

Performance Data

MODELS LD, LDOB, LDCO, FD, FDOB, FDAD

1/2" Spacing • 1/4" Bars • 0° Deflection

Free Area Square Feet Per Lineal Foot	Nominal Duct Width (Inches)	TP	.010	.022	.039	.062	.087	.119	.156	.198	.245
.026	1-1/2	CFM per Foot	10	16	21	26	31	36	42	47	52
		NC	—	—	13	19	24	30	34	37	40
		T Sill or Floor Side Wall	1-1-1 2-4-6	2-2-2 4-7-10	4-4-4 5-9-13	7-7-7 7-12-17	8-9-10 8-13-19	10-11-12 10-16-22	11-12-14 11-17-24	12-14-16 12-19-26	14-16-18 14-21-29
.045	2	CFM per Foot	18	27	36	45	54	63	72	81	90
		NC	—	—	12	18	23	29	33	36	39
		T Sill or Floor Side Wall	1-1-1 3-5-7	4-4-4 5-9-12	7-7-7 7-11-16	9-9-10 9-14-20	10-11-13 11-17-23	13-14-16 13-19-26	14-16-18 14-21-28	15-17-20 15-22-30	17-19-21 17-25-33
.066	2-1/2	CFM per Foot	26	40	53	66	79	92	106	119	132
		NC	—	—	14	20	26	31	35	38	41
		T Sill or Floor Side Wall	2-2-2 4-6-9	6-6-6 6-9-12	8-8-9 8-12-17	11-12-13 11-16-22	13-14-16 13-19-25	15-17-19 15-21-28	18-20-22 18-25-32	21-22-23 21-28-36	22-23-24 22-30-39
.088	3	CFM per Foot	35	53	70	88	106	123	141	158	176
		NC	—	—	15	21	27	32	36	39	42
		T Sill or Floor Side Wall	2-2-2 5-7-10	7-7-7 7-11-15	10-10-11 10-14-19	12-13-15 12-17-23	15-16-18 15-21-27	18-19-21 18-24-31	20-22-24 20-27-34	24-24-25 24-31-39	26-26-27 26-34-41
.110	3-1/2	CFM per Foot	44	66	88	110	132	154	176	198	220
		NC	—	—	16	22	28	33	37	40	43
		T Sill or Floor Side Wall	3-3-3 5-7-10	8-8-8 9-12-16	12-12-12 12-16-20	15-15-16 15-20-25	18-19-20 18-23-28	20-21-22 20-26-32	23-24-25 23-29-36	25-26-27 25-32-39	29-29-29 29-36-43
.133	4	CFM per Foot	53	80	106	133	160	186	213	239	266
		NC	—	—	17	23	29	34	38	41	44
		T Sill or Floor Side Wall	3-3-3 6-8-11	9-9-9 10-13-17	13-13-13 13-17-21	16-16-17 16-21-26	20-20-21 20-25-30	22-23-24 22-28-34	24-25-26 24-30-37	28-28-28 28-35-41	31-31-31 31-38-45
.177	5	CFM per Foot	71	106	142	177	212	248	283	318	354
		NC	—	10	18	24	30	35	39	42	45
		T Sill or Floor Side Wall	4-4-4 8-10-13	10-10-10 11-14-18	15-15-15 15-19-23	18-18-18 18-22-27	22-22-23 22-27-32	25-25-25 25-31-37	27-27-28 27-33-39	30-30-30 30-37-43	34-34-34 34-41-47
.222	6	CFM per Foot	89	133	178	222	266	310	355	400	444
		NC	—	11	20	25	31	36	40	43	46
		T Sill or Floor Side Wall	5-5-5 9-11-14	10-10-10 13-16-20	15-15-15 16-20-24	19-19-19 20-24-29	23-23-23 24-29-34	25-25-25 28-33-39	29-29-29 30-35-40	31-31-31 34-40-45	36-36-36 38-44-49

CFM - cubic feet per minute.

FPM - feet per minute velocity.

TP - total pressure - inches w.g.

T - throw in feet.

NC - Noise Criteria (values) based on 10 dB room absorption, re 10⁻¹² watts.

Throw Correction for Length

NC Correction for Length

Active Length, Ft	1	2	4	8	10	15	20
Correction Factor	-10	-7	-4	-1	0	+2	+3

Active Length	Terminal Velocity		
	150 fpm	100 fpm	50 fpm
1 ft.	0.5	0.6	0.7
10 ft. +	1.6	1.4	1.2

Performance Notes:

1. Throws are given at 150, 100 and 50 fpm terminal velocities.

2. Throw values are based on a 4 foot section with a cooling ΔT of 20°F (11°C).

For other lengths, use the correction factor table above.

3. NC values are based on a 10 foot active section. For other lengths, use the correction factor table above.

4. Return Air Applications:

NC value is increased by + 4.

Neg. SP = 0.8 x TP.

5. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2006.

