and maximum to 50 fpm.
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 50 fpm.
8. The NC values are based on a room absorption of 10 dB, re 10<sup>-12</sup> watts and 10 ft active section. Th NC values are 11 lower with vertical projection.
9. Blanks "-" indicate an NC level below 15.

# PERFORMANCE DATA

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

Slots	Total Pressure (in. w.g.)	H V	0.004 0.003	0.015 0.011	0.032 0.024	0.058 0.044	0.091 0.067	0.125 0.095	0.175 0.125	0.230 0.170
1	Airflow (cfm/ft)		6	12	18	24	30	36	42	48
	Throw (ft.)	H	1-1-3	1-3-9	3-6-11	5-9-13	8-10-15	9-11-16	10-12-17	11-13-19
	Sound (NC)	V	2	6	10	12	14	15	16	17
2	Airflow (cfm/ft)		12	24	36	48	60	72	84	96
	Throw (ft.)	H	1-1-5	2-5-13	5-10-16	9-13-19	11-15-21	13-16-23	14-17-25	15-19-27
	Sound (NC)	V	4	9	14	17	19	21	23	24
3	Airflow (cfm/ft)		18	36	54	72	90	108	126	144
	Throw (ft.)	H	1-2-8	4-8-16	7-12-20	11-16-23	14-18-26	16-20-28	18-22-30	19-23-32
	Sound (NC)	V	6	11	17	21	23	26	28	30
4	Airflow (cfm/ft)		24	48	72	96	120	144	168	192
	Throw (ft.)	H	1-3-10	5-10-19	10-15-23	13-19-27	16-21-30	19-23-32	21-25-35	22-27-37
	Sound (NC)	V	6	13	19	24	27	30	32	34
5	Airflow (cfm/ft)		30	60	90	120	150	180	210	240
	Throw (ft.)	H	2-3-11	6-11-21	11-16-26	15-21-30	18-24-33	21-26-36	23-28-39	25-30-42
	Sound (NC)	V	7	14	21	27	30	33	36	38
6	Airflow (cfm/ft)		36	72	108	144	180	216	252	288
	Throw (ft.)	H	2-4-12	8-12-23	12-18-28	16-23-32	20-26-36	23-28-40	25-31-43	26-33-45
	Sound (NC)	V	8	15	24	30	33	36	39	42
7	Airflow (cfm/ft)		42	84	126	168	210	252	294	336
	Throw (ft.)	H	3-6-12	9-13-25	13-20-30	18-25-35	22-28-39	25-31-43	27-33-46	29-35-49
	Sound (NC)	V	8	16	24	32	36	39	42	45
8	Airflow (cfm/ft)		48	96	144	192	240	288	336	384
	Throw (ft.)	H	4-7-14	9-14-27	14-21-32	19-27-37	24-30-42	26-33-47	29-35-49	30-37-52
	Sound (NC)	V	8	16	24	33	38	42	45	48

\* 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.

### NC Correction for Various Diffuser Lengths

Length, ft	1	2	4	8	9	10	15	20	25	30
Supply	-16	-11	-6	-3	-2	0	+3	+5	+6	+8
Return	-10	-7	-4	-2	-1	0	+2	+3	+4	+5

### Example:

A model SDS 75 diffuser 4 slots wide and 15 feet long is selected for 1800 cfm of supply air. 1800 ÷ 15 = 120 cfm per foot. From the performance chart, the NC value is 34. The NC correction for 15 feet of length for supply service is +3. The corrected NC value is 34 + 3 = 37.

### 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 in. w.g.
3. Throw values are based on a 3 ft long active section. When only 1 ft is active the values are 0.6 times those shown. For a 10 ft or continuous length the values are 1.8 times those shown.
4. Horizontal (H) throw is minimum to a terminal velocity of 150 fpm, middle to 100 fpm and maximum to 50 fpm.
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 50 fpm.
8. The NC values are based on a room absorption of 10 dB, re 10<sup>-12</sup> watts and 10 ft active section. The NC values are 11 lower with vertical projection.
9. Blanks "-" indicate an NC level below 15.

# PERFORMANCE DATA

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

Slots	Total Pressure (in. w.g.)	H V	0.004	0.016	0.037	0.064	0.098	0.140	0.195	0.250
			0.002	0.009	0.022	0.038	0.058	0.084	0.115	0.150
1	Airflow (cfm/ft)		<b>8</b>	<b>16</b>	<b>24</b>	<b>32</b>	<b>40</b>	<b>48</b>	<b>56</b>	<b>64</b>
	Throw (ft.)	H	1-1-3	2-3-11	3-8-13	6-11-15	9-12-17	11-13-19	12-14-20	12-15-22
	Sound (NC)	V	2	8	12	14	15	17	18	19
2	Airflow (cfm/ft)		<b>16</b>	<b>32</b>	<b>48</b>	<b>64</b>	<b>80</b>	<b>96</b>	<b>112</b>	<b>128</b>
	Throw (ft.)	H	1-2-6	3-6-15	6-12-19	11-15-22	14-17-24	15-19-27	16-25-28	18-22-31
	Sound (NC)	V	5	11	16	19	22	24	26	28
3	Airflow (cfm/ft)		<b>24</b>	<b>48</b>	<b>72</b>	<b>96</b>	<b>120</b>	<b>144</b>	<b>168</b>	<b>192</b>
	Throw (ft.)	H	1-3-10	4-10-19	10-16-23	13-19-27	16-21-30	19-23-32	20-25-35	22-27-37
	Sound (NC)	V	7	13	20	24	27	29	32	34
4	Airflow (cfm/ft)		<b>32</b>	<b>64</b>	<b>86</b>	<b>128</b>	<b>160</b>	<b>192</b>	<b>224</b>	<b>256</b>
	Throw (ft.)	H	2-3-11	6-11-22	12-17-27	15-22-31	20-24-34	22-27-37	24-29-40	25-31-43
	Sound (NC)	V	8	15	23	28	31	34	36	39
5	Airflow (cfm/ft)		<b>40</b>	<b>80</b>	<b>120</b>	<b>160</b>	<b>200</b>	<b>240</b>	<b>280</b>	<b>320</b>
	Throw (ft.)	H	2-4-13	8-13-24	13-20-30	18-24-34	22-27-38	24-30-42	26-32-45	28-34-48
	Sound (NC)	V	9	17	25	31	34	38	41	43
6	Airflow (cfm/ft)		<b>48</b>	<b>96</b>	<b>144</b>	<b>192</b>	<b>240</b>	<b>288</b>	<b>336</b>	<b>384</b>
	Throw (ft.)	H	3-5-14	9-14-27	15-21-32	19-27-37	24-30-42	27-32-45	29-35-49	30-37-52
	Sound (NC)	V	9	19	28	34	38	41	45	48
7	Airflow (cfm/ft)		<b>56</b>	<b>112</b>	<b>168</b>	<b>224</b>	<b>280</b>	<b>336</b>	<b>392</b>	<b>448</b>
	Throw (ft.)	H	3-7-15	10-15-28	15-23-35	21-29-40	26-32-45	29-35-49	31-38-53	33-40-56
	Sound (NC)	V	10	20	30	36	41	45	48	52
8	Airflow (cfm/ft)		<b>64</b>	<b>128</b>	<b>192</b>	<b>256</b>	<b>320</b>	<b>384</b>	<b>448</b>	<b>512</b>
	Throw (ft.)	H	4-8-16	11-16-31	16-25-37	22-31-43	28-34-48	30-37-52	33-40-56	35-43-60
	Sound (NC)	V	11	22	32	39	43	48	52	55

\* 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.

