

SLOT DIFFUSERS

MODELS ALF10/20, ALF17/27, ALF18/28 LINEAR FLOW BAR DIFFUSER

MODEL ALF10/ALF20 - return diffuser

MODEL ALF17/ALF27 - supply with high-flow slider

MODEL ALF18/ALF28 - supply with jet-flow baffles

Airvector's **ALF** series combines sleek aesthetics with superior functionality, designed for installation in surface or lay-in T-bar ceilings, and plaster-in frame applications. Ideal for modern architectural ceiling suspension systems, the **ALF** series ensures higher air flow with 1 or 2 slots widths to accommodate different CFM requirements, noise, and pressure reduction.

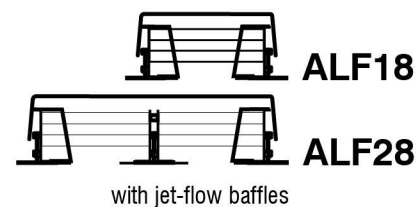
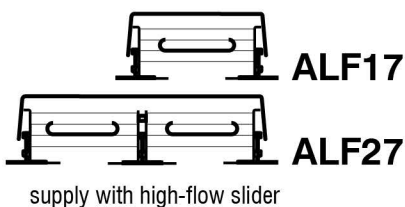
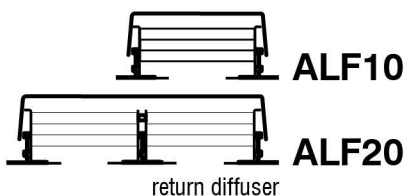
Product Variants:

Linear Flow Return: Designed for higher air flow, matching ALF17/27 Airflow diffusers and ALF18/28 Jetflow diffusers. Ideal for return air applications.

Linear Flow Airflow: Fully adjustable sliding pattern controller for precise air direction. Matching ALF10/20 slot returns and ALF18/28 Jetflow diffusers available.

Linear Flow Jetflow: Enhanced air flow with jet-flow baffles, providing a unique air distribution pattern. Matching ALF10/20 slot returns and ALF17/27 Airflow diffusers available.

The **ALF** series is an excellent choice for projects requiring a combination of modern aesthetics and high-performance air distribution. With its versatile mounting options, durable construction, and efficient performance, the **ALF** series offers a comprehensive solution for various HVAC needs.



Rev. 0



ALF1



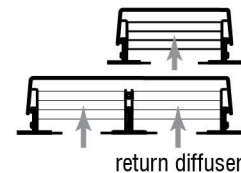
ALF2

GENERAL FEATURES

- **Versatile Mounting:** Suitable for surface mount (regular flange or Tape & Spackle) or T-bar lay-in installations.
- **Adjustable Air Patterns:** Available with or without pattern-control dampers, high-flow sliders, or jet-flow baffles for customizable air distribution.
- **Durable Construction:** Made from extruded aluminum for long-lasting performance and a sleek appearance.
- **Custom Sizing:** Five slot sizes available (1", 1.5", 2", 2.5", 3"), with options for 1 to 2 slots wide to meet specific air volume needs.
- **Efficient Performance:** Designed for higher CFM per linear foot, ensuring effective air distribution and reduced noise levels.
- **Ideal for VAV Systems:** Compatible with Variable Air Volume (VAV) systems for efficient and flexible air management.
- **High-Quality Finish:** Powder paint coating - White, custom finish available.

Linear Flow Bar Return Diffuser ALF10/ALF20 Series

1.0" Slot width	1-Slot	CFM / ft	20	40	60	80	100	120	140
		Ps	0.010	0.036	0.78	0.139	0.215	0.304	0.416
		NC	-	-	18	26	31	38	44
	2-Slot	CFM / ft	40	85	130	175	220	265	310
		Ps	0.011	0.044	0.105	0.192	0.302	0.439	0.601
		NC	-	16	28	33	38	43	47
1.5" Slot width	1-Slot	CFM / ft	30	60	90	120	150	180	210
		Ps	0.010	0.036	0.082	0.148	0.233	0.335	0.452
		NC	-	-	17	28	35	39	44
	2-Slot	CFM / ft	60	120	180	240	300	360	420
		Ps	0.012	0.042	0.094	0.169	0.266	0.385	0.528
		NC	-	18	22	29	36	41	47
2.0" Slot width	1-Slot	CFM / ft	35	75	115	155	195	235	275
		Ps	0.007	0.035	0.081	0.148	0.231	0.337	0.468
		NC	-	20	25	29	35	39	43
	2-Slot	CFM / ft	70	150	230	310	390	470	550
		Ps	0.010	0.036	0.094	0.168	0.266	0.391	0.543
		NC	-	23	28	31	36	41	46
2.5" Slot width	1-Slot	CFM / ft	40	95	150	205	260	315	370
		Ps	0.007	0.030	0.081	0.153	0.242	0.359	0.497
		NC	-	-	20	28	34	40	52
	2-Slot	CFM / ft	80	190	300	410	520	630	740
		Ps	0.007	0.044	0.094	0.173	0.280	0.415	0.573
		NC	-	18	24	30	36	42	55
3 " Slot width	1-Slot	CFM / ft	50	115	180	245	310	375	440
		Ps	0.007	0.032	0.083	0.156	0.250	0.366	0.510
		NC	-	16	25	34	40	45	45
	2-Slot	CFM / ft	100	230	360	490	620	750	80
		Ps	0.009	0.040	0.095	0.176	0.264	0.423	0.628
		NC	-	17	24	32	38	44	48



SYMBOLS Ps Static Pressure in inches of water
 NC Noise Criteria based on 10 db room absorption

LENGTH ADJUSTMENTS

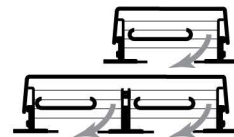
Above data obtained with 4 foot long sections. For lengths other than 4', use the adjustments in adjacent table.

Diffuser Length	2'	4'	6'	8'	10'
NC Adjustment - Return	0	+3	+5	+6	+7

- Data based on test results according to ANSI/ASHRAE 70-2006.
- Data is derived from pressurized plenum application (non ducted) disregarding plenum effects for pressure or sound.
- Plenums should be sized to ensure uniform velocity along the slot length.
- To preserve cataloged performance, duct inlet velocities should remain below 700 fpm.

Linear Flow Bar Diffusers With Continuous Slot

Adjustable high-flow slider - ALF17/ALF27 Series



1.0" Slot width	1-Slot	CFM / ft	25	40	55	70	85	100	115
		Ps	0.03	0.077	0.147	0.235	0.346	0.478	0.618
		Throw	5-9-15	10-13-19	13-116-22	15-17-24	16-20-28	18-21-31	19-23-33
		NC	-	17	27	34	40	46	51
	2-Slot	CFM / ft	50	75	100	125	150	175	200
		Ps	0.03	0.067	0.127	0.191	0.269	0.363	0.468
		Throw	7-12-21	12-17-26	16-21-30	20-24-33	21-26-36	23-27-39	24-30-43
		NC	-	18	27	33	39	45	50
1.5" Slot width	1-Slot	CFM / ft	30	45	60	75	90	105	120
		Ps	0.034	0.078	0.146	0.217	0.311	0.421	0.545
		Throw	6-11-17	11-15-20	14-17-23	15-18-26	16-19-28	17-22-30	18-23-34
		NC	-	14	25	32	38	44	50
	2-Slot	CFM / ft	60	85	110	135	160	185	210
		Ps	0.034	0.068	0.123	0.179	0.245	0.322	0.421
		Throw	9-15-23	13-19-28	18-22-31	19-25-35	22-27-38	24-29-41	25-30-43
		NC	-	-	20	28	32	38	42
2.0" Slot width	1-Slot	CFM / ft	30	50	70	90	110	130	150
		Ps	0.022	0.06	0.117	0.199	0.290	0.405	0.53
		Throw	6-10-17	9-14-21	13-18-25	16-20-28	17-21-30	19-24-34	20-26-36
		NC	-	12	22	31	37	42	48
	2-Slot	CFM / ft	60	95	130	165	200	235	270
		Ps	0.022	0.054	0.102	0.166	0.242	0.326	0.438
		Throw	8-13-23	14-20-29	18-24-34	22-27-37	23-30-41	25-32-45	27-34-49
		NC	-	12	23	30	37	42	48
2.5" Slot width	1-Slot	CFM / ft	30	55	80	105	130	155	180
		Ps	0.013	0.044	0.093	0.162	0.246	0.350	0.472
		Throw	5-8-17	10-16-21	14-19-26	17-22-30	19-24-34	21-26-37	23-28-40
		NC	-	12	23	31	38	44	49
	2-Slot	CFM / ft	60	105	150	195	240	285	330
		Ps	0.013	0.044	0.082	0.139	0.212	0.296	0.394
		Throw	7-11-22	14-21-30	19-26-35	24-29-40	26-33-46	28-35-50	31-38-53
		NC	-	14	25	32	39	44	49
3.0" Slot width	1-Slot	CFM / ft	30	60	90	120	150	180	210
		Ps	0.012	0.047	0.112	0.191	0.293	0.423	0.569
		Throw	4-8-16	11-15-22	15-19-28	18-23-32	20-26-36	22-28-41	24-30-44
		NC	-	-	18	28	35	40	45
	2-Slot	CFM / ft	60	120	180	240	300	360	420
		Ps	0.012	0.047	0.108	0.191	0.295	0.420	0.569
		Throw	6-11-22	14-22-33	22-28-40	27-32-46	29-35-51	32-38-56	34-43-59
		NC	-	-	22	31	38	44	48

SYMBOLS

Ps Static Pressure in inches of water

Throw Horizontal distances in feet to a terminal velocity of 150, 100 and 50 FPM

NC Noise Criteria based on 10 db room absorption

LENGTH MULTIPLIERS AND ADJUSTMENTS

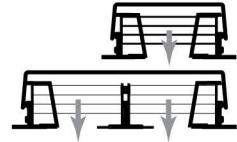
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- Plenums should be sized to ensure uniform velocity along the slot length.
- To preserve cataloged performance, duct inlet velocities should remain below 700 fpm.

