

GENERAL PRODUCT OVERVIEW

PLENUM SLOT AND LIGHT TROFFER DIFFUSERS

The Plenum Slot Ceiling Diffusers and Light Troffer Diffusers have been developed for an extremely unobtrusive method of air distribution. Nailor offers various types of this very discreet, cost effective, air distribution product. The Plenum Slot Diffusers are for use in suspended ceiling grid systems and are offered in four distinctive performance styles. The Light Troffer Diffusers are available in many standard sizes and can be custom built to suit most types of air handling light fixtures.

PLENUM SLOT DIFFUSERS

The Nailor line of Plenum Slot Diffusers have been designed to integrate and blend with T-Bar suspended grid systems. They are available for Standard Lay-in T-Bar systems as well as the Narrow Regressed T-Bar systems. Four different styles are available in a wide range of sizes and capacities for an optimum combination of application flexibility, and performance requirements. All models are available with external foil back or internal insulation. Matching return air diffusers are available for all models.

ADJUSTABLE 'WIPER BLADE' PATTERN CONTROLLER SUPPLY AIR

This series features a friction pivoted, adjustable, extruded aluminum pattern controller in each slot. The pattern controller has a gasketed 'wiper blade' design. The direction of the airflow can be adjusted a full 180° from the face of the diffuser. This diffuser is available in 1 1/2" (38), 1" (25), and 3/4" (19) slot widths. Suffix 'I' adds internal insulation.

Standard Lay-in T-Bar –

Model Series 5700, 5700I

Narrow Regressed T-Bar –

Model Series 5700(I)-F, 5700(I)-F2

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Models 5710 and 5715-F

ADJUSTABLE 'ICE TONG' PATTERN CONTROLLER SUPPLY AIR

This series features a friction pivoted, adjustable, extruded aluminum pattern controller in each slot. The pattern controller has a gasketed 'ice tong' design. The direction of the airflow can be adjusted a full 180° from the face of the diffuser. This diffuser is available in 1 1/2" (38), 1" (25), 3/4" (19) and 1/2" (13) slot widths. Suffix 'I' adds internal insulation.

Standard Lay-in T-Bar –

Model Series 5800, 5800I

Narrow Regressed T-Bar –

Model Series 5800(I)-F, 5800(I)-F2

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Models 5810 and 5810-F2

CURVED BLADE 'FLIP FLOP' PATTERN CONTROLLER SUPPLY AIR

This series features a roll-formed curved blade pattern controller in each slot. Aerodynamically designed to produce a fixed horizontal discharge pattern, the controller is pivoted at either end and may be simply rotated with fingers from the face for either a left or right discharge direction. This diffuser is available with a 3/4" (19) slot width, and with a choice of 1, 2, 3 or 4 parallel slots. Suffix 'I' adds internal insulation.

Standard Lay-in T-Bar –

Model Series 5600, 5600I

Narrow Regressed T-Bar –

Model Series 5600(I)-F

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Model 5675

PLENUM SLOT AND LIGHT TROFFER DIFFUSERS

RETURN AIR PLENUMS FOR 5800, 5700 AND 5600 SERIES

This series of return air plenums are designed to match and complement their supply air counterpart. The plenums are for ductless return and include a light shield. Where required, extruded aluminum center tees will be used. Suffix 'I' adds internal insulation.

Model Series –

5700R(I), 5800R(I), 5600R(I)
 5700R(I)-F, 5800R(I)-F
 5700R(I)-F2, 5800R(I)-F2

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Models 5675R, 5810R-F and 5775R-F2

PLENUM SLOT AND LIGHT TROFFER DIFFUSERS



Model 59ND

**N SERIES
 PREMIUM PERFORMANCE
 SUPPLY AIR**

This supply diffuser has a 3/4" (19) slot that incorporates an extruded aluminum pattern controller for a fixed horizontal discharge pattern. This plenum is also available with a down-blow section that incorporates two hinged pattern controllers to provide a vertical discharge pattern in addition to the horizontal discharge pattern. Suffix 'I' adds internal insulation.

Horizontal Discharge –
 Models 59N, 59NI

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Horizontal/Vertical Discharge –
 Models 59ND, 59NDI

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**N SERIES
 PREMIUM PERFORMANCE
 SUPPLY/RETURN AIR**

The plenum slot diffusers in this series combines a return air plenum attached to the side of the N Series Horizontal Discharge plenum or the combination Horizontal/Vertical Discharge plenum diffuser offered in the same series. Suffix 'I' adds internal insulation.

Horizontal Discharge –
 Models 59NR, 59NRI

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Horizontal/Vertical Discharge –
 Models 59NDR, 59NDRI

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Model 59NDR

**BS SERIES
 PREMIUM PERFORMANCE
 ADJUSTABLE VERTICAL DISCHARGE**

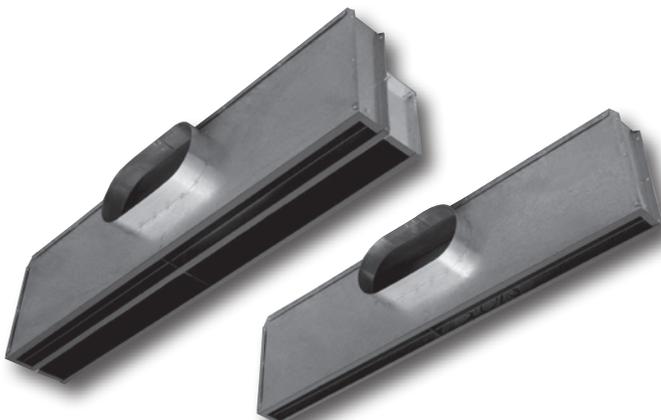
The plenum slot diffuser in this series provides premium performance in curtain wall applications. Available in both supply and supply/return models. Suffix 'I' adds internal insulation.

Model Series – Supply
 59BS(I)

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Model Series – Supply/Return
 59BSR(I)

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Models 59BSR and 59BS

ADJUSTABLE 'ICE TONG' PATTERN CONTROLLER

- FOR STANDARD LAY-IN T-BAR
- SUPPLY

Uninsulated Models:

5850 1/2" (13) Slot Width

5875 3/4" (19) Slot Width

5810 1" (25) Slot Width

Insulated Models:

5850I 1/2" (13) Slot Width

5875I 3/4" (19) Slot Width

5810I 1" (25) Slot Width



Model 5810

Model Series 5800 Plenum Slot Ceiling Diffusers have been designed for standard Lay-in T-Bar ceiling grid applications. They integrate and blend with the suspended grid, so offering an extremely unobtrusive method of air distribution. Available in a wide range of sizes and capacities, the 5800 Series design offers the discerning engineer and architect premium quality construction and design features.

Model Series 5800 features the same 'ice-tong' pattern controller as used in the 5000 Series Linear Slot Diffuser, providing total flexibility in all applications. The direction of airflow is adjustable through a full 180° from the face of the diffuser, and pattern controllers may also be adjusted for volume control.

In the horizontal discharge setting, the coanda effect is maximized and a tight blanket of air is projected across the ceiling. The horizontal pattern is maintained throughout a wide range of cataloged air volumes from maximum to minimum flow. Therefore, the 5800 Series provides excellent performance in variable air volume applications.

STANDARD FEATURES:

- Full 180° pattern controller adjustment means there are no 'lefts or rights'. Pattern controllers also permit volume control.
- Available in 20", 24", 30", 36", 48" and 60" (500, 600, 750, 900, 1200 and 1500 mm) nominal lengths to suit both imperial and metric ceiling systems.
- Choice of three slot widths.
- Choice of 1, 2, 3 or 4 parallel slots.
- Standard unit is 11" (279) in height.

- Factory installed center T-Bars on multi-slot models are standard. They are dropped slightly below the diffuser face to align flush with the ceiling grid.
- Pattern controller is split mid-way on units 36" (900) and longer, permitting a 2-way opposite blow pattern from a single slot.

CONSTRUCTION MATERIAL:

Corrosion-resistant steel plenum and pattern controllers. Aluminum center T-Bars.

FINISH OPTIONS:

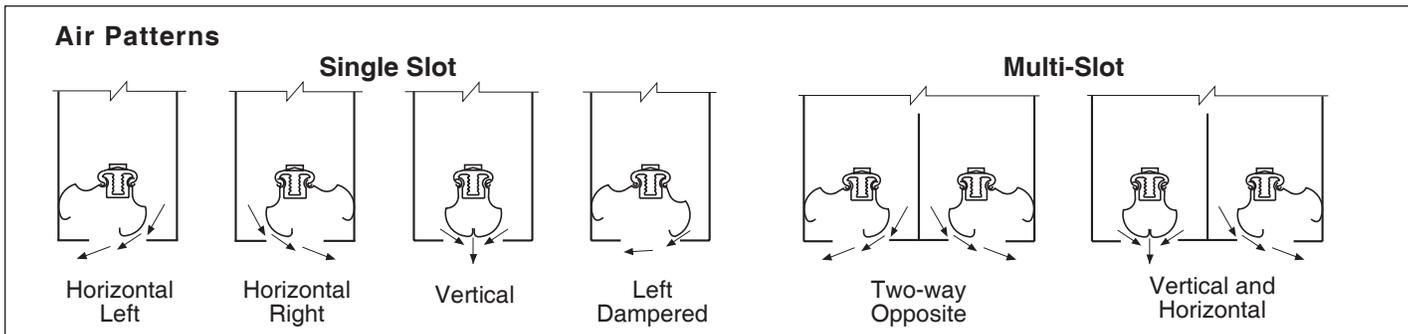
Black on pattern controllers and exposed surfaces. AW Appliance White on center T-Bars.

OPTIONS AND ACCESSORIES:

- Internal insulation (add suffix 'I' to model number).
- EIC Extended Inlet Collar (2.25" [57]) with bead.
- EQT Earthquake Tabs.
- For additional options and accessories, see page C61.