### NC Correction for Various Diffuser Lengths

Length, ft	1	2	4	8	9	10	15	20	25	30
Supply	-16	-11	-6	-3	-2	0	+3	+5	+6	+8
Return	-10	-7	-4	-2	-1	0	+2	+3	+4	+5

### Example:

A model SDS 75 diffuser 4 slots wide and 15 feet long is selected for 1800 cfm of supply air. 1800 ÷ 15 = 120 cfm per foot. From the performance chart, the NC value is 34. The NC correction for 15 feet of length for supply service is +3. The corrected NC value is 34 + 3 = 37.

### 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 in. w.g.
3. Throw values are based on a 3 ft long active section. When only 1 ft is active the values are 0.6 times those shown. For a 10 ft or continuous length the values are 1.8 times those shown.
4. Horizontal (H) throw is minimum to a terminal velocity of 150 fpm, middle to 100 fpm and maximum to 50 fpm.
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 50 fpm.
8. The NC values are based on a room absorption of 10 dB, re 10<sup>-12</sup> watts and 10 ft active section. The NC values are 11 lower with vertical projection.
9. Blanks "-" indicate an NC level below 15.

# PERFORMANCE DATA

## SDS with 1 ½ in. Slot Width (SDS150) and Pressurized Ceiling Plenum (Non-Ducted)

Slots	Total Pressure (in. w.g.)	H V	0.016 0.007	0.037 0.017	0.058 0.028	0.085 0.043	0.119 0.062	0.161 0.086	0.216 0.119	0.271 0.154
1	Airflow (cfm/ft)		<b>13</b>	<b>21</b>	<b>28</b>	<b>34</b>	<b>41</b>	<b>49</b>	<b>58</b>	<b>66</b>
	Throw (ft.)	H	1-3-8	3-7-12	6-9-13	7-10-15	9-11-16	10-12-18	11-13-19	12-14-20
	Sound (NC)	V	7	9	10	12	13	14	15	16
2	Airflow (cfm/ft)		<b>25</b>	<b>40</b>	<b>51</b>	<b>63</b>	<b>77</b>	<b>91</b>	<b>107</b>	<b>122</b>
	Throw (ft.)	H	2-4-9	4-7-14	6-9-17	8-11-19	9-14-21	11-16-23	13-18-25	15-19-27
	Sound (NC)	V	7	12	14	16	18	19	21	22
3	Airflow (cfm/ft)		<b>35</b>	<b>57</b>	<b>73</b>	<b>91</b>	<b>110</b>	<b>130</b>	<b>154</b>	<b>174</b>
	Throw (ft.)	H	2-4-10	4-8-15	7-10-20	8-12-22	10-15-24	12-18-26	14-20-29	16-22-30
	Sound (NC)	V	6	12	15	19	21	23	25	27
4	Airflow (cfm/ft)		<b>46</b>	<b>73</b>	<b>95</b>	<b>117</b>	<b>142</b>	<b>168</b>	<b>198</b>	<b>225</b>
	Throw (ft.)	H	2-4-10	4-8-17	7-11-21	9-13-24	11-16-26	13-19-29	15-22-31	17-23-33
	Sound (NC)	V	4	11	15	18	22	26	29	31
5	Airflow (cfm/ft)		<b>56</b>	<b>90</b>	<b>115</b>	<b>143</b>	<b>173</b>	<b>205</b>	<b>242</b>	<b>275</b>
	Throw (ft.)	H	2-4-11	4-9-18	7-12-23	10-14-25	12-17-28	14-20-30	16-23-33	18-25-35
	Sound (NC)	V	3	8	14	18	22	26	30	34
6	Airflow (cfm/ft)		<b>66</b>	<b>105</b>	<b>136</b>	<b>168</b>	<b>203</b>	<b>241</b>	<b>284</b>	<b>323</b>
	Throw (ft.)	H	2-3-12	4-9-19	7-12-24	10-15-26	12-18-29	15-22-31	17-24-34	20-26-36
	Sound (NC)	V	2	7	11	17	21	25	30	34
7	Airflow (cfm/ft)		<b>75</b>	<b>121</b>	<b>155</b>	<b>193</b>	<b>233</b>	<b>276</b>	<b>326</b>	<b>370</b>
	Throw (ft.)	H	1-3-13	4-9-20	6-13-24	10-16-27	13-20-29	16-23-32	18-25-35	21-26-37
	Sound (NC)	V	2	5	9	14	21	25	29	33
8	Airflow (cfm/ft)		<b>85</b>	<b>136</b>	<b>175</b>	<b>217</b>	<b>262</b>	<b>311</b>	<b>367</b>	<b>417</b>
	Throw (ft.)	H	1-3-13	4-8-21	6-14-24	10-17-27	14-21-30	16-23-32	19-25-35	22-26-37
	Sound (NC)	V	1	4	8	12	18	24	29	33

**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 in. w.g.
- Throw values are based on a 3 ft long active section. When only 1 ft is active the values are 0.94 times those shown. For a 10 ft or continuous length the values are 1.33 times those shown.
- Horizontal (H) throw is minimum to a terminal velocity of 150 fpm, middle to 100 fpm and maximum to 50 fpm.
- 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 50 fpm.
- The NC values are based on a room absorption of 10 dB, re 10<sup>-12</sup> watts and 10 ft active section. The NC values are 11 lower with vertical projection.
- Blanks "-" indicate an NC level below 15.

**NC Correction for Various Diffuser Lengths**

Length, ft	1	2	4	8	9	10	15	20	25	30
Supply	-18	-13	-8	-4	-2	0	+3	+5	+6	+8
Return	-12	-9	-7	-3	-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.

**Example:**

A model SDS150 diffusers 4 slots wide and 15 feet long is selected for 1425 cfm of supply air. 1425 ÷ 15 = 95 cfm per foot. From the performance chart, the NC value is 22. The NC correction for 15 feet of length for supply service is +3. The corrected NC value is 22 + 3 = 25.

## PERFORMANCE DATA

### SDS Return with ½ in. Slot Width (SDR50)

Slots	Negative Static Pressure (in. w.g.)	0.011	0.025	0.045	0.072	0.103	0.180	0.275	0.415
1	Flow Rate (cfm/ft)	10	15	20	25	30	40	50	60
	Sound (NC)	-	-	-	20	25	33	39	44
2	Flow Rate (cfm/ft)	20	30	40	50	60	80	100	120
	Sound (NC)	-	-	17	23	28	36	42	47
3	Flow Rate (cfm/ft)	30	45	60	75	90	120	150	180
	Sound (NC)	-	-	19	25	30	38	44	49
4	Flow Rate (cfm/ft)	40	60	80	100	120	160	200	240
	Sound (NC)	-	-	20	26	31	39	45	50
5	Flow Rate (cfm/ft)	50	75	100	125	150	200	250	300
	Sound (NC)	-	-	21	27	32	40	46	51
6	Flow Rate (cfm/ft)	60	90	120	150	180	240	300	360
	Sound (NC)	-	-	22	28	33	41	47	52
7	Flow Rate (cfm/ft)	70	105	140	175	210	280	350	420
	Sound (NC)	-	-	23	29	34	42	48	53
8	Flow Rate (cfm/ft)	80	120	160	200	240	320	400	480
	Sound (NC)	-	-	23	29	34	42	48	53