Diffuser Length	2'	4'	6'	8'	10'
Throw Multiplier	0.7	1	1.2	1.5	1.8
NC Adjustment - Supply	-2	0	+2	+3	+4

Linear Flow Bar Jet-Flow Diffusers

Jet-flow baffles - ALF18/ALF28 Series



1.0" Slot width	1-Slot	CFM / ft	20	40	60	80	100	120	140
		Ps	0.007	0.029	0.065	0.117	0.182	0.260	0.355
		Throw	3-4-8	5-7-13	8-10-20	10-13-23	12-18-26	14-20-28	16-21-31
		NC	-	-	18	25	28	33	37
	2-Slot	CFM / ft	40	85	130	175	220	265	310
		Ps	0.007	0.033	0.077	0.140	0.220	0.319	0.432
		Throw	4-6-10	8-10-20	11-16-29	15-21-34	18-26-38	22-29-40	25-32-45
		NC	-	12	23	30	36	40	44
1.5" Slot width	1-Slot	CFM / ft	30	60	90	120	150	180	210
		Ps	0.008	0.033	0.075	0.135	0.210	0.302	0.407
		Throw	3-5-8	5-7-16	8-12-23	10-16-28	12-19-31	16-22-33	18-26-37
		NC	-	-	18	22	30	34	38
	2-Slot	CFM / ft	60	120	180	240	300	360	420
		Ps	0.008	0.033	0.075	0.135	0.210	0.302	0.407
		Throw	3-6-11	8-11-22	11-15-32	14-21-37	17-27-43	22-32-47	25-36-51
		NC	-	-	20	28	32	38	42
2.0" Slot width	1-Slot	CFM / ft	35	75	115	155	195	235	275
		Ps	0.006	0.028	0.065	0.118	0.190	0.272	0.373
		Throw	2-4-8	6-9-17	9-12-24	10-16-31	13-21-35	17-25-39	18-29-42
		NC	-	-	19	26	29	35	39
	2-Slot	CFM / ft	70	150	230	310	390	470	550
		Ps	0.006	0.028	0.065	0.118	0.190	0.272	0.373
		Throw	2-5-11	8-12-23	12-17-35	16-24-44	19-29-49	23-33-54	27-40-59
		NC	-	17	25	35	40	45	45
2.5" Slot width	1-Slot	CFM / ft	40	95	150	205	260	315	370
		Ps	0.005	0.029	0.075	0.135	0.216	0.316	0.429
		Throw	2-4-8	7-9-19	10-14-26	12-19-36	16-24-40	18-28-44	23-34-47
		NC	-	-	19	26	32	38	42
	2-Slot	CFM / ft	80	190	300	410	520	630	740
		Ps	0.005	0.029	0.075	0.135	0.216	0.316	0.429
		Throw	3-5-12	8-13-26	12-20-38	17-27-50	23-33-57	27-40-62	31-46-67
		NC	-	11	23	29	36	40	44
3.0" Slot width	1-Slot	CFM / ft	50	115	180	245	310	375	440
		Ps	0.005	0.029	0.074	0.134	0.213	0.312	0.419
		Throw	2-4-9	6-10-19	10-14-29	14-20-39	17-25-44	21-29-48	24-34-52
		NC	-	-	18	25	31	36	40
	2-Slot	CFM / ft	100	230	360	490	620	750	880
		Ps	0.005	0.029	0.074	0.134	0.213	0.312	0.419
		Throw	2-4-12	8-13-26	13-21-40	19-28-54	24-35-62	29-43-68	33-50-73
		NC	-	-	22	285	35	41	45

SYMBOLS
 Ps Static Pressure in inches of water
 Throw Vertical distances in feet to a terminal velocity of 150, 100 and 50 FPM
 NC Noise Criteria based on 10 db room absorption

LENGTH MULTIPLIERS AND ADJUSTMENTS

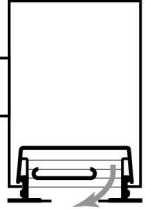
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Diffuser Length	2'	4'	6'	8'	10'
Throw Multiplier	0.7	1	1.2	1.5	1.8
NC Adjustment - Supply	-2	0	+2	+3	+4

Linear Flow Bar High-Flow Diffusers

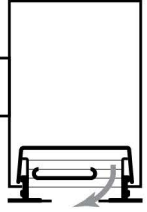
Plenum with adjustable high-flow slider - ALF17 Series



1.0" Slot Width	1-Slot 6" Inlet	2 ft.	CFM / ft	25	50	75	100	125	150	175
			Total Pressure	0.008	0.032	0.072	0.129	0.201	0.296	0.394
			Ps	0.007	0.028	0.063	0.113	0.176	0.255	0.345
			NC	<10	<10	<10	20	28	36	40
			Throw	1-2-6	3-6-10	6-9-12	8-10-14	9-11-16	10-12-18	11-13-19
		4 ft.	CFM / ft	40	80	120	160	200	240	280
			Total Pressure	0.007	0.028	0.064	0.114	0.185	0.255	0.348
			Ps	0.005	0.018	0.041	0.072	0.115	0.162	0.221
			NC	<10	<10	<10	16	24	31	37
			Throw	1-2-6	3-6-13	6-10-16	9-13-18		13-16-22	
		5 ft.	CFM / ft	50	100	150	200	250	300	350
			Total Pressure	0.009	0.034	0.077	0.137	0.216	0.308	0.419
			Ps	0.005	0.018	0.041	0.072	0.115	0.162	0.221
			NC	<10	<10	<10	18	25	33	38
			Throw	1-2-7	3-7-14	7-11-18	10-14-20	12-16-23	14-18-25	16-19-27
1.0" Slot Width	1-Slot 8" Inlet	2 ft.	CFM / ft	50	75	100	125	150	175	200
			Total Pressure	0.029	0.066	0.118	0.184	0.265	0.361	0.471
			Ps	0.028	0.063	0.113	0.176	0.253	0.345	0.450
			NC	<10	<10	19	27	34	40	44
			Throw	2-5-9	6-9-12	8-10-14	9-11-15	10-12-18	11-13-19	12-14-20
		4 ft.	CFM / ft	70	110	150	190	230	270	310
			Total Pressure	0.016	0.040	0.075	0.120	0.176	0.243	0.320
			Ps	0.014	0.034	0.063	0.102	0.149	0.205	0.271
			NC	<10	<10	13	22	29	35	40
			Throw	2-5-10	6-9-15	8-12-18	10-14-20	12-15-21	14-17-24	15-18-25
		5 ft.	CFM / ft	80	130	180	230	280	330	380
			Total Pressure	0.015	0.039	0.075	0.122	0.181	0.252	0.334
			Ps	0.008	0.030	0.058	0.095	0.141	0.196	0.260
			NC	<10	<10	13	22	29	35	40
			Throw	2-5-12	6-9-16	9-13-19	11-15-22	14-17-24	15-18-26	16-20-28
1.5" Slot Width	1-Slot 6" Inlet	2 ft.	CFM / ft	40	70	100	130	160	190	220
			Total Pressure	0.020	0.052	0.106	0.180	0.272	0.384	0.515
			Ps	0.014	0.044	0.090	0.152	0.231	0.326	0.437
			NC	<10	<10	16	25	33	40	46
			Throw	2-5-9	5-8-12	8-10-14	9-12-16	11-13-18	11-14-20	12-15-21
		4 ft.	CFM / ft	80	120	160	200	240	280	320
			Total Pressure	0.024	0.056	0.099	0.155	0.223	0.304	0.397
			Ps	0.013	0.032	0.058	0.090	0.130	0.177	0.231
			NC	<10	<10	12	20	27	33	38
			Throw	3-6-13	6-10-16	9-13-18	11-14-20	13-16-22	14-17-24	15-18-26
		5 ft.	CFM / ft	90	140	190	240	290	340	390
			Total Pressure	0.023	0.060	0.111	0.176	0.258	0.354	0.466
			Ps	0.011	0.028	0.052	0.083	0.121	0.167	0.220
			NC	<10	<10	12	20	27	33	39
			Throw	3-6-13	6-10-17	9-14-20	11-16-22	14-17-24	15-19-27	16-20-28
1.5" Slot Width	1-Slot 8" Inlet	2 ft.	CFM / ft	40	70	100	130	160	190	220
			Total Pressure	0.015	0.047	0.095	0.161	0.244	0.344	0.461
			Ps	0.014	0.044	0.090	0.152	0.231	0.326	0.437
			NC	<10	<10	14	24	31	38	44
			Throw	2-5-9	5-8-12	8-10-14	9-12-16	11-13-18	11-14-20	12-15-21
		4 ft.	CFM / ft	80	130	180	230	280	330	380
			Total Pressure	0.018	0.047	0.090	0.146	0.217	0.301	0.400
			Ps	0.014	0.038	0.073	0.119	0.177	0.246	0.326
			NC	<10	<10	15	24	32	38	43
			Throw	3-6-13	7-10-16	10-14-19	12-16-22	14-17-24	15-18-26	16-20-28
		5 ft.	CFM / ft	90	150	210	270	330	390	450
			Total Pressure	0.016	0.044	0.086	0.143	0.213	0.298	0.396
			Ps	0.012	0.032	0.064	0.105	0.157	0.220	0.292
			NC	<10	<10	14	24	31	37	43
			Throw	3-6-13	7-11-18	10-14-20	13-17-24	15-18-26	16-20-28	18-22-31