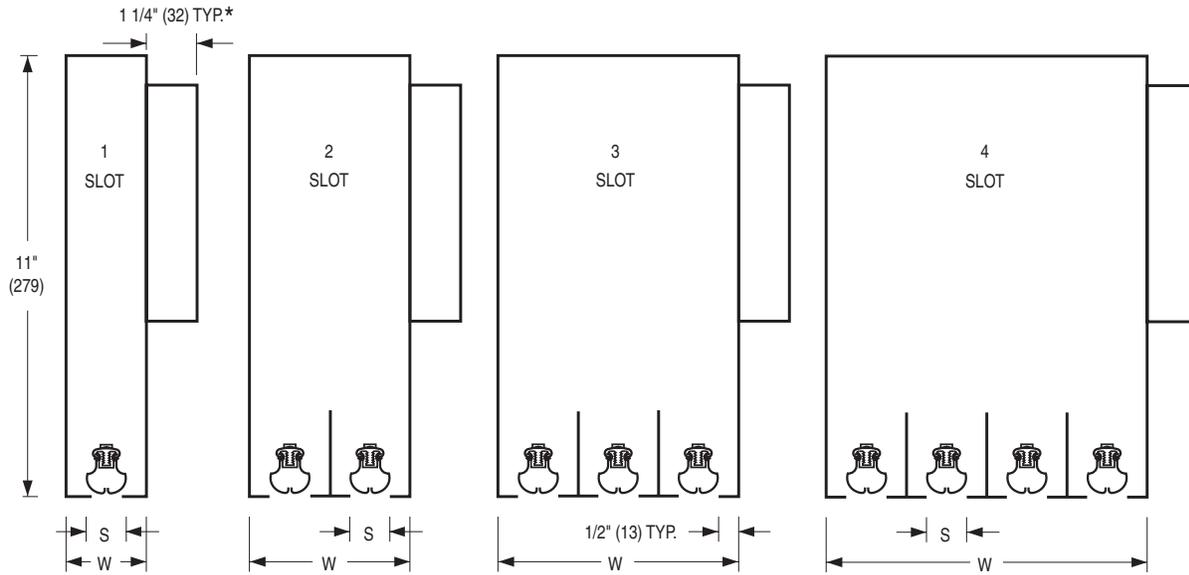
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PLENUM SLOT AND LIGHT TROFFER DIFFUSERS



DIMENSIONAL DATA:

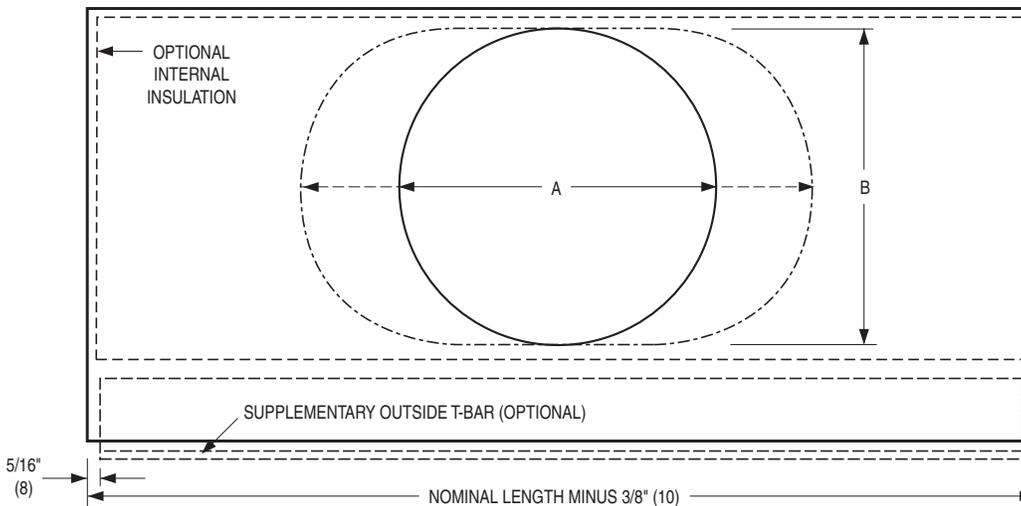
MODEL SERIES: 5800 • STANDARD LAY-IN T-BAR MODELS



*4" (102) WITH OPTIONAL ID INLET DAMPER

		S Slot Width		
		1/2" (13)	3/4" (19)	1" (25)
W Width	1 Slot	1 1/2" (38)	1 3/4" (44)	2" (51)
	2 Slot	3" (76)	3 1/2" (89)	4" (102)
	3 Slot	4 1/2" (114)	5 1/4" (133)	6" (152)
	4 Slot	6" (152)	7" (178)	8" (203)

	Nominal Inlet Size			
	6" (152) Round	8" (203) Round	10" (254) Oval	12" (305) Oval
A	5 7/8" (149)	7 7/8" (200)	11" (279)	14 1/8" (359)
B	—	—	7 7/8" (200)	7 7/8" (200)



Nominal Length L	
Imperial Modules Inches (mm)	Metric Modules (mm)
20" (508)	500
24" (610)	600
30" (762)	750
36" (914)	900
48" (1219)	1200
60" (1524)	1500

ADJUSTABLE 'ICE TONG' PATTERN CONTROLLER

- FOR NARROW REGRESSED T-BAR SUPPLY

Straddle Mount Models:

5850(I)-F 1/2" (13) Slot Width

5875(I)-F 3/4" (19) Slot Width

5810(I)-F 1" (25) Slot Width

Flat Face Center T-Bar Models:

5850(I)-F2 1/2" (13) Slot Width

5875(I)-F2 3/4" (19) Slot Width

5810(I)-F2 1" (25) Slot Width

- Suffix 'I' adds internal insulation



Model 5810-F2

Model Series 5800-F and 5800-F2 Plenum Slot Ceiling Diffusers have been specially developed to integrate with and compliment 'Fineline®' type suspended ceiling grids, thus offering an extremely unobtrusive method of air distribution. Available in a wide range of sizes and capacities, the design offers the optimum combination of application flexibility, high performance and low cost.

This series features an 'ice tong' pattern controller that provides total flexibility in all applications. The direction of airflow is adjustable through a full 180° from the face of the diffuser and pattern controllers may also be adjusted for volume control. In the horizontal discharge setting, the coanda effect is maximized and a tight blanket of air is projected across the ceiling. The horizontal pattern is maintained throughout a wide range of cataloged air volumes from maximum to minimum flow.

The single slot units, for all models, are for installation alongside a main T-Bar runner. The 5800-F Series two slot units incorporate a center hat channel and are designed to straddle, longitudinally, along a main T-Bar runner. The 5800-F2 Series multi-slot units incorporate factory installed 1" (25) flat face T-Bars.

STANDARD FEATURES:

- Full 180° pattern controller adjustment means there are no 'lefts or rights'.
- Available in 24" or 48" (600 or 1200) nominal lengths to suit both imperial and metric ceiling systems.
- A cross notch is a recommended standard option on 48" (1200) long units which allows the plenum to be installed in a 24" x 24" (600 x 600) ceiling grid.
- Series 5800-F is available in a one or two slot configuration and Series 5800-F2 is available in a one, two, three, or four slot configurations.

- The single slot units are for installation alongside a main runner.
- 5800-F two slot unit has a center hat channel that is designed to straddle a main T-Bar runner.
- 5800-F2 multi-slot units include 1" (25) flat face T-Bars.

CONSTRUCTION MATERIAL:

Corrosion-resistant steel. The 5800-F2 Series includes center T-Bars on multi-slot units that are extruded aluminum.

FINISH OPTIONS:

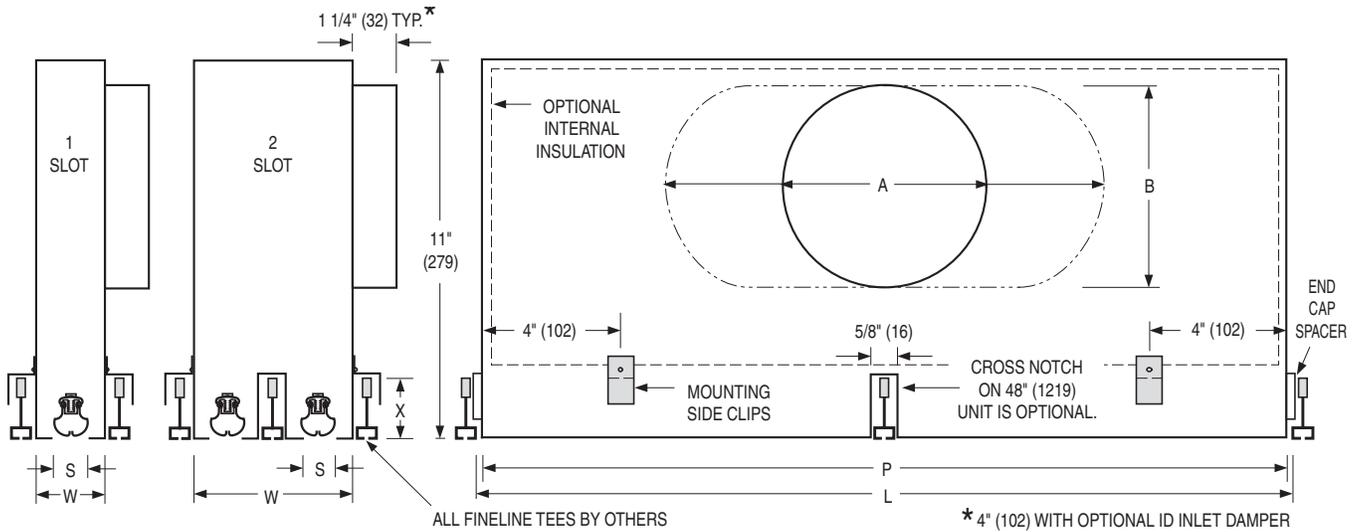
Black on pattern controllers and exposed surfaces. AW Appliance White on center T-Bars.