### SDS Return with ¾ in. Slot Width (SDR75)

Slots	Negative Static Pressure (in. w.g.)	0.007	0.028	0.063	0.108	0.170	0.250	0.345	0.450
1	Flow Rate (cfm/ft)	10	20	30	40	50	60	70	80
	Sound (NC)	-	-	18	26	32	37	41	45
2	Flow Rate (cfm/ft)	20	40	60	80	100	120	140	160
	Sound (NC)	-	-	21	29	35	40	44	48
3	Flow Rate (cfm/ft)	30	60	90	120	150	180	210	240
	Sound (NC)	-	-	23	31	37	42	46	50
4	Flow Rate (cfm/ft)	40	80	120	160	200	240	280	320
	Sound (NC)	-	-	24	32	38	43	47	51
5	Flow Rate (cfm/ft)	50	100	150	200	250	300	350	400
	Sound (NC)	-	-	25	33	39	44	48	52
6	Flow Rate (cfm/ft)	60	120	180	240	300	360	420	480
	Sound (NC)	-	-	26	34	40	45	49	53
7	Flow Rate (cfm/ft)	70	140	210	280	350	420	490	560
	Sound (NC)	-	16	27	35	41	46	50	54
8	Flow Rate (cfm/ft)	80	160	240	320	400	480	560	640
	Sound (NC)	-	16	27	35	41	46	50	54

### SDS Return with 1 in. Slot Width (SDR100)

Slots	Negative Static Pressure (in. w.g.)	0.018	0.040	0.070	0.108	0.160	0.215	0.280	0.450
1	Flow Rate (cfm/ft)	20	30	40	50	60	70	80	100
	Sound (NC)	-	-	19	25	30	34	38	44
2	Flow Rate (cfm/ft)	40	60	80	100	120	140	160	200
	Sound (NC)	-	-	22	28	33	37	41	47
3	Flow Rate (cfm/ft)	60	90	120	150	180	210	240	300
	Sound (NC)	-	16	24	30	35	39	43	49
4	Flow Rate (cfm/ft)	80	120	160	200	240	280	320	400
	Sound (NC)	-	17	25	31	36	40	44	50
5	Flow Rate (cfm/ft)	100	150	200	250	300	350	400	500
	Sound (NC)	-	18	26	32	37	41	45	51
6	Flow Rate (cfm/ft)	120	180	240	300	360	420	480	600
	Sound (NC)	-	19	27	33	38	42	46	52
7	Flow Rate (cfm/ft)	140	210	280	350	420	490	560	700
	Sound (NC)	-	20	28	34	39	43	47	53
8	Flow Rate (cfm/ft)	160	240	320	400	480	560	640	800
	Sound (NC)	-	20	28	34	39	43	47	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 w.g.
3. Noise Criteria (NC) values are based on a room absorption of 10 dB, re 10<sup>-12</sup> watts and 10 ft active section.
4. Blanks "-" indicate an NC level below 15.

# PERFORMANCE DATA

## SDS with SDB Plenum – ½ in. Slot Width (SDS50)

### 1 Slot

Flow Rate (cfm)			60	80	100	120	140	160	180	200	220
36 in. (4 in. Inlet)	Throw (ft.)	H	4-9-13	8-10-14	9-10-15	10-12-18	11-13-19	-	-	-	-
		V	11	13	14	16	17	-	-	-	-
	Total Pressure (in. w.g.)		0.144	0.254	0.394	0.571	0.773	-	-	-	-
48 in. (5 in. Inlet)	Throw (ft.)	H	2-8-13	5-10-16	8-12-17	11-13-19	12-13-20	12-14-22	13-16-23	-	-
		V	11	13	14	17	18	19	20	-	-
	Total Pressure (in. w.g.)		0.088	0.161	0.248	0.358	0.482	0.628	0.796	-	-
60 in. (5 in. Inlet)	Throw (ft.)	H	3-9-13	3-9-14	5-10-17	9-13-18	12-13-21	12-14-22	13-14-22	13-16-23	14-17-25
		V	10	13	14	16	17	18	20	21	22
	Total Pressure (in. w.g.)		0.043	0.079	0.122	0.176	0.238	0.310	0.392	0.486	0.587
	Sound (NC)		-	-	-	25	29	33	37	40	43

### 2 Slot

Flow Rate (cfm)			100	130	160	190	220	250	280	310	340
36 in. (5 in. Inlet)	Throw (ft.)	H	6-10-15	9-13-18	11-14-20	12-15-22	13-16-23	14-17-25	-	-	-
		V	14	16	18	20	21	22	-	-	-
	Total Pressure (in. w.g.)		0.097	0.163	0.245	0.348	0.465	0.601	-	-	-
48 in. (6 in. Inlet)	Throw (ft.)	H	10-12-16	11-13-18	12-14-20	12-16-23	13-17-24	14-18-25	16-19-26	17-20-29	17-22-30
		V	13	17	19	20	22	23	24	25	26
	Total Pressure (in. w.g.)		0.050	0.084	0.131	0.184	0.247	0.315	0.396	0.487	0.587
60 in. (7 in. Inlet)	Throw (ft.)	H	9-12-16	10-13-18	12-14-20	12-16-21	13-17-23	14-18-25	14-20-26	16-20-27	17-21-29
		V	10	14	18	20	21	22	23	25	26
	Total Pressure (in. w.g.)		0.032	0.053	0.077	0.112	0.147	0.193	0.242	0.294	0.354
	Sound (NC)		-	-	-	24	28	32	36	39	41

### 3 Slot

Flow Rate (cfm)			130	160	190	220	250	280	310	340	370
36 in. (6 in. Inlet)	Throw (ft.)	H	7-11-18	9-14-20	11-15-21	13-16-23	14-17-24	15-19-26	16-19-27	16-20-29	17-21-30
		V	15	18	19	21	22	24	25	26	27
	Total Pressure (in. w.g.)		0.072	0.112	0.158	0.211	0.270	0.339	0.417	0.502	0.593
48 in. (7 in. Inlet)	Throw (ft.)	H	11-13-18	12-14-20	13-16-22	14-17-24	14-18-25	16-19-26	17-20-28	18-22-30	18-23-31
		V	13	16	19	22	23	24	25	26	28
	Total Pressure (in. w.g.)		0.045	0.066	0.096	0.126	0.164	0.206	0.251	0.302	0.359
60 in. (8 in. Inlet)	Throw (ft.)	H	10-13-18	12-14-20	12-16-21	13-17-22	14-18-25	16-20-26	16-20-27	17-21-29	18-21-30
		V	12	14	16	20	22	23	25	26	27
	Total Pressure (in. w.g.)		0.024	0.035	0.049	0.068	0.086	0.108	0.132	0.159	0.189
	Sound (NC)		-	-	-	20	23	26	29	32	34

### 4 Slot

Flow Rate (cfm)			160	200	240	280	320	360	400	440	480
36 in. (7 in. Inlet)	Throw (ft.)	H	7-12-19	11-15-22	12-17-24	14-19-26	16-20-28	17-21-29	18-22-31	19-23-33	20-24-34
		V	18	20	22	24	25	27	28	30	31
	Total Pressure (in. w.g.)		0.061	0.096	0.138	0.190	0.248	0.311	0.385	0.465	0.553
48 in. (8 in. Inlet)	Throw (ft.)	H	5-10-20	7-14-23	11-18-24	14-19-26	17-20-29	18-22-30	19-23-32	20-24-34	20-25-36
		V	14	18	22	24	26	28	30	31	32
	Total Pressure (in. w.g.)		0.034	0.052	0.075	0.104	0.135	0.172	0.213	0.257	0.307
60 in. (10 in. Inlet)	Throw (ft.)	H	4-7-16	5-10-22	8-16-25	10-18-26	13-20-27	16-21-29	18-22-31	20-23-33	21-25-34
		V	12	16	18	21	25	27	29	30	31
	Total Pressure (in. w.g.)		0.018	0.029	0.043	0.061	0.079	0.097	0.122	0.148	0.173
	Sound (NC)		-	-	-	21	25	28	32	35	37

### Performance Notes:

1. Tested in accordance with ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets."
2. Horizontal (H) and vertical (V) throw values are measured in feet for terminal velocities of 150 fpm (minimum), 100 fpm (middle) and 50 fpm (maximum). Spread is the maximum width of the jet defined by the above terminal velocities.
3. Throw values are based on full-open, one direction.
4. Throw data is based on supply air and room air being at isothermal conditions.
5. The NC values are based on a room absorption of 10 dB, re 10<sup>-12</sup> watts and one diffuser. The NC values are 10 lower with vertical projection.
6. All pressures are in in. w.g.
7. Spread and throw data applies to Models SDB and SDBI only.
8. Blanks "-" indicate an NC level below 20.
9. Associated SDS diffuser must be specified and ordered as a separate item.