Linear Flow Bar High-Flow Diffusers

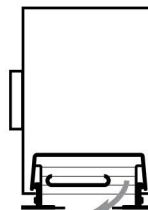
Plenum with adjustable high-flow slider - ALF17 Series



2.0" Slot Width	1-Slot 8" Inlet	2 ft.	CFM / ft	50	85	120	155	190	225	260
			Total Pressure	0.015	0.045	0.089	0.149	0.223	0.313	0.418
			Ps	0.014	0.041	0.082	0.136	0.205	0.270	0.383
			NC	<10	<10	12	21	28	33	40
			Throw	2-5-10	6-9-13	8-11-16	10-13-18	11-14-20	12-15-22	13-16-23
		4 ft.	CFM / ft	90	150	210	270	330	390	450
			Total Pressure	0.016	0.043	0.085	0.141	0.210	0.294	0.391
			Ps	0.011	0.032	0.063	0.103	0.154	0.216	0.287
			NC	<10	<10	20	29	36	42	48
			Throw	3-6-13	7-11-18	10-13-21	13-17-24	15-18-26	16-20-28	18-22-31
		5 ft.	CFM / ft	100	165	230	295	360	425	490
			Total Pressure	0.014	0.039	0.075	0.124	0.184	0.256	0.341
			Ps	0.009	0.025	0.048	0.079	0.118	0.164	0.218
			NC	<10	<10	19	28	36	42	47
			Throw	2-5-13	6-10-18	10-15-22	13-17-25	15-19-27	17-21-30	18-23-32
2.0" Slot Width	1-Slot 12" Inlet	2 ft.	CFM / ft	50	90	130	170	210	250	290
			Total Pressure	0.014	0.047	0.098	0.167	0.254	0.361	0.485
			Ps	0.014	0.046	0.096	0.164	0.250	0.354	0.477
			NC	<10	<10	<10	13	20	27	32
			Throw	2-5-10	6-9-14	9-11-17	11-13-19	12-15-21	13-16-23	14-17-24
		4 ft.	CFM / ft	90	165	240	315	390	465	540
			Total Pressure	0.012	0.041	0.087	0.151	0.231	0.328	0.443
			Ps	0.011	0.039	0.082	0.141	0.216	0.306	0.413
			NC	<10	<10	13	23	31	37	43
			Throw	3-6-13	8-12-18	11-16-22	15-18-26	15-20-28	18-22-31	19-24-33
		5 ft.	CFM / ft	100	190	280	370	460	550	640
			Total Pressure	0.010	0.036	0.079	0.138	0.213	0.305	0.413
			Ps	0.009	0.033	0.071	0.124	0.192	0.274	0.372
			NC	<10	<10	15	25	33	39	45
			Throw	2-5-13	8-12-19	12-17-24	16-20-28	18-22-31	19-24-34	21-26-35
2.5" Slot Width	1-Slot 10" Inlet	2 ft.	CFM / ft	100	145	190	235	280	325	370
			Total Pressure	0.036	0.076	0.131	0.201	0.285	0.384	0.498
			Ps	0.034	0.072	0.123	0.189	0.269	0.362	0.469
			NC	<10	<10	17	26	33	39	44
			Throw	6-10-14	9-12-16	11-14-20	13-16-22	14-17-23	15-18-26	16-20-28
		4 ft.	CFM / ft	140	220	300	380	460	540	620
			Total Pressure	0.021	0.052	0.096	0.154	0.226	0.311	0.410
			Ps	0.017	0.041	0.077	0.124	0.181	0.250	0.329
			NC	<10	<10	20	29	37	44	49
			Throw	5-9-17	10-15-25	14-18-25	16-19-28	18-22-31	19-24-33	21-25-34
		5 ft.	CFM / ft	150	240	330	420	510	600	690
			Total Pressure	0.017	0.044	0.081	0.134	0.197	0.273	0.361
			Ps	0.012	0.032	0.058	0.097	0.143	0.197	0.261
			NC	<10	<10	18	28	36	43	49
			Throw	4-9-18	10-15-22	13-18-26	17-21-29	19-23-32	20-25-35	22-27-38
2.5" Slot Width	1-Slot 12" Inlet	2 ft.	CFM / ft	100	145	190	235	280	325	370
			Total Pressure	0.035	0.074	0.127	0.195	0.277	0.373	0.483
			Ps	0.034	0.072	0.124	0.189	0.269	0.362	0.469
			NC	<10	<10	12	21	28	34	40
			Throw	6-10-14	9-12-17	11-14-20	13-16-22	14-17-24	15-18-26	16-20-28
		4 ft.	CFM / ft	140	225	310	395	480	565	650
			Total Pressure	0.019	0.049	0.092	0.149	0.221	0.306	0.405
			Ps	0.017	0.043	0.082	0.134	0.197	0.273	0.362
			NC	<10	<10	16	26	31	39	45
			Throw	5-9-17	10-15-24	14-18-25	17-20-29	18-22-32	20-24-34	21-26-37
		5 ft.	CFM / ft	150	250	350	450	550	650	750
			Total Pressure	0.015	0.041	0.080	0.132	0.196	0.274	0.365
			Ps	0.012	0.034	0.067	0.111	0.166	0.232	0.308
			NC	<10	<10	16	26	34	41	47
			Throw	4-9-18	10-15-23	14-19-27	18-22-31	19-24-34	21-26-37	23-28-39

Linear Flow Bar High-Flow Diffusers

Plenum with adjustable high-flow slider - ALF17 Series



3.0" Slot Width	1-Slot 10" Inlet	2 ft.	CFM / ft	125	170	215	260	305	350	395
			Total Pressure	0.051	0.095	0.152	0.222	0.306	0.403	0.513
			Ps	0.048	0.089	0.142	0.208	0.286	0.377	0.480
			NC	<10	<10	15	23	30	36	41
			Throw	7-11-16	10-13-19	12-15-21	13-17-23	15-18-25	16-19-27	17-20-30
		4 ft.	CFM / ft	200	275	350	425	500	575	650
			Total Pressure	0.039	0.074	0.120	0.177	0.245	0.324	0.414
			Ps	0.031	0.058	0.094	0.139	0.192	0.254	0.325
			NC	<10	<10	17	25	29	36	42
			Throw	8-13-20	12-17-24	15-19-27	17-21-30	19-23-32	20-24-34	21-26-37
		5 ft.	CFM / ft	220	310	400	490	580	670	760
			Total Pressure	0.034	0.068	0.112	0.169	0.236	0.315	0.406
			Ps	0.024	0.047	0.079	0.118	0.166	0.221	0.284
			NC	<10	<10	17	25	33	40	46
			Throw	8-12-21	12-17-25	15-20-28	16-23-32	20-24-35	21-26-37	23-28-40
3.0" Slot Width	1-Slot 12" Inlet	2 ft.	CFM / ft	125	170	215	260	305	350	395
			Total Pressure	0.050	0.092	0.147	0.215	0.296	0.389	0.496
			Ps	0.048	0.089	0.142	0.208	0.286	0.377	0.480
			NC	<10	<10	11	19	26	32	37
			Throw	7-11-16	10-13-19	12-15-20	13-16-23	15-18-24	16-19-27	17-20-29
		4 ft.	CFM / ft	200	290	380	470	560	650	740
			Total Pressure	0.035	0.073	0.126	0.192	0.273	0.368	0.477
			Ps	0.031	0.065	0.111	0.170	0.241	0.325	0.421
			NC	<10	<10	16	26	31	40	44
			Throw	8-13-20	12-17-24	16-20-28	18-22-31	20-24-34	21-26-37	23-28-39
		5 ft.	CFM / ft	220	330	440	550	660	770	880
			Total Pressure	0.029	0.065	0.115	0.180	0.259	0.352	0.460
			Ps	0.024	0.054	0.095	0.149	0.215	0.292	0.381
			CFM / ft	<10	<10	17	26	34	41	46
			Throw	8-12-21	12-18-26	16-21-30	19-24-34	21-26-37	23-28-40	25-30-43

SYMBOLS Ps Static Pressure in inches of water
Throw Vertical distances in feet to a terminal velocity of 150, 100 and 50 FPM
NC Noise Criteria based on 10 db room absorption

LENGTH MULTIPLIERS AND ADJUSTMENTS

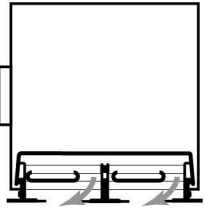
Above data obtained with 4 foot long sections. For lengths other than 4', use the multipliers and adjustments in adjacent table.