OPTIONS AND ACCESSORIES:

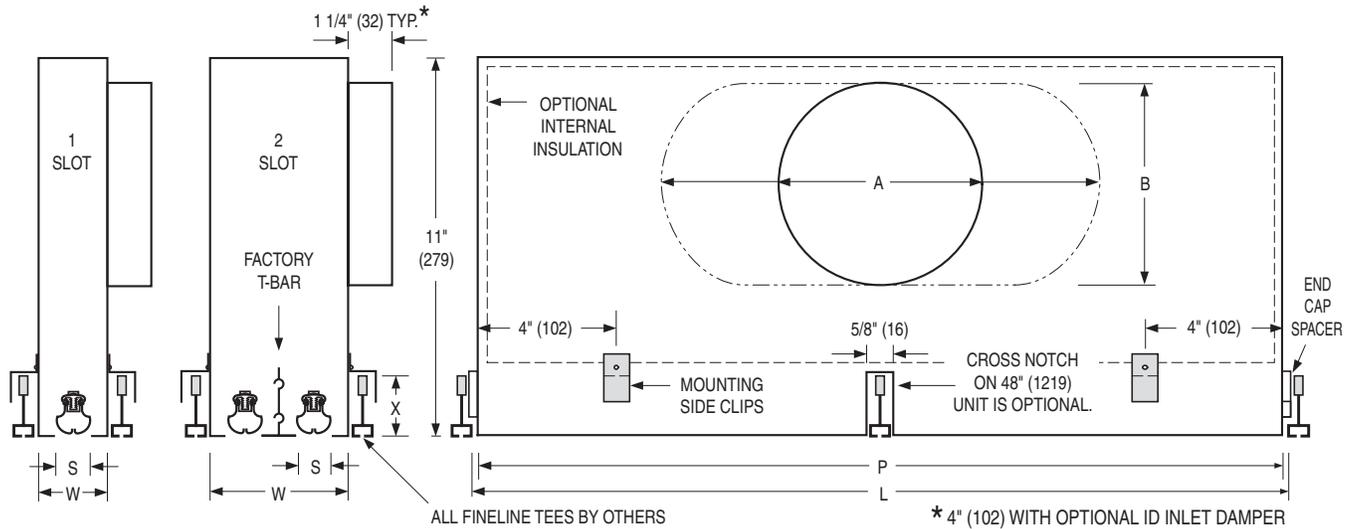
- Internal insulation (add suffix 'I' to model number).
- EIC Extended Inlet Collar (2.25" [57]) with bead.
- EQT Earthquake Tabs.
- For additional options and accessories, see page C61.

DIMENSIONAL DATA:

MODEL SERIES: 5800-F AND 5800-F2 • NARROW REGRESSED T-BAR MODELS



MODEL SERIES 5800-F

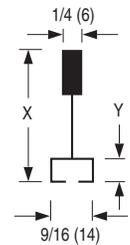


MODEL SERIES 5800-F2

Imperial Ceiling Modules (in.) Metric Ceiling Modules (mm)

Nominal Length	Overall Length L	Plenum Length P
24	23 3/4	23 3/8
48	47 3/4	47 3/8

Nominal Length	Overall Length L	Plenum Length P
600	594	584
1200	1194	1184



Model Series 5800-F

Model	S Slot Width	Width W	
		1 Slot	2 Slot
5850-F	1/2" (13)	1 1/2" (38)	3 5/8" (92)
5875-F	3/4" (19)	1 3/4" (44)	4 1/8" (105)
5810-F	1" (25)	2" (51)	4 5/8" (117)

Model Series 5800-F2

Model	S Slot Width	Width W			
		1 Slot	2 Slot	3 Slot	4 Slot
5850-F2	1/2" (13)	1 1/2" (38)	3" (76)	4 1/2" (114)	6" (152)
5875-F2	3/4" (19)	1 3/4" (44)	3 1/2" (89)	5 1/4" (133)	7" (178)
5810-F2	1" (25)	2" (51)	4" (102)	6" (152)	8" (203)

	Nominal Inlet Size			
	6" (152) Round	8" (203) Round	10" (254) Oval	12" (305) Oval
A	5 7/8" (149)	7 7/8" (200)	11" (279)	14 1/8" (359)
B	—	—	7 7/8" (200)	7 7/8" (200)

	T-Bar Type (Manufacturer)	X	Y
A	Chicago Metallic Ultraline	1 3/4" (44)	5/16" (8)
C	Certainteed Smoothline	1 5/8" (41)	5/16" (8)
D	Donn Fineline	1 25/32" (45)	5/16" (8)

PERFORMANCE DATA • MODEL SERIES 5800

MODEL: 5850(I) • 1/2" (13) SLOT WIDTH

1 Slot • 24" (610) Long

6" Round Inlet	Airflow, CFM	50	65	80	95	110	125	140
	Total Pressure	.120	.171	.228	.289	.356	.429	.506
	Static Pressure	.115	.164	.216	.274	.335	.401	.472
	Noise Criteria	19	25	29	33	37	40	42
	Throw	7-12-21	10-15-25	13-18-28	15-21-31	17-23-33	19-25-35	20-26-37
8" Round Inlet	Airflow, CFM	55	70	85	105	120	135	150
	Total Pressure	.133	.189	.251	.318	.390	.467	.550
	Static Pressure	.132	.187	.247	.312	.382	.457	.538
	Noise Criteria	18	24	28	33	36	39	41
	Throw	9-14-24	13-19-30	14-21-33	18-24-36	20-26-38	22-28-40	23-30-42

1 Slot • 36" (914) Long

6" Round Inlet	Airflow, CFM	55	75	90	110	125	145	160
	Total Pressure	.119	.169	.218	.272	.327	.385	.442
	Static Pressure	.114	.159	.204	.251	.299	.347	.397
	Noise Criteria	14	21	27	31	35	38	41
	Throw	6-10-20	9-14-24	11-17-28	13-20-31	15-22-33	16-24-35	17-26-37
8" Round Inlet	Airflow, CFM	65	85	100	120	135	155	170
	Total Pressure	.126	.165	.205	.245	.285	.328	.370
	Static Pressure	.123	.161	.199	.237	.276	.315	.354
	Noise Criteria	16	22	27	31	34	37	40
	Throw	8-13-23	11-16-27	13-19-30	15-22-33	17-24-35	18-25-37	20-27-39
10" Oval Inlet	Airflow, CFM	75	95	110	130	145	165	180
	Total Pressure	.132	.168	.205	.243	.281	.320	.359
	Static Pressure	.131	.166	.202	.239	.276	.314	.351
	Noise Criteria	16	21	26	30	33	36	39
	Throw	8-13-24	11-17-28	13-20-31	16-22-34	17-24-36	19-26-38	20-28-40

1 Slot • 48" (1219) Long

6" Round Inlet	Airflow, CFM	85	100	120	140	160	175	195
	Total Pressure	.074	.117	.157	.202	.248	.307	.361
	Static Pressure	.068	.107	.141	.178	.216	.267	.309
	Noise Criteria	23	30	33	36	38	40	43
	Throw	4-6-14	7-10-17	6-11-18	8-13-21	9-14-24	9-15-25	11-17-26
8" Round Inlet	Airflow, CFM	80	95	115	135	155	170	190
	Total Pressure	.091	.127	.165	.204	.244	.283	.324
	Static Pressure	.088	.123	.159	.195	.232	.270	.307
	Noise Criteria	16	22	27	31	35	37	40
	Throw	9-10-15	9-12-17	11-14-18	13-15-19	14-18-20	15-19-23	18-22-26
10" Oval Inlet	Airflow, CFM	110	125	145	165	185	200	220
	Total Pressure	.097	.129	.172	.209	.258	.299	.352
	Static Pressure	.095	.126	.169	.205	.252	.292	.343
	Noise Criteria	22	27	30	33	36	38	41
	Throw	10-11-14	11-12-16	12-13-18	12-14-20	13-15-21	14-17-23	15-18-25
12" Oval Inlet	Airflow, CFM	125	145	170	190	215	235	260
	Total Pressure	.107	.142	.192	.235	.292	.341	.406
	Static Pressure	.106	.141	.190	.232	.289	.337	.401
	Noise Criteria	21	25	30	33	36	38	41
	Throw	9-11-16	12-13-17	11-15-18	13-16-20	14-17-22	15-18-24	16-20-28

See page C32 for performance data notes.

PERFORMANCE DATA • MODEL SERIES 5800

MODEL: 5850(I) • 1/2" (13) SLOT WIDTH

1 Slot • 60" (1524) Long

6" Round Inlet	Airflow, CFM	65	85	110	130	155	175	200
	Total Pressure	.058	.100	.154	.203	.274	.350	.436
	Static Pressure	.050	.087	.132	.173	.231	.295	.365
	Noise Criteria	16	22	27	29	33	35	38
	Throw	3-5-10	5-7-14	7-10-17	8-11-18	9-13-20	9-14-22	10-15-23
8" Round Inlet	Airflow, CFM	75	100	125	145	170	195	220
	Total Pressure	.061	.099	.145	.196	.256	.323	.397
	Static Pressure	.058	.094	.136	.185	.240	.302	.370
	Noise Criteria	19	24	27	31	34	37	39
	Throw	6-8-15	8-11-18	9-13-21	10-14-23	12-16-25	12-17-27	13-19-29
10" Oval Inlet	Airflow, CFM	85	110	135	160	185	210	235
	Total Pressure	.065	.105	.152	.207	.269	.339	.416
	Static Pressure	.063	.102	.148	.201	.261	.328	.403
	Noise Criteria	18	24	28	32	36	39	41
	Throw	5-7-15	7-11-19	9-13-22	11-15-24	12-17-26	13-19-28	14-20-30
12" Oval Inlet	Airflow, CFM	110	140	170	200	230	260	290
	Total Pressure	.058	.094	.136	.184	.239	.301	.370
	Static Pressure	.057	.091	.132	.179	.232	.292	.358
	Noise Criteria	24	28	32	35	37	40	42
	Throw	5-8-16	7-11-20	10-14-23	11-16-26	13-18-28	14-20-30	15-22-32

2 Slot • 24" (610) Long

6" Round Inlet	Airflow, CFM	50	70	90	110	130	150	170
	Total Pressure	.086	.123	.162	.204	.250	.298	.348
	Static Pressure	.090	.127	.167	.209	.252	.296	.342
	Noise Criteria	15	23	28	33	36	40	43
	Throw	8-13-22	11-17-26	14-20-30	16-23-33	18-25-36	20-27-38	21-28-40
8" Round Inlet	Airflow, CFM	80	100	120	140	160	180	200
	Total Pressure	.053	.088	.130	.178	.235	.298	.368
	Static Pressure	.050	.082	.121	.166	.218	.276	.341
	Noise Criteria	-	15	23	24	34	36	41
	Throw	9-15-25	13-19-30	16-22-33	19-25-37	21-27-39	23-29-42	25-31-44
10" Oval Inlet	Airflow, CFM	85	110	135	160	185	210	220
	Total Pressure	.050	.081	.119	.164	.215	.273	.337
	Static Pressure	.048	.078	.115	.158	.207	.262	.324
	Noise Criteria	15	22	26	31	34	37	40
	Throw	9-15-26	13-19-30	16-21-33	18-24-35	20-26-37	22-27-39	23-29-41