# PERFORMANCE DATA

## SDS with SDB Plenum – ¾ in. Slot Width (SDS75)

### 1 Slot

Flow Rate (cfm)			80	100	120	140	160	180	200	220	240
36 in. (4 in. Inlet)	Throw (ft.)	H	8-10-15	9-10-15	10-12-17	11-13-19	11-14-20	-	-	-	-
		V	12	14	16	17	18	-	-	-	-
	Total Pressure (in. w.g.)		0.164	0.254	0.369	0.499	0.654	-	-	-	-
48 in. (5 in. Inlet)	Throw (ft.)	H	8-10-14	10-11-17	10-12-18	11-13-19	12-14-20	12-16-22	13-16-23	13-17-24	-
		V	13	14	17	18	18	19	20	22	-
	Total Pressure (in. w.g.)		0.090	0.139	0.201	0.271	0.353	0.447	0.554	0.668	-
60 in. (6 in. Inlet)	Throw (ft.)	H	8-9-14	9-10-16	10-12-18	10-13-20	12-13-20	12-14-21	13-16-23	13-17-23	14-17-25
		V	13	14	16	17	18	20	20	21	22
	Total Pressure (in. w.g.)		0.058	0.093	0.133	0.186	0.244	0.307	0.377	0.458	0.539
	Sound (NC)		-	-	24	29	32	36	40	43	45

### 2 Slot

Flow Rate (cfm)			130	160	190	220	250	280	310	340	370
36 in. (6 in. Inlet)	Throw (ft.)	H	7-12-18	10-14-20	12-15-22	13-16-24	14-17-25	15-19-27	15-20-28	-	-
		V	16	18	19	21	23	24	25	-	-
	Total Pressure (in. w.g.)		-	0.104	0.162	0.228	0.305	0.390	0.490	0.602	-
48 in. (7 in. Inlet)	Throw (ft.)	H	5-11-18	7-14-20	11-16-23	13-17-24	14-18-25	16-19-28	16-20-29	17-22-30	18-23-31
		V	13	15	20	22	23	24	25	28	29
	Total Pressure (in. w.g.)		0.059	0.086	0.126	0.165	0.216	0.271	0.330	0.397	0.472
60 in. (8 in. Inlet)	Throw (ft.)	H	4-5-17	7-12-20	8-14-21	10-17-23	13-18-25	14-18-26	16-20-27	16-21-30	17-23-31
		V	13	16	18	21	22	23	25	26	27
	Total Pressure (in. w.g.)		0.045	0.066	0.091	0.146	0.161	0.202	0.247	0.297	0.353
	Sound (NC)		-	-	24	28	32	36	39	42	44

### 3 Slot

Flow Rate (cfm)			160	190	220	250	280	310	340	370	400
36 in. (7 in. Inlet)	Throw (ft.)	H	7-12-20	9-14-22	11-16-23	13-17-25	14-18-26	15-19-27	17-21-29	18-22-30	19-23-31
		V	17	19	21	22	23	25	27	28	29
	Total Pressure (in. w.g.)		0.073	0.107	0.140	0.183	0.230	0.280	0.336	0.400	0.466
48 in. (8 in. Inlet)	Throw (ft.)	H	5-11-20	7-17-23	10-18-24	12-18-25	14-19-28	17-20-30	18-22-30	18-23-31	19-24-34
		V	14	18	20	24	25	26	28	29	30
	Total Pressure (in. w.g.)		0.042	0.059	0.082	0.104	0.130	0.160	0.192	0.228	0.267
60 in. (10 in. Inlet)	Throw (ft.)	H	4-8-20	5-12-22	7-16-22	8-18-23	10-20-26	13-20-27	16-21-30	17-21-31	18-22-3
		V	13	16	18	20	22	26	27	29	29
	Total Pressure (in. w.g.)		0.023	0.037	0.046	0.060	0.078	0.092	0.110	0.133	0.156
	Sound (NC)		-	-	-	21	24	27	30	32	35

### 4 Slot

Flow Rate (cfm)			200	240	280	320	260	400	440	480	520
36 in. (8 in. Inlet)	Throw (ft.)	H	9-14-22	11-17-25	13-19-27	15-20-28	16-21-30	19-22-31	19-23-32	20-24-34	21-26-36
		V	18	21	24	25	27	29	30	31	33
	Total Pressure (in. w.g.)		0.062	0.090	0.124	0.161	0.205	0.254	0.307	0.366	0.428
48 in. (10 in. Inlet)	Throw (ft.)	H	6-12-24	10-16-25	12-18-28	13-20-29	14-22-31	17-24-32	18-24-35	19-25-36	23-26-37
		V	17	19	23	25	28	30	31	32	34
	Total Pressure (in. w.g.)		0.033	0.049	0.070	0.090	0.111	0.139	0.168	0.197	0.234
60 in. (10 in. Inlet)	Throw (ft.)	H	4-10-21	7-13-25	9-16-26	12-18-29	13-20-30	14-22-31	16-23-34	17-25-35	20-26-36
		V	14	17	20	22	25	27	30	31	33
	Total Pressure (in. w.g.)		0.021	0.031	0.044	0.057	0.070	0.088	0.107	0.125	0.148
	Sound (NC)		-	-	-	-	22	25	28	31	33

#### Performance Notes:

- Tested in accordance with ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets."
- Horizontal (H) and vertical (V) throw values are measured in feet for terminal velocities of 150 fpm (minimum), 100 fpm (middle) and 50 fpm (maximum). Spread is the maximum width of the jet defined by the above terminal velocities.
- Throw values are based on full-open, one direction.
- Throw data is based on supply air and room air being at isothermal conditions.
- The NC values are based on a room absorption of 10 dB, re 10<sup>-12</sup> watts and one diffuser. The NC values are 10 lower with vertical projection.
- All pressures are in in. w.g.
- Spread and throw data applies to Models SDB and SDBI only.
- Blanks "-" indicate an NC level below 20.
- Associated SDS diffuser must be specified and ordered as a separate item.