Diffuser Length	2'	4'	6'	8'	10'
Throw Multiplier	0.7	1	1.2	1.5	1.8
NC Adjustment - Supply	-2	0	+2	+3	+4
NC Adjustment - Return	0	+3	+4	+5	+7

Data based on test results according to ANSI/ASHRAE 70-2006.

Linear Flow Bar High-Flow Diffusers

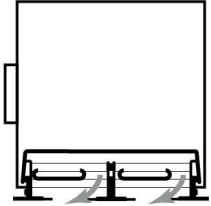
Plenum with adjustable high-flow slider - ALF27 Series



1.0" Slot Width	2-Slot 8" Inlet	2 ft.	CFM / ft	80	120	160	200	240	280	320
			Total Pressure	0.021	0.048	0.085	0.133	0.192	0.261	0.341
			Ps	0.019	0.041	0.072	0.113	0.162	0.221	0.288
			NC	<10	<10	15	24	30	36	41
			Throw	3-6-13	6-10-17	9-13-18	11-14-20	13-16-22	14-17-24	15-18-26
		4 ft.	CFM / ft	160	230	300	370	440	510	580
			Total Pressure	0.031	0.064	0.109	0.167	0.235	0.316	0.409
			Ps	0.018	0.037	0.064	0.096	0.136	0.183	0.237
			NC	<10	<10	18	25	32	37	42
			Throw	4-9-18	9-13-22	11-17-25	14-20-28	17-21-30	19-23-32	20-24-35
		5 ft.	CFM / ft	200	280	360	440	520	600	680
			Total Pressure	0.039	0.075	0.125	0.186	0.260	0.347	0.445
			Ps	0.018	0.035	0.058	0.087	0.122	0.162	0.208
			NC	<10	<10	18	26	31	36	41
			Throw	5-10-20	9-14-24	12-18-27	15-21-30	18-23-33	20-25-35	22-27-38
1.0" Slot Width	2-Slot 10" Inlet	2 ft.	CFM / ft	80	130	180	230	280	330	380
			Total Pressure	0.019	0.051	0.098	0.160	0.238	0.329	0.437
			Ps	0.018	0.048	0.091	0.149	0.221	0.307	0.407
			NC	<10	<10	19	28	35	41	47
			Throw	3-6-13	7-11-16	10-14-19	12-15-22	14-17-24	15-18-26	16-20-28
		4 ft.	CFM / ft	160	240	320	400	480	560	640
			Total Pressure	0.023	0.053	0.094	0.146	0.211	0.288	0.374
			Ps	0.018	0.041	0.072	0.113	0.162	0.221	0.288
			NC	<10	<10	19	27	34	40	45
			Throw	4-9-18	9-14-22	12-18-26	15-20-29	18-22-32	20-24-34	21-27-36
		5 ft.	CFM / ft	200	295	390	485	580	675	770
			Total Pressure	0.026	0.057	0.100	0.155	0.222	0.302	0.392
			Ps	0.018	0.039	0.069	0.106	0.152	0.205	0.267
			NC	<10	<10	20	28	34	40	45
			Throw	5-10-20	10-15-25	13-20-28	17-22-32	20-24-36	22-26-37	23-28-40
1.5" Slot Width	2-Slot 8" Inlet	2 ft.	CFM / ft	120	160	200	240	280	320	360
			Total Pressure	0.040	0.071	0.111	0.160	0.217	0.283	0.359
			Ps	0.032	0.058	0.090	0.130	0.177	0.231	0.292
			NC	<10	11	20	26	32	37	41
			Throw	6-10-16	9-13-18	11-14-20	13-16-22	14-17-24	15-18-26	16-19-27
		4 ft.	CFM / ft	240	310	380	450	520	590	660
			Total Pressure	0.062	0.103	0.155	0.218	0.291	0.375	0.469
			Ps	0.032	0.055	0.081	0.114	0.152	0.196	0.246
			NC	<10	15	22	28	34	38	43
			Throw	9-14-22	12-18-25	14-20-28	17-22-31	19-23-33	20-25-35	21-26-37
		5 ft.	CFM / ft	300	370	440	510	580	650	720
			Total Pressure	0.079	0.120	0.169	0.227	0.294	0.369	0.453
			Ps	0.031	0.049	0.070	0.094	0.121	0.152	0.187
			NC	<10	14	21	26	31	35	39
			Throw	10-15-25	13-19-29	15-21-30	17-23-32	20-24-35	21-26-37	22-27-39
1.5" Slot Width	2-Slot 12" Inlet	2 ft.	CFM / ft	120	170	220	270	320	370	420
			Total Pressure	0.034	0.068	0.114	0.172	0.241	0.323	0.416
			Ps	0.032	0.065	0.109	0.164	0.231	0.309	0.398
			NC	<10	11	22	29	35	40	45
			Throw	6-10-16	9-13-19	12-15-21	14-17-24	15-18-26	16-20-28	17-21-29
		4 ft.	CFM / ft	240	320	400	480	560	640	720
			Total Pressure	0.038	0.068	0.106	0.153	0.209	0.272	0.345
			Ps	0.032	0.058	0.090	0.131	0.177	0.231	0.292
			NC	<10	14	22	29	35	40	44
			Throw	9-14-22	12-18-26	15-20-29	18-22-32	20-24-34	21-26-36	22-27-39
		5 ft.	CFM / ft	300	400	500	600	700	800	900
			Total Pressure	0.042	0.074	0.116	0.166	0.226	0.296	0.374
			Ps	0.032	0.058	0.090	0.130	0.178	0.231	0.292
			NC	<10	15	24	31	36	41	46
			Throw	10-15-25	14-20-29	17-23-32	20-25-35	22-27-38	23-29-41	25-31-43

Linear Flow Bar High-Flow Diffusers

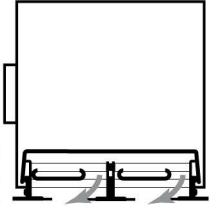
Plenum with adjustable high-flow slider - ALF27 Series