2 Slot • 36" (914) Long

6" Round Inlet	Airflow, CFM	90	120	150	180	210	240	270
	Total Pressure	.059	.100	.150	.209	.277	.355	.443
	Static Pressure	.045	.074	.110	.152	.200	.254	.315
	Noise Criteria	11	19	25	30	34	37	40
	Throw	7-12-22	9-16-26	11-19-30	13-22-32	15-24-35	16-26-37	17-28-38
8" Round Inlet	Airflow, CFM	105	135	165	200	235	265	300
	Total Pressure	.049	.082	.122	.169	.223	.284	.353
	Static Pressure	.043	.071	.105	.145	.191	.244	.302
	Noise Criteria	-	19	25	30	34	38	41
	Throw	8-13-22	11-17-26	13-19-29	15-22-32	17-24-34	19-25-36	20-27-38
10" Oval Inlet	Airflow, CFM	115	150	185	225	260	295	330
	Total Pressure	.076	.125	.171	.227	.279	.323	.371
	Static Pressure	.073	.120	.163	.215	.263	.302	.344
	Noise Criteria	14	21	26	31	35	38	41
	Throw	10-15-26	12-18-29	14-20-32	16-22-34	18-24-36	19-25-37	20-27-39
12" Oval Inlet	Airflow, CFM	120	160	200	240	280	320	360
	Total Pressure	.093	.139	.188	.234	.273	.316	.347
	Static Pressure	.091	.136	.183	.226	.263	.302	.330
	Noise Criteria	17	23	28	32	35	38	40
	Throw	9-15-25	13-19-30	16-23-34	18-25-37	20-28-40	22-30-42	23-32-44

See page C32 for performance data notes.

PLENUM SLOT AND LIGHT TROFFER DIFFUSERS

PERFORMANCE DATA • MODEL SERIES 5800

MODEL: 5850(I) • 1/2" (13) SLOT WIDTH

2 Slot • 48" (1219) Long

6" Round Inlet	Airflow, CFM	100	135	170	210	245	280	315
	Total Pressure	.061	.103	.155	.221	.294	.377	.470
	Static Pressure	.041	.068	.101	.141	.187	.240	.298
	Noise Criteria	17	24	28	33	36	39	42
	Throw	5-9-18	8-13-22	10-16-25	11-18-27	13-20-29	14-22-31	15-23-33
8" Round Inlet	Airflow, CFM	120	160	200	240	280	320	360
	Total Pressure	.045	.076	.113	.159	.211	.271	.338
	Static Pressure	.036	.060	.089	.125	.165	.211	.263
	Noise Criteria	12	19	25	30	35	38	42
	Throw	7-11-19	10-14-22	11-16-25	13-18-27	14-20-29	15-21-30	16-22-32
10" Oval Inlet	Airflow, CFM	135	180	225	265	310	355	400
	Total Pressure	.043	.072	.107	.149	.198	.254	.317
	Static Pressure	.038	.063	.094	.131	.173	.222	.276
	Noise Criteria	15	22	27	31	35	39	42
	Throw	8-13-20	11-15-23	13-16-26	15-18-28	16-20-30	17-20-31	18-22-33
12" Oval Inlet	Airflow, CFM	165	220	275	335	390	430	450
	Total Pressure	.043	.073	.109	.153	.204	.261	.326
	Static Pressure	.040	.066	.099	.138	.183	.235	.292
	Noise Criteria	20	28	30	34	37	41	43
	Throw	9-14-23	11-17-27	14-20-30	15-22-33	17-23-35	18-25-37	19-26-38

2 Slot • 60" (1524) Long

6" Round Inlet	Airflow, CFM	135	170	205	245	280	315	350
	Total Pressure	.118	.167	.227	.283	.346	.417	.487
	Static Pressure	.084	.109	.141	.162	.186	.211	.229
	Noise Criteria	17	22	27	30	33	36	41
	Throw	4-7-13	5-10-16	6-12-19	7-14-21	8-16-23	9-17-24	9-18-26
8" Round Inlet	Airflow, CFM	140	180	220	260	300	340	370
	Total Pressure	.053	.079	.112	.150	.194	.243	.298
	Static Pressure	.037	.055	.078	.104	.134	.168	.206
	Noise Criteria	15	21	26	30	33	37	40
	Throw	6-9-15	7-11-18	8-12-19	9-14-21	10-15-22	11-16-24	11-17-25
10" Oval Inlet	Airflow, CFM	150	200	250	310	350	400	440
	Total Pressure	.044	.067	.094	.127	.164	.206	.251
	Static Pressure	.035	.053	.074	.099	.128	.160	.196
	Noise Criteria	18	23	28	31	34	37	39
	Throw	7-10-18	9-13-22	11-16-25	13-18-28	14-20-30	15-22-32	16-23-34
12" Oval Inlet	Airflow, CFM	190	240	290	340	390	420	520
	Total Pressure	.039	.059	.083	.111	.144	.181	.229
	Static Pressure	.034	.051	.072	.096	.124	.155	.190
	Noise Criteria	22	26	30	32	35	37	38
	Throw	7-11-19	10-16-25	12-19-29	14-22-33	16-24-36	17-26-39	18-28-41

See page C32 for performance data notes.

PERFORMANCE DATA • MODEL SERIES 5800

MODEL: 5850(I) • 1/2" (13) SLOT WIDTH

3 Slot • 24" (1219) Long

6" Round Inlet	Airflow, CFM	85	115	140	170	195	225	250
	Total Pressure	.108	.155	.199	.253	.301	.362	.417
	Static Pressure	.095	.132	.164	.202	.234	.273	.307
	Noise Criteria	19	25	30	34	37	40	42
	Throw	10-16-25	13-19-28	15-21-30	17-23-32	18-24-33	19-26-35	20-27-36
8" Round Inlet	Airflow, CFM	100	130	160	190	220	240	265
	Total Pressure	.084	.137	.187	.235	.289	.320	.368
	Static Pressure	.079	.128	.173	.215	.263	.289	.330
	Noise Criteria	15	22	27	31	35	37	40
	Throw	11-17-26	14-20-30	17-22-32	19-24-34	21-26-36	22-27-37	23-28-39
10" Oval Inlet	Airflow, CFM	105	135	160	190	215	245	270
	Total Pressure	.070	.116	.160	.213	.261	.303	.348
	Static Pressure	.068	.112	.154	.204	.250	.289	.330
	Noise Criteria	13	20	25	30	34	37	40
	Throw	11-16-26	14-19-29	16-21-32	18-23-34	20-25-36	22-27-37	23-28-39

3 Slot • 36" (914) Long

6" Round Inlet	Airflow, CFM	105	140	175	210	245	280	315
	Total Pressure	.100	.107	.159	.222	.293	.373	.463
	Static Pressure	.044	.072	.105	.144	.187	.235	.288
	Noise Criteria	14	21	27	31	35	38	41
	Throw	6-10-20	9-15-25	12-18-29	14-21-32	16-24-34	17-26-36	18-28-38
8" Round Inlet	Airflow, CFM	115	155	195	235	275	315	355
	Total Pressure	.038	.064	.096	.135	.179	.230	.288
	Static Pressure	.031	.051	.075	.105	.138	.176	.219
	Noise Criteria	8	17	23	29	33	37	41
	Throw	6-10-19	9-14-24	12-17-27	14-20-30	16-22-33	18-24-35	19-26-37
10" Oval Inlet	Airflow, CFM	135	180	225	265	310	355	400
	Total Pressure	.045	.074	.107	.141	.184	.230	.282
	Static Pressure	.041	.066	.095	.124	.161	.200	.243
	Noise Criteria	17	24	28	32	35	38	41
	Throw	11-17-28	14-20-31	16-22-34	18-24-36	19-26-38	20-27-40	21-29-41
12" Oval Inlet	Airflow, CFM	145	195	245	290	340	390	440
	Total Pressure	.045	.075	.112	.156	.206	.264	.328
	Static Pressure	.042	.070	.104	.144	.191	.243	.302
	Noise Criteria	19	24	28	31	34	37	39
	Throw	10-15-26	13-19-30	16-23-34	19-25-37	21-27-39	22-29-41	24-31-43

3 Slot • 48" (1219) Long

6" Round Inlet	Airflow, CFM	130	180	200	255	290	340	375
	Total Pressure	.076	.133	.200	.286	.375	.482	.588
	Static Pressure	.045	.075	.110	.151	.198	.251	.309
	Noise Criteria	13	21	26	31	35	38	40
	Throw	4-8-17	7-13-22	9-16-25	12-19-28	13-21-29	15-23-31	16-24-33
8" Round Inlet	Airflow, CFM	155	200	245	290	335	380	425
	Total Pressure	.046	.075	.111	.154	.203	.258	.320
	Static Pressure	.032	.053	.079	.108	.141	.179	.221
	Noise Criteria	10	18	24	30	34	38	41
	Throw	7-11-20	9-14-24	12-17-27	13-20-29	15-21-31	16-23-33	18-25-35
10" Oval Inlet	Airflow, CFM	175	230	290	345	405	450	500
	Total Pressure	.039	.067	.102	.144	.193	.250	.313
	Static Pressure	.030	.052	.079	.112	.149	.193	.241
	Noise Criteria	16	22	28	32	35	38	40
	Throw	7-12-22	10-16-26	13-19-30	15-21-32	17-23-35	18-25-37	19-26-37
12" Oval Inlet	Airflow, CFM	185	250	315	380	445	510	575
	Total Pressure	.033	.059	.093	.135	.184	.241	.306
	Static Pressure	.028	.051	.080	.115	.157	.206	.262
	Noise Criteria	8	17	24	29	34	38	41
	Throw	9-13-22	12-17-26	15-20-30	17-22-32	19-24-35	21-26-37	22-28-38

See page C32 for performance data notes.