# PERFORMANCE DATA

## SDS with SDB Plenum – 1 in. Slot Width (SDS100)

### 1 Slot

Flow Rate (cfm)			100	120	140	160	180	200	220	240	260
36 in. (5 in. Inlet)	Throw (ft.)	H	6-11-15	9-12-17	11-13-19	11-14-20	12-14-20	12-15-22	-	-	-
		V	14	15	17	18	19	20	-	-	-
	Total Pressure (in. w.g.)		0.218	0.314	0.422	0.550	0.698	0.864	-	-	-
48 in. (5 in. Inlet)	Throw (ft.)	H	5-8-17	6-12-18	8-13-19	11-14-20	13-16-22	13-16-24	14-17-24	14-18-24	-
		V	14	17	18	19	20	22	22	23	-
	Total Pressure (in. w.g.)		0.108	0.155	0.209	0.273	0.346	0.428	0.517	0.615	-
60 in. (6 in. Inlet)	Throw (ft.)	H	3-7-16	5-9-18	7-12-20	8-14-20	10-14-21	12-16-22	13-16-23	14-17-25	14-18-26
		V	14	16	17	18	20	21	22	22	23
	Total Pressure (in. w.g.)		0.062	0.090	0.125	0.164	0.207	0.254	0.308	0.363	0.429
	Sound (NC)		-	-	20	24	27	30	33	36	38

### 2 Slot

Flow Rate (cfm)			160	190	220	250	280	310	340	370	400
36 in. (6 in. Inlet)	Throw (ft.)	H	7-14-20	11-15-22	13-16-23	14-17-24	15-19-26	16-19-27	17-20-28	-	-
		V	17	19	21	23	24	25	26	-	-
	Total Pressure (in. w.g.)		0.122	0.171	0.229	0.293	0.368	0.452	0.545	-	-
48 in. (7 in. Inlet)	Throw (ft.)	H	5-13-20	7-16-23	10-17-24	12-18-26	16-19-28	17-20-29	18-22-30	18-23-31	19-24-32
		V	17	19	22	23	24	26	28	29	30
	Total Pressure (in. w.g.)		0.060	0.087	0.114	0.150	0.188	0.228	0.275	0.326	0.381
60 in. (8 in. Inlet)	Throw (ft.)	H	4-9-20	5-14-22	7-17-23	9-18-25	10-20-26	13-20-29	17-21-30	18-22-31	18-22-32
		V	14	17	20	22	23	25	26	27	29
	Total Pressure (in. w.g.)		0.040	0.055	0.076	0.098	0.122	0.149	0.180	0.214	0.25
	Sound (NC)		-	-	-	21	24	27	30	32	35

### 3 Slot

Flow Rate (cfm)			190	220	250	280	310	340	370	400	430
36 in. (8 in. Inlet)	Throw (ft.)	H	8-14-21	10-16-23	11-17-25	13-19-27	15-20-28	16-21-30	16-22-31	18-23-32	19-24-33
		V	18	20	22	24	26	27	28	29	30
	Total Pressure (in. w.g.)		0.076	0.105	0.134	0.168	0.206	0.248	0.294	0.344	0.399
48 in. (10 in. Inlet)	Throw (ft.)	H	5-12-23	7-16-24	10-18-25	12-19-28	14-20-30	16-22-31	16-23-32	17-23-34	17-24-35
		V	16	18	20	23	25	26	28	29	30
	Total Pressure (in. w.g.)		0.037	0.051	0.066	0.082	0.101	0.121	0.144	0.168	0.194
60 in. (10 in. Inlet)	Throw (ft.)	H	4-8-22	5-12-23	7-14-25	8-18-26	9-20-29	12-21-31	14-21-31	16-22-33	17-23-34
		V	14	16	28	20	22	23	26	27	29
	Total Pressure (in. w.g.)		0.027	0.033	0.043	0.057	0.067	0.080	0.097	0.113	0.130
	Sound (NC)		-	-	-	-	20	23	25	28	30

### 4 Slot

Flow Rate (cfm)			240	280	320	360	400	440	480	520	560
36 in. (8 in. Inlet)	Throw (ft.)	H	9-15-25	12-17-27	13-18-28	14-21-30	15-23-32	17-24-33	20-24-34	21-25-36	22-26-37
		V	19	23	25	27	29	30	31	32	33
	Total Pressure (in. w.g.)		0.070	0.096	0.125	0.159	0.198	0.239	0.284	0.333	0.388
48 in. (10 in. Inlet)	Throw (ft.)	H	6-12-25	8-16-26	11-18-29	14-22-30	18-23-31	19-24-34	20-25-35	22-26-36	23-28-37
		V	17	20	23	25	29	30	31	32	35
	Total Pressure (in. w.g.)		0.036	0.051	0.066	0.081	0.102	0.123	0.144	0.171	0.198
60 in. (10 in. Inlet)	Throw (ft.)	H	5-9-23	7-13-26	8-14-29	9-17-29	12-20-31	14-21-33	16-22-35	20-26-36	21-26-36
		V	14	17	20	22	25	26	30	33	33
	Total Pressure (in. w.g.)		0.025	0.036	0.046	0.057	0.071	0.086	0.101	0.120	0.139
	Sound (NC)		-	-	-	-	20	23	26	28	31

#### Performance Notes:

- Tested in accordance with ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets."
- Horizontal (H) and vertical (V) throw values are measured in feet for terminal velocities of 150 fpm (minimum), 100 fpm (middle) and 50 fpm (maximum). Spread is the maximum width of the jet defined by the above terminal velocities.
- Throw values are based on full-open, one direction.
- Throw data is based on supply air and room air being at isothermal conditions.
- The NC values are based on a room absorption of 10 dB, re 10<sup>-12</sup> watts and one diffuser. The NC values are 10 lower with vertical projection.
- All pressures are in in. w.g.
- Spread and throw data applies to Models SDB and SDBI only.
- Blanks "-" indicate an NC level below 20.
- Associated SDS diffuser must be specified and ordered as a separate item.



# PERFORMANCE DATA

## SDS with SDB Plenum – 1 ½ in. Slot Width (SDS150)

### 1 Slot

Flow Rate (cfm)			120	140	160	180	200	220	240	260	280
36 in. (5 in. Inlet)	Throw (ft.)	H	13-16-23	14-17-25	15-19-26	16-20-28	17-21-30	18-22-31	19-23-32	19-24-34	20-25-35
		V	15	16	17	18	19	20	21	21	22
	Total Pressure (in. w.g.)		0.135	0.184	0.240	0.304	0.375	0.454	0.541	0.634	0.736
48 in. (6 in. Inlet)	Throw (ft.)	H	9-14-21	11-16-23	12-17-24	14-18-26	15-19-27	16-20-28	17-21-30	18-22-31	18-23-32
		V	15	16	17	18	19	20	21	22	23
	Total Pressure (in. w.g.)		0.071	0.096	0.125	0.159	0.196	0.237	0.282	0.331	0.384
60 in. (6 in. Inlet)	Throw (ft.)	H	5-9-19	7-11-20	8-12-22	9-14-23	10-16-24	11-17-26	12-19-27	14-20-28	15-20-29
		V	16	17	18	19	20	21	22	23	24
	Total Pressure (in. w.g.)		0.056	0.077	0.100	0.127	0.157	0.190	0.226	0.265	0.307
	Sound (NC)		-	19	22	26	28	31	33	36	38

### 2 Slot

Flow Rate (cfm)			190	220	250	280	310	340	370	400	430
36 in. (6 in. Inlet)	Throw (ft.)	H	14-19-27	16-20-29	18-22-30	19-23-32	20-24-34	20-25-35	21-26-37	22-27-38	23-28-40
		V	19	20	21	23	24	25	26	27	28
	Total Pressure (in. w.g.)		0.120	0.161	0.208	0.261	0.320	0.385	0.455	0.532	0.615
48 in. (8 in. Inlet)	Throw (ft.)	H	10-16-22	12-17-24	14-18-26	15-19-27	16-20-29	17-21-30	18-22-31	19-23-32	19-24-34
		V	16	17	18	19	20	21	22	23	24
	Total Pressure (in. w.g.)		0.049	0.066	0.086	0.107	0.132	0.158	0.188	0.219	0.253
60 in. (10 in. Inlet)	Throw (ft.)	H	8-12-18	9-14-20	11-15-21	12-16-22	13-16-23	14-17-24	15-18-25	15-19-26	16-19-27
		V	13	14	15	16	17	18	18	19	20
	Total Pressure (in. w.g.)		0.026	0.034	0.045	0.056	0.068	0.082	0.098	0.114	0.132
	Sound (NC)		-	-	-	-	17	19	21	23	25