2.0" Slot Width	2-Slot 8" Inlet	2 ft.	CFM / ft	120	165	210	255	300	345	390
			Total Pressure	0.029	0.053	0.085	0.125	0.174	0.230	0.294
			Ps	0.020	0.039	0.063	0.092	0.128	0.169	0.216
			NC	<10	11	20	27	33	38	42
			Throw	5-9-16	8-12-18	10-15-21	12-16-23	14-18-25	15-19-27	16-20-28
		4 ft.	CFM / ft	240	300	360	420	480	540	600
			Total Pressure	0.050	0.078	0.112	0.153	0.200	0.253	0.312
			Ps	0.020	0.031	0.046	0.063	0.082	0.103	0.128
			NC	12	21	27	33	38	43	47
			Throw	7-12-22	10-15-25	12-19-27	14-21-29	16-22-32	18-24-33	20-25-35
		5 ft.	CFM / ft	260	325	390	455	520	585	650
			Total Pressure	0.050	0.078	0.112	0.153	0.200	0.253	0.312
			Ps	0.015	0.024	0.034	0.045	0.061	0.078	0.096
			NC	11	20	26	32	37	42	46
			Throw	6-12-23	9-15-26	12-18-28	14-20-31	16-24-33	18-25-35	19-26-37
2" Slot Width	2-Slot 12" Inlet	2 ft.	CFM / ft	120	195	270	345	420	495	570
			Total Pressure	0.022	0.058	0.111	0.181	0.268	0.372	0.493
			Ps	0.020	0.054	0.103	0.169	0.250	0.348	0.460
			NC	<10	<10	17	26	33	39	45
			Throw	5-9-16	9-14-20	13-17-24	15-19-27	17-21-29	18-23-32	20-24-34
		4 ft.	CFM / ft	240	330	420	510	600	690	780
			Total Pressure	0.026	0.050	0.080	0.118	0.164	0.217	0.277
			Ps	0.020	0.039	0.063	0.092	0.128	0.169	0.216
			NC	<10	12	21	28	34	40	44
			Throw	7-12-22	11-17-26	14-21-29	17-23-32	20-25-35	22-27-38	23-28-40
		5 ft.	CFM / ft	280	380	480	580	680	780	880
			Total Pressure	0.026	0.047	0.076	0.110	0.152	0.200	0.254
			Ps	0.018	0.033	0.052	0.076	0.105	0.138	0.177
			NC	<10	14	22	29	35	40	45
			Throw	6-13-24	11-17-28	14-22-32	17-24-35	20-27-38	23-28-40	25-30-43
2.5" Slot Width	2-Slot 10" Inlet	2 ft.	CFM / ft	80	160	240	320	400	480	560
			Total Pressure	0.007	0.027	0.061	0.109	0.171	0.247	0.334
			Ps	0.005	0.022	0.049	0.088	0.137	0.197	0.269
			NC	<10	<10	11	22	31	39	45
			Throw	2-4-11	7-11-18	11-16-22	14-18-26	17-20-29	18-22-32	20-24-34
		4 ft.	CFM / ft	160	280	400	520	640	760	880
			Total Pressure	0.011	0.033	0.068	0.115	0.175	0.245	0.328
			Ps	0.005	0.017	0.034	0.058	0.088	0.124	0.166
			NC	<10	<10	15	26	35	42	48
			Throw	3-6-15	8-13-24	13-19-29	17-23-34	20-26-36	23-28-40	25-30-43
		5 ft.	CFM / ft	200	335	470	605	740	875	1010
			Total Pressure	0.014	0.039	0.077	0.128	0.190	0.266	0.354
			Ps	0.005	0.015	0.030	0.050	0.075	0.105	0.140
			NC	<10	<10	17	27	35	42	48
			Throw	3-6-17	8-14-26	13-20-31	17-25-35	21-28-39	25-30-43	26-32-46
2.5" Slot Width	2-Slot 12" Inlet	2 ft.	CFM / ft	80	170	260	350	440	530	620
			Total Pressure	0.006	0.028	0.066	0.117	0.185	0.269	0.368
			Ps	0.005	0.025	0.058	0.105	0.166	0.241	0.329
			NC	<10	<10	<10	21	31	38	45
			Throw	2-4-11	8-12-19	12-16-23	16-19-27	17-21-30	19-23-33	21-25-36
		4 ft.	CFM / ft	160	295	430	565	700	835	970
			Total Pressure	0.008	0.027	0.058	0.101	0.155	0.220	0.297
			Ps	0.006	0.019	0.040	0.068	0.105	0.149	0.202
			NC	<10	<10	13	25	33	41	47
			Throw	3-6-15	9-14-25	14-21-30	18-24-34	22-27-38	24-29-42	26-32-45
		5 ft.	CFM / ft	200	350	500	650	800	950	1100
			Total Pressure	0.010	0.029	0.060	0.101	0.153	0.215	0.288
			Ps	0.005	0.017	0.034	0.058	0.088	0.124	0.166
			NC	<10	<10	14	25	34	41	47
			Throw	3-6-18	9-15-27	14-21-32	19-26-37	23-29-41	26-31-44	28-34-48

Linear Flow Bar Jet-Flow Diffusers

Plenum with adjustable high-flow slider - ALF27 Series



3.0" Slot Width	2 Slot 10" Inlet	2 ft.	CFM / ft	80	180	280	380	480	580	680
			Total Pressure	0.006	0.032	0.077	0.141	0.226	0.329	0.453
			Ps	0.006	0.025	0.060	0.111	0.177	0.259	0.356
			NC	<10	<10	<10	20	31	39	46
			Throw	1-3-10	7-12-19	12-17-24	16-20-28	18-22-32	20-24-35	22-27-38
		4 ft.	CFM / ft	150	300	450	600	750	900	1050
			Total Pressure	0.009	0.036	0.081	0.145	0.226	0.326	0.444
			Ps	0.004	0.017	0.040	0.069	0.108	0.156	0.212
			NC	<10	<10	<10	22	32	41	48
			Throw	2-4-13	7-13-25	13-20-31	18-25-35	22-28-39	25-31-43	27-33-47
		5 ft.	CFM / ft	180	350	520	690	860	1030	1200
			Total Pressure	0.011	0.041	0.090	0.159	0.246	0.353	0.480
			Ps	0.004	0.015	0.033	0.059	0.091	0.131	0.177
			NC	<10	<10	10	22	33	41	48
			Throw	2-4-14	7-14-27	14-21-33	18-27-38	23-30-42	27-33-46	29-35-50
3.0" Slot Width	2 Slot 12" Inlet	2 ft.	CFM / ft	80	180	280	380	480	580	680
			Total Pressure	0.006	0.028	0.068	0.126	0.201	0.293	0.403
			Ps	0.005	0.025	0.060	0.111	0.177	0.259	0.356
			NC	<10	<10	<10	16	26	35	42
			Throw	1-3-10	7-11-19	12-16-24	16-20-28	18-22-32	20-24-35	22-27-38
		4 ft.	CFM / ft	150	310	470	630	790	950	1110
			Total Pressure	0.007	0.028	0.065	0.117	0.183	0.265	0.362
			Ps	0.004	0.019	0.043	0.076	0.120	0.174	0.237
			NC	<10	<10	<10	19	30	38	45
			Throw	2-4-13	8-14-25	14-21-31	19-26-36	23-29-40	26-31-44	28-34-48
		5 ft.	CFM / ft	180	360	540	720	900	1080	1260
			Total Pressure	0.007	0.029	0.065	0.116	0.182	0.262	0.356
			Ps	0.004	0.016	0.036	0.064	0.100	0.144	0.197
			NC	<10	<10	<10	20	30	38	45
			Throw	2-4-14	7-14-27	14-21-33	19-26-39	24-31-43	27-33-47	29-36-51

SYMBOLS Ps Static Pressure in inches of water
Throw Vertical distances in feet to a terminal velocity of 150, 100 and 50 FPM
NC Noise Criteria based on 10 db room absorption

LENGTH MULTIPLIERS AND ADJUSTMENTS

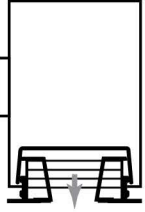
Above data obtained with 4 foot long sections. For lengths other than 4', use the multipliers and adjustments in adjacent table.

Diffuser Length	2'	4'	6'	8'	10'
Throw Multiplier	0.7	1	1.2	1.5	1.8
NC Adjustment - Supply	-2	0	+2	+3	+4
NC Adjustment - Return	0	+3	+4	+5	+7

Data based on test results according to ANSI/ASHRAE 70-2006.

Linear Jet-Flow Diffusers

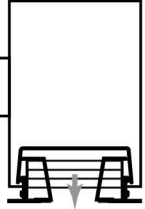
Plenum with jet-flow baffles - ALF18 Series



1.0" Slot Width	1-Slot 8" Inlet	2 ft.	CFM / ft	50	95	140	185	230	275	320
			Total Pressure	0.010	0.043	0.093	0.163	0.252	0.361	0.488
			Static Pressure	0.009	0.038	0.083	0.146	0.225	0.322	0.436
			NC	<10	<10	16	23	29	34	39
			Throw	2-3-6	4-5-12	5-8-14	7-11-16	9-13-18	11-14-20	12-15-22
		4 ft.	CFM / ft	100	175	250	325	400	475	550
			Total Pressure	0.016	0.048	0.097	0.166	0.252	0.356	0.477
			Static Pressure	0.011	0.033	0.068	0.112	0.170	0.240	0.322
			NC	<10	<10	19	25	30	34	38
			Throw	3-4-8	5-7-14	7-10-19	9-12-22	11-17-24	13-19-26	15-20-28
		5 ft.	CFM / ft	110	195	280	365	450	535	620
			Total Pressure	0.014	0.045	0.094	0.156	0.242	0.342	0.459
			Static Pressure	0.008	0.026	0.053	0.091	0.141	0.195	0.262
			NC	<10	<10	17	24	28	33	37
			Throw	3-4-8	5-7-14	7-10-20	9-13-23	11-17-26	13-20-28	15-21-30
1.0" Slot Width	1-Slot 10" Inlet	2 ft.	CFM / ft	50	95	140	185	230	275	320
			Total Pressure	0.011	0.040	0.088	0.153	0.236	0.337	0.457
			Static Pressure	0.011	0.038	0.083	0.146	0.225	0.322	0.436
			NC	<10	<10	16	22	28	33	39
			Throw	2-3-6	4-6-11	5-8-14	7-11-16	9-13-18	11-14-20	12-15-23
		4 ft.	CFM / ft	100	180	260	340	420	500	580
			Total Pressure	0.013	0.041	0.086	0.147	0.225	0.318	0.427
			Static Pressure	0.011	0.034	0.072	0.123	0.188	0.267	0.358
			NC	<10	<10	18	25	30	35	39
			Throw	3-4-8	5-7-15	7-11-19	9-14-22	12-17-25	14-19-27	16-21-29
		5 ft.	CFM / ft	110	210	310	410	510	610	710
			Total Pressure	0.011	0.039	0.086	0.150	0.234	0.331	0.449
			Static Pressure	0.008	0.030	0.065	0.113	0.177	0.253	0.343
			NC	<10	<10	19	27	31	35	40
			Throw	3-4-8	5-8-16	8-11-21	10-15-24	13-19-27	15-21-30	18-23-32
1.0" Slot Width	1-Slot 12" Inlet	2 ft.	CFM / ft	50	95	140	185	230	275	320
			Total Pressure	0.011	0.039	0.086	0.149	0.230	0.329	0.446
			Static Pressure	0.011	0.041	0.083	0.146	0.225	0.322	0.436
			NC	<10	<10	15	22	27	32	38
			Throw	2-3-6	4-6-11	5-8-14	7-11-16	9-13-18	11-14-20	12-15-22
		4 ft.	CFM / ft	100	190	280	370	460	550	640
			Total Pressure	0.012	0.042	0.091	0.159	0.247	0.352	0.477
			Static Pressure	0.011	0.038	0.083	0.146	0.225	0.322	0.436
			NC	<10	10	19	26	32	37	42
			Throw	3-4-8	5-8-16	8-12-20	10-15-23	13-18-26	15-20-28	18-22-30
		5 ft.	CFM / ft	110	220	330	440	550	660	770
			Total Pressure	0.008	0.038	0.085	0.151	0.237	0.341	0.464
			Static Pressure	0.007	0.033	0.074	0.132	0.206	0.297	0.404
			NC	<10	<10	20	27	32	37	42
			Throw	3-4-8	5-8-16	8-12-22	11-16-25	14-20-28	16-22-31	19-24-33
1.5" Slot Width	1-Slot 8" Inlet		CFM / ft	60	110	160	210	260	310	360
			Total Pressure	0.014	0.046	0.097	0.167	0.257	0.365	0.492
			Static Pressure	0.008	0.026	0.058	0.096	0.147	0.209	0.282
			NC	<10	<10	<10	16	24	31	37
			Throw	1-3-5	3-5-9	5-7-14	6-9-17	7-11-19	9-13-21	10-15-23
		4 ft.	CFM / ft	120	180	240	300	360	420	480
			Total Pressure	0.031	0.070	0.125	0.195	0.280	0.382	0.498
			Static Pressure	0.008	0.018	0.031	0.049	0.069	0.096	0.125
			NC	<10	<10	<10	<10	16	22	27
			Throw	2-4-7	4-5-11	5-7-15	6-9-18	7-11-22	8-13-25	10-15-26
		5 ft.	CFM / ft	140	200	260	320	380	440	500
			Total Pressure	0.039	0.079	0.133	0.201	0.284	0.383	0.492
			Static Pressure	0.007	0.014	0.024	0.036	0.050	0.067	0.089
			NC	<10	<10	<10	<10	12	17	22
			Throw	2-4-8	4-5-11	5-7-14	6-9-17	7-10-21	8-12-24	9-14-27