PLENUM SLOT AND LIGHT TROFFER DIFFUSERS

PERFORMANCE DATA • MODEL SERIES 5800

MODEL: 5850(I) • 1/2" (13) SLOT WIDTH

3 Slot • 60" (1524) Long

8" Round Inlet	Airflow, CFM	180	235	285	340	390	445	495
	Total Pressure	.053	.083	.118	.162	.211	.268	.330
	Static Pressure	.035	.053	.074	.099	.128	.160	.196
	Noise Criteria	13	20	25	30	33	36	39
	Throw	3-5-12	5-9-17	7-12-20	9-14-23	10-16-25	11-18-28	12-19-29
10" Oval Inlet	Airflow, CFM	200	265	325	385	445	510	580
	Total Pressure	.044	.071	.102	.140	.184	.235	.292
	Static Pressure	.032	.050	.071	.096	.125	.158	.194
	Noise Criteria	15	19	26	30	33	36	39
	Throw	5-8-16	8-12-21	10-15-25	12-17-28	14-19-31	16-21-33	17-22-35
12" Oval Inlet	Airflow, CFM	220	290	360	430	500	570	665
	Total Pressure	.036	.058	.086	.119	.157	.201	.254
	Static Pressure	.030	.047	.068	.093	.122	.155	.192
	Noise Criteria	15	21	26	30	34	37	39
	Throw	6-10-18	9-13-23	11-16-26	13-19-29	15-21-32	16-23-34	18-24-36

4 Slot • 24" (1219) Long

6" Round Inlet	Airflow, CFM	100	125	155	180	205	215	240
	Total Pressure	.100	.127	.178	.226	.279	.302	.361
	Static Pressure	.071	.099	.136	.169	.205	.220	.259
	Noise Criteria	18	24	29	33	36	37	40
	Throw	10-15-25	13-18-28	15-21-31	17-23-33	18-25-35	18-26-35	20-27-37
8" Round Inlet	Airflow, CFM	110	145	175	205	230	260	280
	Total Pressure	.100	.115	.154	.195	.232	.280	.314
	Static Pressure	.070	.104	.137	.172	.203	.243	.271
	Noise Criteria	18	25	30	34	37	40	42
	Throw	13-18-28	16-21-32	18-24-34	19-26-36	20-27-37	22-28-39	22-29-40
10" Oval Inlet	Airflow, CFM	125	155	190	225	260	290	325
	Total Pressure	.100	.115	.145	.174	.204	.231	.263
	Static Pressure	.087	.109	.136	.162	.188	.211	.238
	Noise Criteria	20	24	29	32	35	37	40
	Throw	14-19-29	17-22-32	19-24-34	21-26-37	22-28-38	23-29-40	25-31-41

4 Slot • 36" (914) Long

6" Round Inlet	Airflow, CFM	115	155	195	235	275	315	355
	Total Pressure	.064	.109	.164	.231	.307	.393	.490
	Static Pressure	.040	.066	.097	.132	.172	.216	.265
	Noise Criteria	12	19	25	30	34	37	40
	Throw	6-10-20	9-15-25	12-18-28	14-21-31	16-24-33	17-26-35	19-28-37
8" Round Inlet	Airflow, CFM	125	170	210	255	295	340	380
	Total Pressure	.038	.064	.096	.135	.179	.231	.287
	Static Pressure	.029	.048	.072	.099	.131	.168	.208
	Noise Criteria	10	18	24	29	33	37	40
	Throw	8-12-22	11-16-26	13-19-30	15-22-32	17-24-34	19-26-37	20-28-38
10" Oval Inlet	Airflow, CFM	145	195	240	290	335	385	430
	Total Pressure	.044	.072	.104	.138	.180	.226	.276
	Static Pressure	.039	.063	.091	.118	.153	.190	.231
	Noise Criteria	12	19	25	29	33	36	40
	Throw	9-14-25	12-17-28	14-20-31	16-22-34	18-24-36	19-26-38	20-27-39
12" Oval Inlet	Airflow, CFM	170	220	270	320	370	420	470
	Total Pressure	.044	.073	.109	.151	.200	.255	.317
	Static Pressure	.040	.067	.099	.137	.181	.231	.287
	Noise Criteria	17	23	28	32	35	38	40
	Throw	10-16-26	14-20-31	17-23-35	20-26-38	22-29-41	24-31-43	26-33-45

See page C32 for performance data notes.

PERFORMANCE DATA • MODEL SERIES 5800

MODEL: 5850(I) • 1/2" (13) SLOT WIDTH

4 Slot • 48" (1219) Long

6" Round Inlet	Airflow, CFM	155	200	245	290	335	380	425
	Total Pressure	.086	.142	.209	.287	.377	.478	.591
	Static Pressure	.044	.070	.102	.137	.177	.220	.269
	Noise Criteria	13	20	25	29	33	36	39
	Throw	5-10-19	8-14-22	10-17-24	12-19-27	14-21-28	15-23-30	17-24-31
8" Round Inlet	Airflow, CFM	180	230	280	330	380	430	480
	Total Pressure	.047	.076	.110	.151	.197	.248	.305
	Static Pressure	.029	.047	.068	.091	.118	.147	.179
	Noise Criteria	11	18	24	29	33	37	40
	Throw	4-8-17	6-11-21	8-14-24	10-16-27	11-18-29	12-19-31	13-21-33
10" Oval Inlet	Airflow, CFM	195	255	310	370	420	480	520
	Total Pressure	.040	.064	.093	.126	.164	.206	.253
	Static Pressure	.030	.049	.071	.096	.124	.154	.188
	Noise Criteria	12	20	26	31	35	39	41
	Throw	7-11-20	10-15-25	13-19-29	15-21-33	17-23-35	19-26-38	20-27-39
12" Oval Inlet	Airflow, CFM	225	290	355	420	485	550	615
	Total Pressure	.039	.063	.091	.124	.161	.202	.248
	Static Pressure	.032	.052	.074	.100	.129	.162	.197
	Noise Criteria	15	21	26	31	34	37	40
	Throw	8-13-23	12-18-28	15-21-32	18-24-36	20-27-39	22-29-41	24-31-44

4 Slot • 60" (1524) Long

8" Round Inlet	Airflow, CFM	200	260	320	380	440	500	560
	Total Pressure	.046	.078	.118	.167	.224	.289	.362
	Static Pressure	.025	.041	.062	.088	.118	.152	.191
	Noise Criteria	17	21	24	29	34	38	42
	Throw	3-7-13	6-10-17	8-13-21	10-16-24	11-18-26	13-20-28	14-21-30
10" Oval Inlet	Airflow, CFM	225	300	375	450	525	600	675
	Total Pressure	.036	.062	.094	.134	.181	.234	.295
	Static Pressure	.024	.040	.061	.085	.114	.148	.185
	Noise Criteria	14	21	26	31	35	38	41
	Throw	6-9-18	8-13-22	10-15-25	12-18-28	13-19-30	14-21-32	15-22-33
12" Oval Inlet	Airflow, CFM	250	340	430	520	610	700	790
	Total Pressure	.034	.058	.089	.126	.171	.221	.279
	Static Pressure	.025	.042	.064	.090	.120	.155	.195
	Noise Criteria	12	16	23	28	33	37	40
	Throw	6-10-18	9-14-22	12-16-25	13-19-27	15-21-29	16-22-31	18-24-32

Performance Data Notes:

1. Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
2. Total and Static Pressure are in in. w.g..
3. Noise Criteria [NC] values based on a room absorption of 10 dB, re 10⁻¹² watts. Dash (-) in space denotes a Noise Criteria level less than 15.
4. Cataloged throws are for a one-way horizontal air pattern. For divided airflow, deduce the airflow in each direction according to the number of slots, with the total airflow apportioned between the slots. Look up throw for the airflow in each direction according to the number of slots in that direction.
5. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2006.

PLENUM SLOT AND LIGHT TROFFER DIFFUSERS

PERFORMANCE DATA • MODEL SERIES 5800

MODEL: 5875(I) • 3/4" (19) SLOT WIDTH

1 Slot • 24" (610) Long

6" Round Inlet	Airflow, CFM	55	70	85	100	115	130	145
	Total Pressure	.108	.156	.211	.272	.341	.414	.496
	Static Pressure	.103	.149	.200	.257	.320	.389	.464
	Noise Criteria	18	24	28	32	36	38	42
	Throw	6-11-20	10-15-25	12-18-28	14-20-31	16-22-33	18-24-35	19-26-37
8" Round Inlet	Airflow, CFM	60	75	90	110	125	140	155
	Total Pressure	.120	.173	.233	.301	.375	.456	.543
	Static Pressure	.118	.170	.229	.294	.367	.445	.531
	Noise Criteria	18	24	28	33	36	39	41
	Throw	8-14-23	13-18-29	16-22-32	18-25-36	21-27-38	23-30-41	25-32-43

1 Slot • 36" (914) Long

6" Round Inlet	Airflow, CFM	65	80	95	115	135	150	180
	Total Pressure	.075	.116	.152	.217	.270	.315	.402
	Static Pressure	.068	.105	.136	.193	.238	.276	.344
	Noise Criteria	13	18	24	29	33	36	41
	Throw	6-9-19	8-12-22	9-14-24	11-17-27	12-19-30	13-20-31	15-22-34
8" Round Inlet	Airflow, CFM	70	90	110	130	150	170	190
	Total Pressure	.053	.095	.143	.192	.239	.279	.336
	Static Pressure	.050	.091	.136	.183	.226	.263	.316
	Noise Criteria	12	21	26	31	34	38	42
	Throw	6-9-19	9-13-24	11-16-28	13-19-31	15-21-33	17-23-36	18-25-38
10" Oval Inlet	Airflow, CFM	80	105	125	145	165	190	210
	Total Pressure	.075	.122	.177	.232	.282	.311	.355
	Static Pressure	.073	.120	.173	.226	.276	.302	.344
	Noise Criteria	14	21	27	32	36	38	41
	Throw	7-12-22	11-16-27	13-19-31	15-21-34	17-24-36	18-25-38	20-26-40

1 Slot • 48" (1219) Long

6" Round Inlet	Airflow, CFM	85	100	120	140	160	175	195
	Total Pressure	.087	.124	.167	.217	.273	.306	.344
	Static Pressure	.080	.113	.151	.194	.241	.266	.292
	Noise Criteria	21	27	31	33	35	38	40
	Throw	2-4-13	2-6-15	3-7-16	5-9-19	6-10-22	6-11-22	7-11-22
8" Round Inlet	Airflow, CFM	105	120	140	160	180	195	215
	Total Pressure	.081	.115	.154	.198	.247	.275	.304
	Static Pressure	.078	.111	.148	.190	.236	.261	.286
	Noise Criteria	21	26	28	32	35	37	40
	Throw	2-5-15	3-7-17	4-9-19	6-11-22	8-12-25	8-13-25	9-14-26
10" Oval Inlet	Airflow, CFM	120	130	150	170	190	210	240
	Total Pressure	.082	.116	.155	.199	.247	.273	.300
	Static Pressure	.080	.113	.151	.193	.240	.265	.291
	Noise Criteria	21	23	28	30	32	34	38
	Throw	8-12-16	9-13-17	11-14-19	12-15-20	13-15-22	13-17-24	15-18-26
12" Oval Inlet	Airflow, CFM	110	130	150	180	200	220	250
	Total Pressure	.039	.044	.065	.085	.132	.151	.211
	Static Pressure	.038	.041	.063	.081	.128	.149	.201
	Noise Criteria	12	18	23	28	31	34	38
	Throw	9-12-16	10-13-17	11-14-19	12-15-21	14-16-23	15-17-24	16-18-26

See page C38 for performance data notes.