### 3 Slot

Flow Rate (cfm)			220	250	280	310	340	370	400	430	460
36 in. (8 in. Inlet)	Throw (ft.)	H	12-17-29	13-20-30	15-22-32	16-24-34	18-25-36	19-26-37	21-27-39	23-28-40	24-29-41
		V	18	19	20	21	22	23	24	25	26
	Total Pressure (in. w.g.)		0.059	0.076	0.096	0.117	0.141	0.167	0.196	0.226	0.259
48 in. (10 in. Inlet)	Throw (ft.)	H	7-14-23	10-16-24	12-17-26	13-19-27	14-20-28	15-21-29	17-22-31	18-22-32	19-23-33
		V	12	13	14	15	16	16	17	18	18
	Total Pressure (in. w.g.)		0.028	0.037	0.046	0.056	0.068	0.080	0.094	0.108	0.124
60 in. (10 in. Inlet)	Throw (ft.)	H	5-11-17	6-13-18	8-14-19	9-14-20	11-15-21	13-16-22	13-16-23	14-17-24	14-17-24
		V	7	8	9	10	10	11	12	13	14
	Total Pressure (in. w.g.)		0.023	0.030	0.037	0.045	0.055	0.065	0.076	0.087	0.100
	Sound (NC)		-	-	-	-	-	17	19	21	23

### 4 Slot

Flow Rate (cfm)			280	320	360	400	440	480	520	560	600
36 in. (8 in. Inlet)	Throw (ft.)	H	13-20-30	15-23-32	17-24-34	19-26-36	21-27-38	23-28-40	24-29-41	25-30-43	26-31-44
		V	19	20	22	23	24	25	26	27	28
	Total Pressure (in. w.g.)		0.075	0.098	0.124	0.153	0.185	0.220	0.258	0.299	0.344
48 in. (10 in. Inlet)	Throw (ft.)	H	7-13-25	9-14-26	11-16-28	12-18-29	13-20-31	14-22-32	6-23-34	17-25-35	18-26-36
		V	13	15	16	16	17	18	19	19	20
	Total Pressure (in. w.g.)		0.035	0.046	0.058	0.071	0.086	0.103	0.120	0.140	0.160
60 in. (10 in. Inlet)	Throw (ft.)	H	3-7-14	4-8-16	5-9-18	6-10-20	8-11-23	8-12-25	9-13-26	10-14-27	10-15-28
		V	9	10	11	12	13	14	15	15	16
	Total Pressure (in. w.g.)		0.029	0.038	0.048	0.060	0.072	0.086	0.101	0.117	0.134
	Sound (NC)		-	-	-	16	19	21	23	25	27

#### Performance Notes:

- Tested in accordance with ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets."
- Horizontal (H) and vertical (V) throw values are measured in feet for terminal velocities of 150 fpm (minimum), 100 fpm (middle) and 50 fpm (maximum). Spread is the maximum width of the jet defined by the above terminal velocities.
- Throw values are based on full-open, one direction.
- Throw data is based on supply air and room air being at isothermal conditions.
- The NC values are based on a room absorption of 10 dB, re 10<sup>-12</sup> watts and one diffuser. The NC values are 10 lower with vertical projection.
- All pressures are in in. w.g.
- Spread and throw data applies to Models SDB and SDBI only.
- Blanks "-" indicate an NC level below 15.
- Associated SDS diffuser must be specified and ordered as a separate item.

# PERFORMANCE DATA

## SDS with SDA Plenum – ½ in. Slot Width (SDS50)

### 1 Slot

Flow Rate (cfm)			60	80	100	120	140	160	180	200	220
Nom. Length	Throw (ft.)	H	3-5-9	4-7-11	5-8-12	6-9-13	8-10-14	9-11-15	9-11-16	10-12-17	10-12-18
		V	2-4-7	3-5-8	4-6-9	5-7-10	5-8-11	6-8-11	7-9-12	7-9-13	8-10-14
	Spread (ft.)	H	4-7-13	6-10-16	7-12-18	9-13-19	12-15-21	13-16-22	13-16-24	15-18-25	15-18-27
		V	3-5-9	4-6-10	5-8-12	6-9-13	6-10-14	8-10-14	9-12-16	9-12-17	10-13-18
36 in. (4 in. Inlet)	Total Pressure (in. w.g.)		0.144	0.254	0.394	0.571	0.773	-	-	-	-
	Sound (NC)		23	32	39	45	49	-	-	-	-
48 in. (5 in. Inlet)	Total Pressure (in. w.g.)		0.088	0.161	0.254	0.358	0.482	0.628	0.796	-	-
	Sound (NC)		-	28	35	40	45	49	52	-	-
60 in. (5 in. Inlet)	Total Pressure (in. w.g.)		0.043	0.079	0.122	0.176	0.238	0.310	0.392	0.486	0.587
	Sound (NC)		-	-	-	25	29	33	37	40	43

### 2 Slot

Flow Rate (cfm)			100	130	160	190	220	250	280	310	340
Nom. Length	Throw (ft.)	H	4-6-11	5-7-12	6-9-14	7-10-15	8-11-16	9-12-17	10-13-18	11-13-19	11-14-20
		V	2-3-5	2-4-6	3-4-7	3-5-7	4-6-8	4-6-8	5-6-9	5-7-9	6-7-10
	Spread (ft.)	H	6-9-16	7-10-18	9-13-21	10-15-22	12-16-24	13-18-25	15-19-27	16-19-28	16-21-30
		V	3-4-6	3-5-8	4-5-9	4-6-9	5-8-10	5-8-10	6-8-12	6-9-12	8-9-13
36 in. (5 in. Inlet)	Total Pressure (in. w.g.)		0.097	0.163	0.245	0.348	0.465	0.601	-	-	-
	Sound (NC)		21	28	35	40	44	48	-	-	-
48 in. (6 in. Inlet)	Total Pressure (in. w.g.)		0.050	0.084	0.131	0.184	0.247	0.315	0.396	0.487	0.587
	Sound (NC)		-	-	25	30	35	39	43	46	49
60 in. (7 in. Inlet)	Total Pressure (in. w.g.)		0.032	0.053	0.077	0.112	0.147	0.193	0.242	0.294	0.354
	Sound (NC)		-	-	-	24	28	32	36	39	41

### 3 Slot

Flow Rate (cfm)			130	160	190	220	250	280	310	340	370
Nom. Length	Throw (ft.)	H	4-6-11	5-7-12	5-8-14	6-9-15	7-11-16	8-12-17	9-12-18	10-13-18	10-13-19
		V	2-2-5	2-3-5	2-3-6	3-4-7	3-4-7	3-5-8	4-5-8	4-6-8	4-6-9
	Spread (ft.)	H	6-9-16	7-10-18	7-12-21	9-13-22	10-16-24	12-18-25	13-18-27	15-19-27	15-19-28
		V	3-3-6	3-4-6	3-4-8	4-5-9	4-5-9	4-6-10	5-6-10	5-8-10	5-8-12
36 in. (6 in. Inlet)	Total Pressure (in. w.g.)		0.072	0.112	0.158	0.211	0.270	0.339	0.417	0.502	0.593
	Sound (NC)		20	26	31	36	40	43	46	49	51
48 in. (7 in. Inlet)	Total Pressure (in. w.g.)		0.045	0.066	0.096	0.126	0.164	0.206	0.251	0.302	0.359
	Sound (NC)		-	-	23	29	33	36	39	42	44
60 in. (8 in. Inlet)	Total Pressure (in. w.g.)		0.024	0.035	0.049	0.068	0.086	0.108	0.132	0.159	0.189
	Sound (NC)		-	-	-	20	23	26	29	32	34