Linear Jet-Flow Diffusers

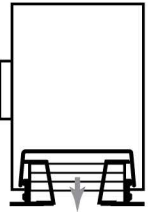
Plenum with jet-flow baffles - ALF18 Series



1.5" Slot Width	1-Slot 8" Inlet	2 ft.	CFM / ft	60	125	190	255	320	385	450
			Total Pressure	0.010	0.037	0.086	0.155	0.244	0.354	0.483
			Ps	0.009	0.033	0.079	0.141	0.223	0.322	0.441
			NC	<10	<10	<10	19	28	36	44
			Throw	1-3-5	4-5-10	5-8-16	7-11-19	9-14-22	11-17-24	13-18-26
		4 ft.	CFM / ft	120	230	340	450	560	670	780
			Total Pressure	0.011	0.040	0.089	0.153	0.236	0.338	0.459
			Ps	0.008	0.029	0.065	0.110	0.171	0.244	0.331
			NC	<10	<10	10	20	29	36	42
			Throw	2-4-7	5-7-14	7-10-21	9-13-26	11-17-29	14-20-31	16-24-34
		5 ft.	CFM / ft	140	265	390	516	640	765	890
			Total Pressure	0.011	0.039	0.085	0.148	0.228	0.327	0.442
			Ps	0.007	0.024	0.053	0.092	0.145	0.204	0.276
			NC	<10	<10	<10	19	28	34	40
			Throw	2-4-8	5-7-14	7-11-21	9-14-27	12-17-30	14-20-33	16-24-36
1.5" Slot Width	1-Slot 10" Inlet	2 ft.	CFM / ft	60	125	190	255	320	385	450
			Total Pressure	0.008	0.036	0.082	0.148	0.233	0.335	0.461
			Ps	0.008	0.034	0.079	0.141	0.223	0.322	0.442
			NC	<10	<10	<10	18	27	35	43
			Throw	1-3-5	4-5-11	5-8-16	7-11-19	9-14-22	11-17-24	13-19-26
		4 ft.	CFM / ft	120	240	360	480	600	720	840
			Total Pressure	0.009	0.037	0.084	0.149	0.232	0.334	0.453
			Ps	0.008	0.031	0.070	0.125	0.196	0.282	0.386
			NC	<10	<10	10	21	30	37	45
			Throw	2-4-7	5-7-15	7-11-22	10-15-26	12-18-30	14-21-32	17-25-35
		5 ft.	CFM / ft	140	280	420	560	700	840	980
			Total Pressure	0.009	0.035	0.079	0.141	0.222	0.317	0.432
			Ps	0.007	0.027	0.061	0.109	0.173	0.246	0.334
			NC	<10	<10	10	20	28	36	43
			Throw	2-4-8	5-8-15	8-11-23	10-15-28	13-19-32	15-23-35	18-27-38
2.0" Slot Width	1-Slot 12" Inlet	2 ft.	CFM / ft	70	140	210	280	350	420	490
			Total Pressure	0.008	0.033	0.075	0.131	0.206	0.296	0.403
			Ps	0.006	0.023	0.051	0.092	0.143	0.206	0.280
			NC	<10	<10	14	21	27	33	38
			Throw	1-2-5	3-5-10	5-7-15	7-10-20	8-12-23	10-15-25	12-17-27
		4 ft.	CFM / ft	140	240	340	440	540	640	740
			Total Pressure	0.016	0.045	0.093	0.156	0.235	0.329	0.440
			Ps	0.005	0.017	0.034	0.057	0.085	0.120	0.160
			NC	<10	12	21	27	32	36	40
			Throw	1-3-7	4-6-12	6-9-17	7-11-22	9-14-27	11-16-30	12-19-33
		5 ft.	CFM / ft	150	260	370	480	590	700	810
			Total Pressure	0.015	0.047	0.096	0.161	0.243	0.343	0.459
			Ps	0.003	0.013	0.026	0.043	0.065	0.092	0.123
			NC	<10	13	21	27	32	36	40
			Throw	1-3-7	3-6-12	6-8-17	7-11-22	9-13-27	10-16-31	12-18-34
2.0" Slot Width	1-Slot 8" Inlet		CFM / ft	70	150	230	310	390	470	550
			Total Pressure	0.007	0.031	0.075	0.132	0.210	0.304	0.417
			Ps	0.006	0.026	0.064	0.112	0.178	0.258	0.353
			NC	<10	<10	11	18	26	31	36
			Throw	1-2-5	4-5-11	5-8-16	7-11-21	9-14-24	11-17-26	13-20-28
		4 ft.	CFM / ft	140	265	390	515	640	765	890
			Total Pressure	0.010	0.035	0.076	0.132	0.207	0.294	0.398
			Ps	0.006	0.021	0.044	0.077	0.122	0.171	0.231
			NC	<10	10	19	25	31	36	41
			Throw	1-3-7	4-7-13	7-10-20	9-13-26	11-16-30	13-19-33	15-22-36
		5 ft.	CFM / ft	150	300	450	600	750	900	1050
			Total Pressure	0.009	0.036	0.080	0.143	0.223	0.323	0.437
			Ps	0.004	0.017	0.038	0.067	0.105	0.151	0.204
			NC	<10	11	21	27	33	37	42
			Throw	1-3-7	4-7-13	7-10-20	9-13-27	11-17-33	13-20-36	16-24-38