PERFORMANCE DATA • MODEL SERIES 5800

MODEL: 5875(I) • 3/4" (19) SLOT WIDTH

1 Slot • 60" (1524) Long

6" Round Inlet	Airflow, CFM	100	115	135	155	175	190	210
	Total Pressure	.112	.144	.171	.201	.234	.259	.289
	Static Pressure	.094	.120	.138	.158	.179	.194	.210
	Noise Criteria	23	28	31	34	37	39	41
	Throw	4-6-14	6-9-17	7-12-20	8-14-22	9-15-24	10-17-26	11-18-28
8" Round Inlet	Airflow, CFM	120	145	165	190	210	235	255
	Total Pressure	.110	.143	.166	.192	.220	.242	.265
	Static Pressure	.102	.131	.151	.172	.196	.212	.229
	Noise Criteria	23	28	32	35	38	40	42
	Throw	5-7-16	8-11-20	9-15-23	10-17-26	12-18-28	13-21-30	14-22-32
10" Oval Inlet	Airflow, CFM	135	160	185	215	240	265	290
	Total Pressure	.107	.138	.160	.185	.211	.230	.251
	Static Pressure	.103	.132	.152	.174	.197	.213	.231
	Noise Criteria	22	27	32	34	38	40	41
	Throw	6-8-17	9-13-22	11-17-25	12-19-28	14-21-31	15-24-33	16-25-35
12" Oval Inlet	Airflow, CFM	150	175	205	235	265	290	320
	Total Pressure	.110	.141	.163	.187	.213	.232	.252
	Static Pressure	.107	.138	.158	.181	.205	.223	.241
	Noise Criteria	22	26	32	34	38	40	40
	Throw	6-8-17	9-13-22	12-17-24	13-19-27	15-21-30	16-24-32	17-25-34

2 Slot • 24" (610) Long

6" Round Inlet	Airflow, CFM	55	80	105	140	165	180	200
	Total Pressure	.031	.063	.101	.164	.217	.275	.340
	Static Pressure	.026	.052	.081	.130	.169	.212	.259
	Noise Criteria	2	12	19	26	30	32	37
	Throw	3-7-14	7-11-19	10-14-22	13-17-25	15-19-27	16-21-29	17-22-30
8" Round Inlet	Airflow, CFM	100	120	140	160	180	200	220
	Total Pressure	.036	.059	.088	.121	.159	.202	.249
	Static Pressure	.031	.051	.075	.103	.134	.170	.209
	Noise Criteria	-	22	23	29	32	34	40
	Throw	9-15-25	13-18-28	15-20-31	17-23-33	18-24-35	20-25-36	21-26-38
10" Oval Inlet	Airflow, CFM	120	140	160	180	200	220	240
	Total Pressure	.039	.065	.096	.132	.173	.219	.270
	Static Pressure	.038	.062	.091	.124	.163	.205	.253
	Noise Criteria	16	23	28	32	34	38	41
	Throw	11-17-27	15-20-31	17-23-34	20-26-36	21-27-38	23-29-39	24-30-41

2 Slot • 36" (914) Long

6" Round Inlet	Airflow, CFM	90	120	150	180	210	240	270
	Total Pressure	.045	.077	.117	.166	.223	.288	.362
	Static Pressure	.031	.051	.077	.109	.145	.187	.234
	Noise Criteria	5	14	21	27	32	36	40
	Throw	6-11-21	9-15-26	11-18-30	13-21-34	15-23-36	16-25-39	18-27-41
8" Round Inlet	Airflow, CFM	115	145	180	210	245	275	310
	Total Pressure	.049	.080	.117	.161	.212	.270	.336
	Static Pressure	.040	.063	.092	.125	.164	.208	.257
	Noise Criteria	15	19	24	29	34	37	41
	Throw	7-13-23	11-17-28	13-20-32	16-23-34	18-25-37	18-27-39	20-29-41
10" Oval Inlet	Airflow, CFM	135	170	205	240	275	310	345
	Total Pressure	.054	.082	.116	.156	.201	.252	.309
	Static Pressure	.050	.075	.106	.142	.183	.229	.280
	Noise Criteria	17	23	28	32	35	38	41
	Throw	9-15-26	13-19-30	15-22-34	18-24-37	20-27-40	22-29-42	23-30-44
12" Oval Inlet	Airflow, CFM	155	200	245	290	335	380	425
	Total Pressure	.054	.082	.116	.156	.201	.253	.309
	Static Pressure	.050	.077	.108	.145	.186	.233	.285
	Noise Criteria	17	23	27	31	35	37	41
	Throw	9-15-25	14-19-29	16-22-33	19-24-36	21-27-39	23-29-41	24-30-43

See page C38 for performance data notes.

PLENUM SLOT AND LIGHT TROFFER DIFFUSERS

PERFORMANCE DATA • MODEL SERIES 5800

MODEL: 5875(I) • 3/4" (19) SLOT WIDTH

2 Slot • 48" (1219) Long

6" Round Inlet	Airflow, CFM	90	130	170	215	255	295	335
	Total Pressure	.060	.104	.160	.231	.311	.402	.505
	Static Pressure	.032	.055	.085	.120	.161	.208	.261
	Noise Criteria	10	18	25	30	35	38	42
	Throw	5-9-16	8-11-19	9-13-22	10-15-23	12-16-25	12-18-27	13-19-28
8" Round Inlet	Airflow, CFM	105	150	195	240	285	330	375
	Total Pressure	.036	.063	.097	.138	.186	.241	.303
	Static Pressure	.026	.045	.069	.098	.132	.170	.213
	Noise Criteria	7	16	22	28	32	36	40
	Throw	5-9-17	9-13-21	11-15-24	12-17-26	14-19-28	15-20-30	16-22-31
10" Oval Inlet	Airflow, CFM	130	180	230	280	330	380	430
	Total Pressure	.040	.069	.105	.149	.200	.260	.328
	Static Pressure	.035	.059	.090	.127	.171	.222	.279
	Noise Criteria	11	19	25	30	34	37	41
	Throw	6-7-15	7-11-20	10-14-24	10-16-26	12-18-29	13-19-31	14-21-33
12" Oval Inlet	Airflow, CFM	170	225	285	345	405	460	520
	Total Pressure	.035	.060	.092	.131	.176	.228	.288
	Static Pressure	.032	.053	.081	.115	.154	.200	.252
	Noise Criteria	15	19	24	29	34	37	40
	Throw	7-11-19	10-14-23	11-16-26	13-18-29	16-19-30	18-21-33	20-23-35

2 Slot • 60" (1524) Long

6" Round Inlet	Airflow, CFM	145	190	230	270	310	355	395
	Total Pressure	.077	.125	.181	.245	.319	.409	.503
	Static Pressure	.040	.061	.086	.115	.148	.184	.225
	Noise Criteria	14	21	27	31	35	38	42
	Throw	2-4-11	3-7-15	5-8-17	5-10-20	5-11-22	6-12-23	7-14-24
8" Round Inlet	Airflow, CFM	175	225	275	325	375	425	475
	Total Pressure	.053	.084	.121	.164	.213	.268	.330
	Static Pressure	.036	.056	.079	.106	.136	.170	.207
	Noise Criteria	15	22	27	32	36	39	42
	Throw	3-5-13	4-8-17	6-10-20	7-12-23	7-14-25	8-15-27	9-17-28
10" Oval Inlet	Airflow, CFM	200	260	315	375	430	490	545
	Total Pressure	.042	.067	.095	.129	.167	.211	.258
	Static Pressure	.033	.051	.071	.095	.123	.153	.186
	Noise Criteria	15	21	27	31	35	39	41
	Throw	4-6-14	5-9-19	7-11-22	8-14-25	8-16-27	9-17-29	11-19-31
12" Oval Inlet	Airflow, CFM	210	270	330	395	455	515	575
	Total Pressure	.037	.057	.081	.110	.142	.178	.218
	Static Pressure	.031	.047	.067	.089	.114	.143	.174
	Noise Criteria	14	21	26	31	34	39	40
	Throw	4-6-14	5-9-19	7-11-22	8-14-24	8-16-26	9-17-28	12-19-30

3 Slot • 24" (610) Long

6" Round Inlet	Airflow, CFM	100	135	165	200	225	255	280
	Total Pressure	.045	.098	.143	.211	.292	.319	.408
	Static Pressure	.037	.081	.102	.155	.201	.215	.287
	Noise Criteria	14	22	27	32	35	38	41
	Throw	8-12-22	12-17-26	14-20-29	17-23-32	18-25-34	20-26-35	21-28-37
8" Round Inlet	Airflow, CFM	100	135	170	200	235	270	305
	Total Pressure	.050	.078	.118	.156	.200	.248	.302
	Static Pressure	.045	.068	.102	.134	.170	.209	.252
	Noise Criteria	15	19	25	30	33	37	40
	Throw	10-15-26	13-19-28	15-20-31	16-23-33	17-24-35	19-25-36	20-36-38
10" Oval Inlet	Airflow, CFM	135	175	210	245	285	325	360
	Total Pressure	.042	.066	.094	.126	.164	.207	.254
	Static Pressure	.038	.058	.083	.112	.145	.182	.223
	Noise Criteria	14	21	26	31	34	37	40
	Throw	9-14-24	12-17-28	14-20-31	16-22-33	18-24-35	19-26-37	20-27-39

See page C38 for performance data notes.