### 4 Slot

Flow Rate (cfm)			160	200	240	280	320	360	400	440	480
Nom. Length	Throw (ft.)	H	4-6-12	5-7-13	6-9-15	7-10-16	8-12-17	9-13-18	10-13-19	11-14-20	12-15-21
		V	1-2-4	2-3-5	2-3-6	2-4-7	3-4-7	3-5-8	3-5-8	4-6-9	4-6-9
	Spread (ft.)	H	6-9-18	7-10-19	9-13-22	10-15-24	12-18-25	13-19-27	15-19-28	16-21-30	18-22-31
		V	1-3-5	3-4-6	3-4-8	3-5-9	4-5-9	4-6-10	4-6-10	5-8-12	5-8-12
36 in. (7 in. Inlet)	Total Pressure (in. w.g.)		0.061	0.096	0.138	0.190	0.248	0.311	0.385	0.465	0.553
	Sound (NC)		20	26	32	37	41	44	47	51	53
48 in. (8 in. Inlet)	Total Pressure (in. w.g.)		0.034	0.052	0.075	0.104	0.135	0.172	0.213	0.257	0.307
	Sound (NC)		-	-	23	28	31	35	38	41	44
60 in. (10 in. Inlet)	Total Pressure (in. w.g.)		0.018	0.029	0.043	0.061	79	0.097	0.122	0.148	0.173
	Sound (NC)		-	-	-	21	25	28	32	25	37

#### Performance Notes:

- Tested in accordance with ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets."
- Horizontal (H) and vertical (V) throw values are measured in feet for terminal velocities of 150 fpm (minimum), 100 fpm (middle) and 50 fpm (maximum). Spread is the maximum width of the jet defined by the above terminal velocities.
- Throw values are based on full-open, one direction.
- Throw data is based on supply air and room air being at isothermal conditions.
- The NC values are based on a room absorption of 10 dB, re 10<sup>-12</sup> watts and one diffuser. The NC values are 10 lower with vertical projection.
- All pressures are in in. w.g.
- Spread and throw data applies to Models SDA and SDAI only.
- Blanks "-" indicate an NC level below 15.
- Associated SDS diffuser must be specified and ordered as a separate item.

# PERFORMANCE DATA

## SDS with SDA Plenum – ¾ in. Slot Width (SDS75)

### 1 Slot

Flow Rate (cfm)			20	40	60	80	100	120	140	160
Nom. Length	Throw (ft.)	H		3-5-9	4-6-10	4-7-11	5-7-11	6-9-13	7-10-14	8-10-15
		V		2-4-5	3-4-6	3-4-6	3-5-7	4-6-8	5-6-8	5-6-9
Nom. Length	Spread (ft.)	H		4-7-13	5-9-14	6-9-15	7-10-16	9-13-19	10-15-21	12-15-22
		V		3-5-7	3-5-8	4-5-8	4-6-9	5-8-10	6-8-10	6-8-12
36 in. (4 in. Inlet)	Total Pressure (in. w.g.)			0.051	0.116	0.206	0.321	0.463	0.630	0.823
	Sound (NC)			19	28	35	40	44	48	51
48 in. (5 in. Inlet)	Total Pressure (in. w.g.)			0.025	0.056	0.100	0.156	0.225	0.306	0.400
	Sound (NC)			-	20	27	32	36	40	43
60 in. (6 in. Inlet)	Total Pressure (in. w.g.)			0.014	0.032	0.057	0.089	0.128	0.174	0.228
	Sound (NC)			-	-	20	25	30	33	36

### 2 Slot

Flow Rate (cfm)			130	160	190	220	250	280	310	340	370
Nom. Length	Throw (ft.)	H	5-7-12	6-9-13	7-10-14	8-11-15	9-11-16	10-12-17	10-13-18	11-13-19	11-14-20
		V	2-4-6	3-4-6	4-5-7	4-5-7	5-6-8	5-6-8	5-6-9	5-6-9	6-7-10
Nom. Length	Spread (ft.)	H	7-10-18	9-13-19	10-15-21	12-16-22	13-16-24	15-18-25	15-19-27	16-19-28	16-21-30
		V	3-5-8	4-5-8	5-6-9	5-6-9	6-8-10	6-8-10	6-8-12	6-8-12	8-9-13
36 in. (6 in. Inlet)	Total Pressure (in. w.g.)		0.104	0.162	0.228	0.305	0.390	0.490	0.602	-	-
	Sound (NC)		24	30	35	40	44	47	50	-	-
48 in. (7 in. Inlet)	Total Pressure (in. w.g.)		0.059	0.086	0.126	0.165	0.216	0.221	0.330	0.397	0.472
	Sound (NC)		-	21	26	30	34	38	41	43	46
60 in. (8 in. Inlet)	Total Pressure (in. w.g.)		0.045	0.066	0.091	0.146	0.161	0.202	0.247	0.297	0.353
	Sound (NC)		-	-	24	28	32	36	39	42	44

### 3 Slot

Flow Rate (cfm)			160	190	220	250	280	310	340	370	400
Nom. Length	Throw (ft.)	H	5-7-12	6-8-13	6-10-14	7-11-15	8-11-16	9-12-17	10-12-18	10-13-19	11-13-19
		V	2-3-5	3-4-6	3-5-6	3-5-7	4-5-7	4-5-8	5-6-8	5-6-9	4-6-9
Nom. Length	Spread (ft.)	H	7-10-18	9-12-19	9-15-21	10-16-22	12-16-24	13-18-25	15-18-27	15-19-28	16-19-28
		V	3-4-6	4-5-8	4-6-8	4-6-9	5-6-9	5-6-10	6-8-10	6-8-10	6-8-12
36 in. (7 in. Inlet)	Total Pressure (in. w.g.)		0.073	0.107	0.140	0.183	0.270	0.280	0.336	0.400	0.466
	Sound (NC)		21	26	31	35	38	41	44	43	49
48 in. (8 in. Inlet)	Total Pressure (in. w.g.)		0.042	0.059	0.082	0.104	0.130	0.160	0.192	0.228	0.267
	Sound (NC)		-	-	23	26	30	33	35	37	40
60 in. (10 in. Inlet)	Total Pressure (in. w.g.)		0.023	0.037	0.046	0.060	0.078	0.092	0.110	0.133	0.156
	Sound (NC)		-	-	-	21	24	27	30	32	35

### 4 Slot

Flow Rate (cfm)			200	240	280	320	360	400	440	480	520
Nom. Length	Throw (ft.)	H	5-8-13	6-9-14	7-11-15	8-12-16	9-12-17	10-13-18	11-14-19	11-14-20	12-15-21
		V	2-3-6	3-4-6	3-5-7	4-5-7	4-5-7	4-5-8	5-6-8	5-6-9	5-6-9
Nom. Length	Spread (ft.)	H	7-12-19	9-13-21	10-16-22	12-18-24	13-18-25	15-19-27	16-21-28	16-21-30	18-22-31
		V	3-4-8	4-5-8	4-6-9	5-6-9	5-6-9	5-6-10	6-8-10	6-8-12	6-8-12
36 in. (8 in. Inlet)	Total Pressure (in. w.g.)		0.062	0.090	0.124	0.161	0.205	0.254	0.307	0.366	0.428
	Sound (NC)		22	27	32	36	39	42	45	48	51
48 in. (10 in. Inlet)	Total Pressure (in. w.g.)		0.033	0.049	0.070	0.090	0.111	0.139	0.168	0.197	0.234
	Sound (NC)		-	20	25	28	32	35	38	41	44
60 in. (10 in. Inlet)	Total Pressure (in. w.g.)		0.021	0.031	0.044	0.057	0.070	0.088	0.107	0.125	0.148
	Sound (NC)		-	-	-	-	22	25	28	31	33

### Performance Notes:

1. Tested in accordance with ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets."
2. Horizontal (H) and vertical (V) throw values are measured in feet for terminal velocities of 150 fpm (minimum), 100 fpm (middle) and 50 fpm (maximum). Spread is the maximum width of the jet defined by the above terminal velocities.
3. Throw values are based on full-open, one direction.
4. Throw data is based on supply air and room air being at isothermal conditions.
5. The NC values are based on a room absorption of 10 dB, re 10<sup>-12</sup> watts and one diffuser. The NC values are 10 lower with vertical projection.
6. All pressures are in in. w.g.
7. Spread and throw data applies to Models SDA and SDAI only.
8. Blanks "-" indicate a NC level below 15.
9. Associated SDS diffuser must be specified and ordered as a separate item.