Nominal Width	Ak Factor per foot	
	Supply	Return
1 1/2"	.035	.030
2"	.054	.046
2 1/2"	.075	.064
3"	.098	.083
3 1/2"	.120	.102
4"	.143	.121
5"	.187	.159
6"	.233	.198

Performance Data

MODELS LD, LDOB, LDCO, FD, FDOB, FDAD

1/2" Spacing • 1/4" Bars • 15° Deflection

Free Area Square Feet Per Lineal Foot	Nominal Duct Width (Inches)	TP	.012	.025	.047	.074	.105	.142	.187	.237	.294
.031	1-1/2	CFM per Foot	12	19	25	31	37	43	50	56	62
		NC	—	16	24	32	37	42	46	49	52
		T Sill or Floor Side Wall	1-1-1 2-4-6	3-3-3 4-7-10	5-5-5 6-10-14	7-7-7 7-12-17	9-9-10 9-14-20	10-11-12 10-16-23	12-13-15 12-18-25	13-15-17 13-20-27	14-16-18 14-22-30
.048	2	CFM per Foot	19	29	38	48	58	67	77	86	96
		NC	—	12	20	27	32	37	41	44	47
		T Sill or Floor Side Wall	1-1-1 3-5-7	4-4-4 5-8-12	7-7-7 7-11-16	9-9-10 9-14-20	11-12-13 11-17-24	13-14-15 13-19-26	15-16-18 15-22-29	16-18-20 16-23-31	17-19-22 17-25-34
.067	2-1/2	CFM per Foot	27	40	54	67	80	94	107	120	134
		NC	—	12	20	27	32	37	41	44	47
		T Sill or Floor Side Wall	1-1-1 4-6-8	5-5-5 6-9-13	9-9-9 9-13-17	11-11-12 11-16-21	13-14-15 14-19-25	15-16-18 15-21-27	17-19-21 17-24-31	20-21-22 20-27-35	22-22-23 22-29-38
.086	3	CFM per Foot	34	52	69	86	103	120	138	155	172
		NC	—	12	20	27	32	37	41	44	47
		T Sill or Floor Side Wall	2-2-2 4-6-9	6-6-6 8-11-15	10-10-11 10-14-19	12-13-14 13-18-23	15-16-18 16-21-27	18-19-20 18-24-31	20-21-23 21-28-35	23-24-25 23-30-38	25-25-25 26-34-41
.105	3-1/2	CFM per Foot	42	63	84	105	126	147	168	189	210
		NC	—	12	20	28	33	38	42	45	48
		T Sill or Floor Side Wall	2-2-2 6-8-11	8-8-8 9-12-16	11-11-12 12-16-21	15-15-15 14-19-24	17-18-19 18-23-29	21-21-22 21-27-33	22-23-25 23-29-36	25-25-26 25-32-39	28-28-29 28-36-43
.127	4	CFM per Foot	51	76	102	127	152	178	203	228	254
		NC	—	13	21	29	34	39	43	46	49
		T Sill or Floor Side Wall	3-3-3 6-9-12	9-9-9 10-13-17	13-13-13 13-17-22	16-16-17 15-20-25	19-20-21 19-24-30	22-22-23 22-28-34	24-25-26 25-31-38	27-27-27 28-36-41	30-30-30 30-37-44
.167	5	CFM per Foot	67	100	134	167	200	234	267	301	334
		NC	—	13	21	29	34	39	43	46	49
		T Sill or Floor Side Wall	4-4-4 8-11-14	10-10-10 11-15-19	14-14-14 15-19-24	18-18-18 19-23-28	21-21-22 21-26-32	24-24-25 24-30-36	26-27-28 26-32-39	30-30-30 29-36-42	32-32-32 33-39-46
.210	6	CFM per Foot	84	126	168	210	252	294	336	378	420
		NC	—	15	23	31	36	41	45	48	51
		T Sill or Floor Side Wall	5-5-5 9-12-15	10-10-10 14-17-21	15-15-15 17-21-25	19-19-19 20-24-29	23-23-23 24-29-34	25-25-25 27-32-38	28-28-29 29-35-40	31-31-31 32-38-43	35-35-35 36-42-47

CFM - cubic feet per minute.

FPM - feet per minute velocity.

TP - total pressure - inches w.g.

T - throw in feet.

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Performance Notes:

- Throws are given at 150, 100 and 50 fpm terminal velocities.
- Throw values are based on a 4 foot section with a cooling ΔT of 20°F (11°C). For other lengths, use the correction factor table above.
- NC values are based on a 10 foot active section. For other lengths, use the correction factor table above.

NC Correction for Length

Active Length, Ft.	1	2	4	8	10	15	20
Correction Factor	-10	-7	-4	-1	0	+2	+3

Throw Correction for Length

Active Length	Terminal Velocity		
	150 fpm	100 fpm	50 fpm
1 ft.	0.5	0.6	0.7
10 ft. +	1.6	1.4	1.2

4. Return Air Applications:

NC value is increased by + 4.

Neg. SP = 0.8 x TP.

5. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2006.

Nominal Width	Ak Factor per foot	
	Supply	Return
1 1/2"	.041	.037
2"	.058	.051
2 1/2"	.076	.066
3"	.095	.080
3 1/2"	.115	.098
4"	.137	.113
5"	.177	.148
6"	.230	.189

Performance Data

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.031	1-1/2	CFM per Foot	12	19	25	31	37	43	50	56	62
		NC	—	16	24	32	37	42	46	49	52
		T Sill or Floor Side Wall	1-1-1 2-4-6	3-3-3 4-7-10	5-5-5 6-10-14	7-7-7 7-12-17	9-9-10 9-14-20	10-11-12 10-16-23	12-13-15 12-18-25	13-15-17 13-20-27	14-16-18 14-22-30
.048	2	CFM per Foot	19	29	38	48	58	67	77	86	96
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