PERFORMANCE DATA • MODEL SERIES 5800

MODEL: 5875(I) • 3/4" (19) SLOT WIDTH

3 Slot • 36" (914) Long

6" Round Inlet	Airflow, CFM	120	160	200	235	275	310	350
	Total Pressure	.057	.098	.151	.213	.285	.364	.460
	Static Pressure	.030	.050	.075	.106	.142	.182	.228
	Noise Criteria	6	16	23	28	33	37	40
	Throw	9-14-24	12-17-28	14-20-31	16-22-33	18-24-35	19-26-37	20-27-39
8" Round Inlet	Airflow, CFM	135	180	225	275	320	365	410
	Total Pressure	.052	.089	.134	.188	.250	.320	.402
	Static Pressure	.036	.060	.089	.124	.165	.211	.263
	Noise Criteria	15	19	24	29	34	37	41
	Throw	9-14-24	12-17-28	14-20-31	16-22-33	18-24-35	19-26-37	20-27-39
10" Oval Inlet	Airflow, CFM	150	205	255	305	355	410	460
	Total Pressure	.046	.076	.113	.157	.209	.268	.334
	Static Pressure	.040	.066	.098	.135	.179	.228	.283
	Noise Criteria	12	20	26	30	35	38	41
	Throw	9-14-24	12-17-28	14-20-31	16-22-33	18-24-35	19-26-37	20-27-39
12" Oval Inlet	Airflow, CFM	160	220	280	340	400	460	520
	Total Pressure	.033	.060	.095	.138	.187	.244	.309
	Static Pressure	.030	.054	.085	.122	.166	.216	.272
	Noise Criteria	6	16	23	29	34	39	43
	Throw	9-14-23	13-18-28	16-21-32	18-24-35	20-26-38	22-28-40	23-29-42

3 Slot • 48" (1219) Long

6" Round Inlet	Airflow, CFM	140	185	235	285	335	380	430
	Total Pressure	.069	.120	.189	.273	.373	.481	.610
	Static Pressure	.034	.059	.091	.129	.173	.223	.280
	Noise Criteria	12	20	27	32	37	40	44
	Throw	2-5-13	5-10-18	8-13-22	10-16-24	11-18-27	13-20-29	14-22-31
8" Round Inlet	Airflow, CFM	155	215	275	340	400	460	520
	Total Pressure	.046	.083	.130	.189	.256	.333	.421
	Static Pressure	.033	.058	.089	.126	.169	.218	.273
	Noise Criteria	8	17	23	29	33	37	40
	Throw	3-6-15	6-12-21	10-16-26	13-20-28	14-22-31	17-25-34	18-27-36
10" Oval Inlet	Airflow, CFM	180	250	320	390	460	530	600
	Total Pressure	.041	.071	.110	.157	.213	.278	.352
	Static Pressure	.033	.056	.085	.121	.162	.211	.265
	Noise Criteria	7	17	23	29	33	36	40
	Throw	4-7-16	7-14-23	12-18-28	15-23-31	16-25-34	20-28-37	21-31-39
12" Oval Inlet	Airflow, CFM	215	285	355	425	490	560	630
	Total Pressure	.041	.070	.107	.151	.201	.259	.325
	Static Pressure	.035	.059	.090	.126	.169	.217	.271
	Noise Criteria	7	18	25	30	34	38	41
	Throw	7-11-22	11-16-28	14-19-32	17-22-36	19-25-38	21-27-41	23-29-43

3 Slot • 60" (1524) Long

8" Round Inlet	Airflow, CFM	225	275	325	370	420	470	520
	Total Pressure	.064	.095	.131	.172	.218	.273	.331
	Static Pressure	.036	.054	.073	.097	.122	.152	.183
	Noise Criteria	12	19	24	30	33	37	42
	Throw	7-11-22	9-14-25	11-17-28	13-18-29	15-20-31	15-22-32	17-24-34
10" Oval Inlet	Airflow, CFM	255	315	370	430	485	545	600
	Total Pressure	.048	.073	.099	.133	.168	.210	.253
	Static Pressure	.033	.049	.066	.088	.111	.139	.167
	Noise Criteria	12	19	24	29	34	38	41
	Throw	8-13-24	11-16-27	13-19-30	15-21-32	17-23-34	18-25-35	20-27-37
12" Oval Inlet	Airflow, CFM	270	330	390	450	510	570	630
	Total Pressure	.038	.056	.077	.102	.129	.162	.195
	Static Pressure	.028	.042	.056	.075	.094	.118	.142
	Noise Criteria	11	18	24	29	34	38	40
	Throw	8-13-24	12-16-26	14-19-29	16-21-31	18-23-33	19-25-34	21-27-36

See page C38 for performance data notes.

PLENUM SLOT AND LIGHT TROFFER DIFFUSERS

PERFORMANCE DATA • MODEL SERIES 5800

MODEL: 5875(I) • 3/4" (19) SLOT WIDTH

4 Slot • 24" (610) Long

6" Round Inlet	Airflow, CFM	120	155	195	235	270	300	330
	Total Pressure	.090	.131	.182	.242	.293	.338	.386
	Static Pressure	.064	.089	.115	.145	.165	.179	.194
	Noise Criteria	16	22	27	32	35	37	39
	Throw	7-12-21	10-16-24	13-21-27	16-24-30	17-26-32	19-28-33	20-30-34
8" Round Inlet	Airflow, CFM	145	180	220	260	290	335	365
	Total Pressure	.062	.090	.121	.159	.195	.230	.266
	Static Pressure	.051	.072	.095	.122	.146	.169	.194
	Noise Criteria	15	19	26	31	34	37	39
	Throw	11-16-26	13-19-29	15-21-31	16-22-33	17-24-35	18-25-36	19-26-37
10" Oval Inlet	Airflow, CFM	165	205	245	285	325	365	405
	Total Pressure	.044	.065	.090	.119	.153	.191	.233
	Static Pressure	.038	.055	.075	.100	.127	.158	.193
	Noise Criteria	12	19	24	29	33	36	40
	Throw	6-10-20	8-13-24	10-16-27	12-18-30	14-20-32	15-22-34	16-24-36

4 Slot • 36" (914) Long

6" Round Inlet	Airflow, CFM	140	180	225	270	315	355	400
	Total Pressure	.064	.107	.164	.233	.315	.402	.508
	Static Pressure	.029	.049	.074	.103	.138	.178	.222
	Noise Criteria	8	17	24	29	34	37	41
	Throw	6-12-21	10-16-25	13-19-28	15-22-30	16-24-32	18-26-33	19-27-35
8" Round Inlet	Airflow, CFM	165	220	270	325	375	430	480
	Total Pressure	.047	.082	.126	.180	.242	.315	.395
	Static Pressure	.032	.056	.086	.123	.165	.214	.269
	Noise Criteria	15	19	24	29	34	38	41
	Throw	7-13-23	11-17-28	13-20-32	16-23-34	18-25-37	18-27-39	20-29-41
10" Oval Inlet	Airflow, CFM	190	250	305	360	415	475	530
	Total Pressure	.040	.072	.111	.159	.215	.281	.353
	Static Pressure	.031	.057	.089	.128	.174	.227	.286
	Noise Criteria	8	18	24	29	34	38	41
	Throw	9-17-26	15-23-32	20-26-35	23-31-38	25-34-40	27-36-41	29-38-45
12" Oval Inlet	Airflow, CFM	210	275	340	405	470	535	600
	Total Pressure	.033	.059	.092	.132	.179	.233	.294
	Static Pressure	.027	.049	.076	.110	.149	.194	.245
	Noise Criteria	9	17	24	29	34	37	41
	Throw	9-17-25	16-23-31	21-26-34	24-31-37	26-34-39	28-36-40	30-38-44

4 Slot • 48" (1219) Long

8" Round Inlet	Airflow, CFM	190	250	310	370	430	490	550
	Total Pressure	.050	.086	.130	.182	.244	.314	.393
	Static Pressure	.026	.046	.070	.099	.133	.172	.216
	Noise Criteria	15	21	24	29	33	37	41
	Throw	5-10-19	8-13-22	10-15-24	13-17-26	14-19-28	16-21-29	17-22-31
10" Oval Inlet	Airflow, CFM	225	290	360	430	500	565	635
	Total Pressure	.043	.071	.108	.153	.205	.264	.332
	Static Pressure	.029	.048	.073	.104	.140	.182	.229
	Noise Criteria	13	20	24	29	33	36	39
	Throw	6-11-21	9-15-24	12-17-26	15-19-28	16-22-31	19-24-32	20-25-34
12" Oval Inlet	Airflow, CFM	255	325	390	450	525	590	660
	Total Pressure	.035	.058	.089	.125	.168	.217	.273
	Static Pressure	.026	.044	.067	.095	.128	.166	.209
	Noise Criteria	14	18	25	30	33	36	40
	Throw	6-11-21	9-15-24	13-17-25	16-19-27	17-22-30	20-24-31	21-25-33

See page C38 for performance data notes.

PERFORMANCE DATA • MODEL SERIES 5800

MODEL: 5875(I) • 3/4" (19) SLOT WIDTH

4 Slot • 60" (1524) Long

8" Round Inlet	Airflow, CFM	250	315	375	440	500	565	625
	Total Pressure	.066	.102	.142	.192	.245	.310	.376
	Static Pressure	.032	.048	.065	.086	.109	.136	.163
	Noise Criteria	16	20	26	32	35	38	42
	Throw	5-10-17	9-13-22	9-16-27	12-18-29	14-20-32	15-22-34	16-24-36
10" Oval Inlet	Airflow, CFM	290	365	435	505	575	650	720
	Total Pressure	.048	.073	.101	.135	.173	.218	.265
	Static Pressure	.027	.041	.056	.074	.093	.116	.140
	Noise Criteria	20	24	30	32	35	38	42
	Throw	6-11-19	10-15-24	11-18-29	14-21-32	16-23-35	17-25-37	19-27-39
12" Oval Inlet	Airflow, CFM	320	360	455	540	635	715	800
	Total Pressure	.042	.067	.099	.135	.179	.227	.283
	Static Pressure	.029	.045	.065	.090	.118	.150	.186
	Noise Criteria	18	23	26	29	34	38	41
	Throw	6-11-19	10-15-24	12-18-28	15-21-31	17-23-34	18-25-36	20-27-38

Performance Data Notes:

1. Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
2. Total and Static Pressure are in in. w.g..
3. Noise Criteria [NC] values based on a room absorption of 10 dB, re 10⁻¹² watts. Dash (-) in space denotes a Noise Criteria level less than 15.
4. Cataloged throws are for a one-way horizontal air pattern. For divided airflow, deduce the airflow in each direction according to the number of slots, with the total airflow apportioned between the slots. Look up throw for the airflow in each direction according to the number of slots in that direction.
5. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2006.