# PERFORMANCE DATA

## SDS with SDA Plenum – 1 in. Slot Width (SDS100)

### 1 Slot

Flow Rate (cfm)			100	120	140	160	180	200	220	240	260
Nom. Length	Throw (ft.)	H	4-6-11	5-8-12	6-10-13	7-10-14	8-11-15	9-11-16	10-12-17	10-12-17	10-13-18
		V	2-3-6	3-4-7	3-5-7	3-5-8	4-6-8	4-6-9	5-6-9	5-7-9	6-7-10
	Spread (ft.)	H	6-9-16	7-12-18	9-15-19	10-15-21	12-16-22	13-16-24	15-18-25	15-18-25	15-19-27
		V	3-4-8	4-5-9	4-6-9	4-6-10	5-8-10	5-8-12	6-8-12	6-9-12	8-9-13
36 in. (4 in. Inlet)	Total Pressure (in. w.g.)		0.218	0.314	0.422	0.550	0.698	0.864	-	-	-
	Sound (NC)		32	37	42	46	49	52	-	-	-
48 in. (5 in. Inlet)	Total Pressure (in. w.g.)		0.108	0.155	0.209	0.273	0.346	0.428	0.517	0.615	-
	Sound (NC)		-	22	26	30	34	37	40	43	-
60 in. (6 in. Inlet)	Total Pressure (in. w.g.)		0.062	0.090	0.125	0.164	0.207	0.254	0.308	0.363	0.429
	Sound (NC)		-	-	20	24	27	30	33	36	38

### 2 Slot

Flow Rate (cfm)			160	190	220	250	280	310	340	370	400
Nom. Length	Throw (ft.)	H	5-8-12	6-9-14	7-10-15	8-11-16	9-12-17	10-12-18	11-13-18	11-13-19	11-14-20
		V	2-3-6	3-4-7	3-5-7	3-5-7	4-6-8	4-6-8	5-6-8	5-6-9	5-6-9
	Spread (ft.)	H	7-12-18	9-13-21	10-15-22	12-16-24	13-18-25	15-18-27	16-19-27	16-19-28	16-21-30
		V	3-4-8	4-5-9	4-6-9	4-6-9	5-8-10	5-8-10	6-8-10	6-8-12	6-8-12
36 in. (6 in. Inlet)	Total Pressure (in. w.g.)		0.122	0.171	0.229	0.293	0.368	0.452	0.545	-	-
	Sound (NC)		24	29	34	37	41	44	46	-	-
48 in. (7 in. Inlet)	Total Pressure (in. w.g.)		0.060	0.087	0.114	0.150	0.188	0.228	0.275	0.326	0.381
	Sound (NC)		-	-	23	27	30	33	36	39	41
60 in. (8 in. Inlet)	Total Pressure (in. w.g.)		0.040	0.055	0.076	0.98	0.122	0.149	0.180	0.214	0.250
	Sound (NC)		-	-	-	21	24	27	30	32	35

### 3 Slot

Flow Rate (cfm)			190	220	250	280	310	340	370	400	430
Nom. Length	Throw (ft.)	H	5-7-12	6-8-14	6-10-15	7-11-15	8-11-16	8-12-17	9-12-18	10-13-18	11-13-19
		V	2-3-6	2-3-6	3-4-6	3-4-7	3-5-7	3-5-7	4-5-8	4-6-8	4-6-8
	Spread (ft.)	H	7-10-18	9-12-21	9-15-22	10-16-22	12-16-24	12-18-25	13-18-27	15-19-27	16-19-28
		V	3-4-8	3-4-8	4-5-8	4-5-9	4-6-9	4-6-9	5-6-10	5-8-10	5-8-10
36 in. (8 in. Inlet)	Total Pressure (in. w.g.)		0.076	0.105	0.134	0.168	0.206	0.248	0.294	0.344	0.399
	Sound (NC)		23	28	32	35	38	40	43	46	48
48 in. (10 in. Inlet)	Total Pressure (in. w.g.)		0.037	0.051	0.066	0.082	0.101	0.121	0.144	0.168	0.194
	Sound (NC)		-	-	22	26	29	32	34	37	39
60 in. (10 in. Inlet)	Total Pressure (in. w.g.)		0.027	0.033	0.043	0.057	0.067	0.080	0.097	0.113	0.130
	Sound (NC)		-	-	-	-	20	23	25	28	30

### 4 Slot

Flow Rate (cfm)			240	280	320	360	400	440	480	520	560
Nom. Length	Throw (ft.)	H	5-8-14	6-9-15	7-11-16	8-12-17	9-12-18	10-13-18	10-13-18	11-14-20	12-15-21
		V	2-3-6	2-4-6	3-4-6	3-5-7	4-5-7	4-5-8	5-6-8	5-6-8	5-6-9
	Spread (ft.)	H	7-12-21	9-13-22	10-16-24	12-18-25	13-18-27	15-19-27	15-19-28	16-21-30	18-22-31
		V	3-4-8	3-5-8	4-5-8	4-6-9	5-6-9	5-6-10	5-8-10	6-8-10	6-8-12
36 in. (8 in. Inlet)	Total Pressure (in. w.g.)		0.070	0.096	0.125	0.159	0.198	0.239	0.284	0.333	0.388
	Sound (NC)		21	26	30	33	37	40	42	45	47
48 in. (10 in. Inlet)	Total Pressure (in. w.g.)		0.036	0.051	0.066	0.081	0.102	0.123	0.144	0.171	0.198
	Sound (NC)		-	-	21	25	28	31	34	36	39
60 in. (10 in. Inlet)	Total Pressure (in. w.g.)		0.025	0.036	0.044	0.057	0.071	0.086	0.101	0.120	0.139
	Sound (NC)		-	-	-	-	20	23	26	28	31

### Performance Notes:

1. Tested in accordance with ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets."
2. Horizontal (H) and vertical (V) throw values are measured in feet for terminal velocities of 150 fpm (minimum), 100 fpm (middle) and 50 fpm (maximum). Spread is the maximum width of the jet defined by the above terminal velocities.
3. Throw values are based on full-open, one direction.
4. Throw data is based on supply air and room air being at isothermal conditions.
5. The NC values are based on a room absorption of 10 dB, re 10<sup>-12</sup> watts and one diffuser. The NC values are 10 lower with vertical projection.
6. All pressures are in in. w.g.
7. Spread and throw data applies to Models SDA and SDAI only.
8. Blanks "-" indicate an NC level below 15.
9. Associated SDS diffuser must be specified and ordered as a separate item.