Linear Jet-Flow Diffusers

Plenum with jet-flow baffles - ALF18 Series



2.0" Slot Width	1-Slot 12" Inlet	2 ft.	CFM / ft	70	160	250	340	430	520	610
			Total Pressure	0.007	0.032	0.079	0.147	0.235	0.343	0.472
			Ps	0.006	0.031	0.073	0.135	0.216	0.316	0.435
			NC	<10	<10	<10	17	25	31	36
			Throw	1-2-5	4-6-11	6-9-18	8-12-22	10-15-25	12-18-27	14-21-30
		4 ft.	CFM / ft	140	290	440	590	740	890	1040
			Total Pressure	0.008	0.033	0.075	0.136	0.215	0.311	0.425
			Ps	0.006	0.025	0.057	0.100	0.160	0.231	0.316
			NC	<10	<10	17	24	30	37	41
			Throw	1-3-7	5-7-15	7-11-22	10-15-29	13-19-33	15-22-36	17-26-39
		5 ft.	CFM / ft	150	330	510	690	870	1050	1230
			Total Pressure	0.006	0.031	0.075	0.137	0.218	0.320	0.436
			Ps	0.004	0.020	0.049	0.089	0.141	0.208	0.283
			NC	<10	<10	19	26	32	38	43
			Throw	1-3-7	5-7-15	8-11-23	10-16-31	13-20-36	16-24-39	18-28-42
	1-Slot 12" Inlet	2 ft.	CFM / ft	80	190	300	410	520	630	740
			Total Pressure	0.005	0.031	0.077	0.143	0.231	0.339	0.465
			Ps	0.005	0.027	0.068	0.126	0.203	0.300	0.412
			NC	<10	<10	<10	12	20	27	33
			Throw	1-2-5	4-6-12	6-9-19	9-13-24	11-16-27	13-20-30	15-23-33
		4 ft.	CFM / ft	150	335	520	705	890	1075	1260
			Total Pressure	0.007	0.032	0.078	0.146	0.228	0.334	0.459
			Ps	0.004	0.021	0.051	0.095	0.149	0.217	0.298
			NC	<10	<10	<10	18	26	32	38
			Throw	1-2-7	5-7-15	8-11-23	10-16-31	13-20-36	16-24-40	18-28-43
		5 ft.	CFM / ft	160	370	580	790	1000	1210	1420
			Total Pressure	0.006	0.032	0.075	0.138	0.222	0.324	0.447
			Ps	0.003	0.018	0.040	0.075	0.120	0.176	0.243
			NC	<10	<10	<10	18	26	32	38
			Throw	1-3-6	5-7-15	8-11-23	10-16-31	13-20-38	16-24-42	19-28-45
3.0" Slot Width	1-Slot 12" Inlet	2 ft.	CFM / ft	100	225	350	475	600	725	850
			Total Pressure	0.005	0.031	0.076	0.140	0.224	0.327	0.449
			Ps	0.004	0.025	0.064	0.117	0.187	0.274	0.376
			NC	<10	<10	<10	<10	15	24	31
			Throw	1-2-6	4-6-12	6-10-19	9-13-26	11-17-30	13-20-32	16-24-35
		4 ft.	CFM / ft	200	400	600	800	1000	1200	1400
			Total Pressure	0.009	0.037	0.082	0.147	0.231	0.333	0.454
			Ps	0.005	0.021	0.047	0.082	0.130	0.187	0.255
			NC	<10	<10	<10	<10	17	25	32
			Throw	1-3-8	5-8-16	8-12-24	10-16-31	13-20-38	16-24-42	18-27-45
		5 ft.	CFM / ft	240	460	680	900	1120	1340	1560
			Total Pressure	0.011	0.039	0.085	0.149	0.231	0.333	0.449
			Ps	0.005	0.018	0.039	0.067	0.105	0.151	0.203
			NC	<10	<10	<10	<10	15	24	30
			Throw	1-3-8	5-8-16	8-12-24	11-16-32	13-20-39	16-23-44	18-27-49

SYMBOLS Ps Static Pressure in inches of water
Throw Vertical distances in feet to a terminal velocity of 150, 100 and 50 FPM
NC Noise Criteria based on 10 db room absorption

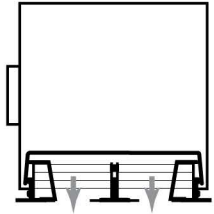
LENGTH MULTIPLIERS AND ADJUSTMENTS

Above data obtained with 4 foot long sections. For lengths other than 4', use the multipliers and adjustments in adjacent table.

Data based on test results according to ANSI/ASHRAE 70-2006.

Linear Jet-Flow Diffusers

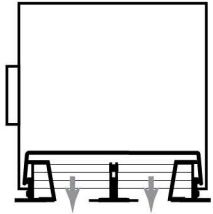
Plenum with jet-flow baffles - ALF28 Series



1.0" Slot Width	2-Slot 8" Inlet	2 ft.	CFM / ft	80	155	230	305	380	455	530
			Total Pressure	0.009	0.038	0.083	0.147	0.228	0.326	0.443
			Ps	0.006	0.026	0.056	0.099	0.154	0.220	0.299
			NC	<10	<10	16	23	29	33	37
			Throw	2-3-7	4-7-13	6-10-18	8-13-21	10-16-23	13-18-26	15-20-28
		4 ft.	CFM / ft	160	260	360	460	560	660	760
			Total Pressure	0.020	0.053	0.103	0.165	0.244	0.339	0.450
			Ps	0.007	0.018	0.036	0.056	0.083	0.116	0.154
			NC	<10	<10	16	21	26	30	33
			Throw	3-5-9	5-8-15	7-11-21	9-14-26	11-16-29	13-19-31	15-22-33
		5 ft.	CFM / ft	200	300	400	500	600	700	800
			Total Pressure	0.027	0.061	0.109	0.173	0.248	0.334	0.437
			Ps	0.007	0.015	0.027	0.043	0.061	0.083	0.109
			NC	<10	<10	13	19	24	27	30
			Throw	3-5-10	5-8-16	7-10-21	9-13-26	10-15-30	12-18-32	14-21-34
1.0" Slot Width	1-Slot 12" Inlet	2 ft.	CFM / ft	80	165	250	335	420	505	590
			Total Pressure	0.008	0.035	0.080	0.143	0.225	0.327	0.443
			Ps	0.007	0.029	0.066	0.119	0.188	0.271	0.396
			NC	<10	<10	17	25	30	35	40
			Throw	2-3-7	5-7-14	7-10-19	9-14-22	12-17-25	14-19-27	16-21-29
		4 ft.	CFM / ft	160	300	440	580	720	860	1000
			Total Pressure	0.012	0.043	0.092	0.160	0.247	0.352	0.478
			Ps	0.007	0.024	0.051	0.089	0.138	0.197	0.265
			NC	<10	<10	19	26	31	35	39
			Throw	3-5-9	6-9-18	9-13-25	11-17-29	14-21-32	17-24-35	19-27-38
		5 ft.	CFM / ft	200	350	500	650	800	950	1100
			Total Pressure	0.015	0.047	0.095	0.161	0.245	0.343	0.460
			Ps	0.007	0.021	0.043	0.072	0.111	0.154	0.206
			NC	<10	<10	18	24	30	34	37
			Throw	3-5-10	6-9-18	9-13-26	11-17-31	14-21-34	17-25-37	19-28-40
1.0" Slot Width	2-Slot 12" Inlet	2 ft.	CFM / ft	80	170	260	350	440	530	620
			Total Pressure	0.007	0.034	0.081	0.143	0.226	0.327	0.448
			Ps	0.007	0.031	0.076	0.130	0.206	0.299	0.409
			NC	<10	<10	18	25	31	36	41
			Throw	2-3-7	5-7-15	7-11-19	10-14-23	12-18-25	15-20-28	17-21-30
		4 ft.	CFM / ft	160	320	480	640	800	960	1120
			Total Pressure	0.010	0.040	0.085	0.150	0.235	0.338	0.461
			Ps	0.008	0.027	0.061	0.109	0.170	0.245	0.334
			NC	<10	10	20	27	33	37	42
			Throw	3-5-10	6-9-19	9-14-26	12-19-30	16-23-34	19-26-37	22-29-40
		5 ft.	CFM / ft	200	375	550	725	900	1075	1250
			Total Pressure	0.009	0.038	0.082	0.143	0.220	0.314	0.424
			Ps	0.006	0.024	0.051	0.089	0.138	0.197	0.266
			NC	<10	10	20	26	32	36	40
			Throw	3-5-10	7-9-20	10-14-28	13-19-32	16-24-36	19-28-40	22-30-43
1.5" Slot Width	2-Slot 8" Inlet	2 ft.	CFM / ft	120	210	300	390	480	570	660
			Total Pressure	0.015	0.047	0.097	0.161	0.243	0.343	0.460
			Ps	0.008	0.024	0.051	0.083	0.125	0.177	0.237
			NC	<10	<10	<10	17	25	31	37
			Throw	2-4-7	4-6-13	6-9-19	8-12-24	10-15-26	12-17-29	13-20-31
		4 ft.	CFM / ft	240	340	440	540	640	740	840
			Total Pressure	0.037	0.075	0.126	0.191	0.266	0.355	0.458
			Ps	0.008	0.016	0.026	0.040	0.057	0.074	0.096
			NC	<10	<10	<10	<10	15	21	26
			Throw	2-5-10	5-7-15	6-9-19	8-12-23	9-14-28	11-16-32	12-18-35
		5 ft.	CFM / ft	260	365	470	575	680	785	890
			Total Pressure	0.041	0.080	0.132	0.198	0.277	0.371	0.475
			Ps	0.006	0.012	0.019	0.029	0.040	0.055	0.070
			NC	<10	<10	<10	<10	11	17	21
			Throw	2-5-10	4-7-14	6-9-18	7-11-22	9-13-26	10-15-31	11-17-35

Linear Jet-Flow Diffusers

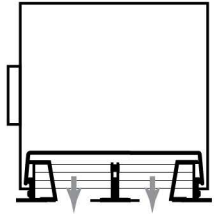
Plenum with jet-flow baffles - ALF28 Series



1.5" Slot Width	2-Slot 10" Inlet	2 ft.	CFM / ft	120	230	340	450	560	670	780
			Total Pressure	0.012	0.040	0.087	0.153	0.236	0.338	0.459
			Ps	0.009	0.029	0.063	0.110	0.171	0.244	0.331
			NC	<10	<10	10	20	29	36	42
			Throw	2-4-7	4-7-13	7-10-21	9-14-26	11-17-29	14-20-31	16-24-34
		4 ft.	CFM / ft	240	390	540	690	840	990	1140
			Total Pressure	0.020	0.053	0.103	0.165	0.244	0.339	0.449
			Ps	0.008	0.021	0.042	0.065	0.096	0.133	0.177
			NC	<10	<10	<10	16	24	30	35
			Throw	2-5-10	6-8-17	8-12-24	10-14-30	12-18-35	14-21-38	16-24-41
		5 ft.	CFM / ft	260	425	590	755	920	1085	1250
			Total Pressure	0.020	0.054	0.103	0.171	0.253	0.350	0.464
			Ps	0.006	0.016	0.030	0.052	0.076	0.102	0.136
			NC	<10	<10	<10	13	21	27	32
			Throw	2-5-10	5-8-16	8-11-23	10-14-29	12-18-35	14-21-39	16-24-43
1.5" Slot Width	2-Slot 12" Inlet	2 ft.	CFM / ft	120	240	360	480	600	720	840
			Total Pressure	0.009	0.037	0.084	0.149	0.232	0.332	0.455
			Ps	0.008	0.031	0.070	0.125	0.196	0.282	0.386
			NC	<10	<10	10	21	30	37	45
			Throw	2-4-7	5-7-15	7-11-22	10-15-26	12-18-30	15-22-32	17-25-36
		4 ft.	CFM / ft	240	415	590	765	940	1115	1290
			Total Pressure	0.014	0.041	0.083	0.139	0.210	0.295	0.393
			Ps	0.008	0.023	0.047	0.080	0.120	0.168	0.224
			NC	<10	<10	<10	19	27	33	39
			Throw	2-5-10	6-9-18	8-13-25	11-16-33	13-20-37	16-24-40	18-28-43
		5 ft.	CFM / ft	260	440	620	800	980	1160	1340
			Total Pressure	0.013	0.036	0.072	0.120	0.183	0.253	0.338
			Ps	0.006	0.017	0.033	0.056	0.086	0.117	0.156
			NC	<10	<10	<10	15	22	28	34
			Throw	2-5-10	6-8-17	8-12-24	10-16-31	13-19-38	15-22-41	17-26-44
2.0" Slot Width	2-Slot 8" Inlet	2 ft.	CFM / ft	70	140	210	280	350	420	490
			Total Pressure	0.008	0.033	0.076	0.134	0.206	0.296	0.403
			Ps	0.006	0.017	0.036	0.057	0.085	0.120	0.160
			NC	<10	12	20	27	32	36	40
			Throw	1-3-7	4-6-12	5-9-17	7-11-22	9-14-27	11-16-30	12-19-33
		4 ft.	CFM / ft	250	355	460	565	670	775	880
			Total Pressure	0.037	0.076	0.124	0.187	0.263	0.352	0.453
			Ps	0.004	0.009	0.015	0.023	0.033	0.044	0.057
			NC	<10	17	23	28	32	35	38
			Throw	2-3-10	3-6-13	5-8-16	7-10-20	8-12-24	9-14-28	10-16-31
		5 ft.	CFM / ft	280	390	500	610	720	830	940
			Total Pressure	0.042	0.085	0.140	0.208	0.290	0.385	0.494
			Ps	0.003	0.007	0.012	0.017	0.024	0.032	0.041
			NC	10	18	24	28	32	36	38
			Throw	1-3-9	3-6-12	4-8-16	6-10-19	8-11-23	9-13-26	10-15-30
2.0" Slot Width	2-Slot 10" Inlet	2 ft.	CFM / ft	140	275	410	545	680	815	950
			Total Pressure	0.010	0.038	0.086	0.149	0.232	0.333	0.453
			Ps	0.006	0.022	0.051	0.087	0.135	0.194	0.263
			NC	<10	10	19	27	32	38	43
			Throw	1-3-7	5-7-14	7-11-21	9-14-26	11-17-31	14-20-34	16-24-37
		4 ft.	CFM / ft	250	425	600	775	950	1125	1300
			Total Pressure	0.018	0.051	0.102	0.170	0.257	0.358	0.478
			Ps	0.005	0.013	0.026	0.044	0.068	0.092	0.123
			NC	<10	16	24	30	34	39	42
			Throw	2-3-9	4-8-15	7-11-21	9-14-28	11-17-34	13-20-40	15-23-43
		5 ft.	CFM / ft	280	460	640	820	1000	1180	1360
			Total Pressure	0.020	0.054	0.105	0.173	0.257	0.359	0.475
			Ps	0.004	0.010	0.019	0.031	0.047	0.065	0.085
			NC	<10	16	24	30	35	39	42
			Throw	1-3-9	4-7-15	7-10-20	9-13-26	11-16-32	12-19-37	14-22-42

Linear Jet-Flow Diffusers

Plenum with jet-flow baffles - ALF28 Series



2.0" Slot Width	2-Slot 12" Inlet	2 ft.	CFM / ft	140	280	420	560	700	840	980
			Total Pressure	0.011	0.031	0.069	0.130	0.193	0.277	0.378
			Ps	0.007	0.023	0.052	0.092	0.143	0.206	0.280
			NC	<10	<10	16	24	29	35	40
			Throw	1-3-7	4-7-14	7-11-20	9-14-28	12-18-32	14-21-35	16-25-38
		4 ft.	CFM / ft	250	450	650	850	1050	1250	1450
			Total Pressure	0.080	0.035	0.076	0.132	0.192	0.272	0.390
			Ps	0.005	0.015	0.031	0.051	0.080	0.114	0.153
			NC	<10	13	22	28	33	37	42
			Throw	2-3-9	5-8-16	8-12-23	10-15-30	13-18-37	15-22-43	17-26-46
		5 ft.	CFM / ft	280	480	680	880	1080	1280	1480
			Total Pressure	0.012	0.034	0.070	0.115	0.173	0.244	0.324
			Ps	0.004	0.011	0.022	0.036	0.054	0.078	0.102
			NC	<10	13	21	27	32	36	40
			Throw	1-3-9	4-8-15	7-11-22	9-14-28	11-17-34	14-20-41	16-24-46
2.5" Slot Width	2-Slot 12" Inlet	2 ft.	CFM / ft	150	335	520	705	890	1075	1260
			Total Pressure	0.010	0.032	0.078	0.150	0.229	0.334	0.479
			Ps	0.004	0.021	0.051	0.093	0.149	0.218	0.299
			NC	<10	<10	<10	18	26	33	39
			Throw	1-2-7	5-7-15	8-11-23	10-16-31	13-20-35	16-24-40	18-27-43
		4 ft.	CFM / ft	300	540	780	1020	1260	1500	1740
			Total Pressure	0.010	0.043	0.090	0.162	0.235	0.334	0.449
			Ps	0.004	0.014	0.029	0.050	0.075	0.106	0.142
			NC	<10	<10	<10	18	25	31	36
			Throw	1-3-9	5-8-17	8-12-24	11-16-32	13-20-39	16-23-47	18-27-50
		5 ft.	CFM / ft	350	600	850	1100	1350	1600	1850
			Total Pressure	0.020	0.049	0.095	0.170	0.239	0.336	0.480
			Ps	0.004	0.012	0.022	0.036	0.055	0.077	0.103
			NC	<10	<10	<10	16	24	30	35
			Throw	1-4-10	4-8-17	8-12-24	10-15-31	13-19-38	15-22-45	17-26-51
3.0" Slot Width	2-Slot 12" Inlet	2 ft.	CFM / ft	175	385	595	805	1015	1225	1435
			Total Pressure	0.009	0.034	0.082	0.160	0.238	0.347	0.477
			Ps	0.003	0.019	0.046	0.084	0.134	0.195	0.268
			NC	<10	<10	<10	<12	18	26	33
			Throw	1-4-7	5-8-15	8-13-23	11-17-32	13-20-38	16-24-42	19-28-46
		4 ft.	CFM / ft	320	580	840	1100	1360	1620	1880
			Total Pressure	0.080	0.050	0.102	0.170	0.270	0.330	0.510
			Ps	0.003	0.011	0.023	0.041	0.060	0.085	0.115
			NC	<10	<10	<10	<10	16	24	31
			Throw	1-4-9	4-9-16	8-13-23	10-17-30	12-21-38	15-25-45	17-29-52
		5 ft.	CFM / ft	380	645	910	1175	1440	1705	1970
			Total Pressure	0.020	0.051	0.101	0.180	0.253	0.357	0.510
			Ps	0.003	0.009	0.017	0.029	0.043	0.062	0.081
			NC	<10	<10	<10	<10	<10	13	26
			Throw	1-4-9	3-8-16	7-11-23	10-16-29	12-18-36	14-21-42	16-27-48

SYMBOLS Ps Static Pressure in inches of water
Throw Vertical distances in feet to a terminal velocity of 150, 100 and 50 FPM
NC Noise Criteria based on 10 db room absorption

LENGTH MULTIPLIERS AND ADJUSTMENTS

Above data obtained with 4 foot long sections. For lengths other than 4', use the multipliers and adjustments in adjacent table.

Data based on test results according to ANSI/ASHRAE 70-2006.