PLENUM SLOT AND LIGHT TROFFER DIFFUSERS

PERFORMANCE DATA • MODEL SERIES 5800

MODEL: 5810(I) • 1" (25) SLOT WIDTH

1 Slot • 24" (610) Long

6" Round Inlet	Airflow, CFM	55	70	85	100	115	130	145
	Total Pressure	.096	.141	.195	.255	.325	.400	.485
	Static Pressure	.090	.133	.184	.241	.305	.377	.455
	Noise Criteria	18	23	27	31	35	37	41
	Throw	8-13-22	10-15-25	12-18-28	14-20-30	15-21-32	16-22-34	18-24-35
8" Round Inlet	Airflow, CFM	65	80	95	110	125	140	155
	Total Pressure	.106	.157	.216	.284	.360	.444	.537
	Static Pressure	.104	.153	.211	.277	.351	.433	.524
	Noise Criteria	18	24	28	32	36	39	42
	Throw	10-16-26	13-19-29	16-22-32	18-24-35	20-26-37	21-27-39	23-29-41
10" Oval Inlet	Airflow, CFM	75	90	110	125	145	160	180
	Total Pressure	.127	.187	.258	.339	.430	.531	.642
	Static Pressure	.125	.186	.255	.335	.425	.524	.634
	Noise Criteria	18	23	28	32	36	38	42
	Throw	12-18-28	15-22-32	19-25-35	21-27-38	23-30-40	25-31-43	27-33-45

1 Slot • 36" (914) Long

6" Round Inlet	Airflow, CFM	55	80	100	120	140	165	200
	Total Pressure	.057	.095	.143	.197	.260	.333	.411
	Static Pressure	.049	.082	.121	.167	.219	.278	.344
	Noise Criteria	11	17	23	28	31	36	40
	Throw	7-11-21	9-15-25	12-17-29	13-20-32	15-20-34	16-23-36	17-24-38
8" Round Inlet	Airflow, CFM	65	85	110	130	150	180	200
	Total Pressure	.049	.081	.121	.167	.220	.280	.346
	Static Pressure	.046	.078	.115	.158	.208	.264	.326
	Noise Criteria	9	17	23	28	32	37	39
	Throw	9-13-24	12-18-29	15-21-34	17-24-37	19-25-39	21-28-42	22-30-44
10" Oval Inlet	Airflow, CFM	75	100	125	150	175	200	225
	Total Pressure	.053	.089	.131	.181	.238	.303	.374
	Static Pressure	.052	.086	.128	.176	.231	.293	.362
	Noise Criteria	13	20	26	31	35	38	41
	Throw	10-15-26	14-20-32	17-24-37	20-27-40	22-29-43	24-32-46	26-34-48

1 Slot • 48" (1219) Long

6" Round Inlet	Airflow, CFM	65	85	110	130	155	175	200
	Total Pressure	.024	.043	.068	.098	.133	.174	.220
	Static Pressure	.009	.016	.025	.036	.049	.063	.079
	Noise Criteria	6	15	21	28	33	36	40
	Throw	4-7-13	8-10-15	10-12-16	11-13-18	11-14-20	12-14-21	13-17-23
8" Round Inlet	Airflow, CFM	75	100	130	160	185	215	240
	Total Pressure	.020	.036	.057	.082	.111	.145	.183
	Static Pressure	.013	.022	.034	.049	.066	.085	.107
	Noise Criteria	6	15	22	28	33	37	41
	Throw	6-8-12	8-10-16	10-13-18	12-15-19	13-16-21	15-18-23	16-19-25
10" Oval Inlet	Airflow, CFM	80	110	140	170	200	230	250
	Total Pressure	.016	.028	.043	.062	.084	.109	.202
	Static Pressure	.012	.022	.034	.048	.064	.083	.105
	Noise Criteria	5	15	22	27	33	37	40
	Throw	6-9-14	7-12-16	10-14-19	12-15-21	13-17-22	15-18-24	16-20-25
12" Oval Inlet	Airflow, CFM	90	120	150	180	210	240	280
	Total Pressure	.016	.028	.044	.062	.084	.109	.274
	Static Pressure	.014	.025	.038	.054	.073	.094	.118
	Noise Criteria	12	16	22	27	33	37	39
	Throw	6-9-12	9-12-16	11-14-18	12-15-22	13-16-24	14-17-25	15-19-27

See page C44 for performance data notes.

PLENUM SLOT AND LIGHT TROFFER DIFFUSERS

PERFORMANCE DATA • MODEL SERIES 5800

MODEL: 5810(I) • 1" (25) SLOT WIDTH

1 Slot • 60" (1524) Long

6" Round Inlet	Airflow, CFM	105	125	150	170	195	215	240
	Total Pressure	.060	.106	.165	.237	.321	.418	.528
	Static Pressure	.020	.035	.054	.076	.103	.133	.167
	Noise Criteria	19	25	29	33	36	39	41
	Throw	4-7-13	6-10-16	8-13-18	9-15-20	10-16-22	11-18-23	12-19-25
8" Round Inlet	Airflow, CFM	115	140	170	200	225	255	280
	Total Pressure	.039	.069	.106	.152	.204	.266	.333
	Static Pressure	.022	.039	.060	.085	.114	.148	.186
	Noise Criteria	19	25	30	33	37	40	42
	Throw	5-9-15	8-12-19	10-16-21	12-18-23	13-20-26	14-22-27	16-23-29
10" Oval Inlet	Airflow, CFM	90	120	150	180	210	240	260
	Total Pressure	.032	.057	.087	.124	.167	.217	.273
	Static Pressure	.023	.041	.063	.090	.121	.157	.197
	Noise Criteria	17	22	28	31	35	38	40
	Throw	6-10-16	9-14-21	12-18-23	14-21-25	15-23-28	16-25-29	19-26-32
12" Oval Inlet	Airflow, CFM	135	165	195	225	255	285	325
	Total Pressure	.031	.054	.083	.118	.159	.206	.259
	Static Pressure	.025	.043	.067	.095	.128	.166	.209
	Noise Criteria	12	18	23	27	33	37	39
	Throw	6-10-16	9-14-21	13-18-23	15-21-24	16-23-27	17-25-28	20-26-31

2 Slot • 24" (610) Long

6" Round Inlet	Airflow, CFM	50	70	90	110	150	185	200
	Total Pressure	.038	.069	.106	.150	.200	.257	.320
	Static Pressure	.034	.060	.092	.128	.170	.217	.269
	Noise Criteria	7	11	15	22	29	35	40
	Throw	5-10-19	9-14-24	13-18-28	15-21-31	17-23-34	19-25-36	20-27-38
8" Round Inlet	Airflow, CFM	80	110	140	170	200	215	240
	Total Pressure	.043	.073	.110	.154	.206	.264	.330
	Static Pressure	.039	.066	.099	.139	.184	.236	.293
	Noise Criteria	7	16	23	29	34	38	43
	Throw	8-13-24	13-18-28	16-22-32	19-24-34	21-27-37	23-29-39	25-31-40
10" Oval Inlet	Airflow, CFM	80	110	140	170	200	230	260
	Total Pressure	.035	.059	.086	.118	.154	.194	.238
	Static Pressure	.033	.055	.081	.110	.143	.180	.277
	Noise Criteria	7	16	18	27	33	38	43
	Throw	10-15-24	14-19-28	17-22-32	19-24-34	21-26-36	23-28-38	26-32-42

2 Slot • 36" (914) Long

6" Round Inlet	Airflow, CFM	120	160	200	240	280	320	360
	Total Pressure	.062	.107	.165	.235	.318	.413	.521
	Static Pressure	.036	.062	.095	.134	.180	.233	.293
	Noise Criteria	12	20	26	31	36	39	43
	Throw	7-12-22	10-17-27	12-20-31	14-23-33	16-25-36	17-27-38	18-29-40
8" Round Inlet	Airflow, CFM	130	170	215	255	295	340	380
	Total Pressure	.049	.082	.124	.172	.229	.296	.368
	Static Pressure	.039	.066	.098	.137	.182	.233	.290
	Noise Criteria	15	19	26	31	35	39	42
	Throw	8-14-24	11-19-28	14-21-34	17-24-36	19-26-38	20-29-40	21-31-42
10" Oval Inlet	Airflow, CFM	135	180	225	265	310	355	400
	Total Pressure	.047	.077	.114	.157	.207	.263	.325
	Static Pressure	.042	.070	.102	.140	.183	.232	.286
	Noise Criteria	11	19	25	30	35	38	42
	Throw	10-16-26	14-20-31	17-23-36	20-26-38	22-28-41	24-31-42	25-33-44
12" Oval Inlet	Airflow, CFM	175	235	290	350	410	465	525
	Total Pressure	.037	.063	.096	.136	.183	.237	.299
	Static Pressure	.033	.055	.084	.120	.161	.208	.261
	Noise Criteria	13	20	26	32	36	39	42
	Throw	12-17-27	16-24-33	20-28-38	22-32-40	26-35-45	27-38-47	28-41-49

See page C44 for performance data notes.

PLENUM SLOT AND LIGHT TROFFER DIFFUSERS

PERFORMANCE DATA • MODEL SERIES 5800

MODEL: 5810(I) • 1" (25) SLOT WIDTH

2 Slot • 48" (1219) Long

6" Round Inlet	Airflow, CFM	65	105	150	190	230	270	315
	Total Pressure	.078	.120	.174	.234	.302	.379	.472
	Static Pressure	.030	.046	.064	.086	.110	.138	.168
	Noise Criteria	14	20	26	30	34	37	40
	Throw	6-10-18	8-12-20	10-14-22	11-15-24	12-17-25	13-18-27	14-19-28
8" Round Inlet	Airflow, CFM	100	150	200	250	300	350	400
	Total Pressure	.056	.086	.123	.165	.214	.269	.329
	Static Pressure	.035	.052	.074	.098	.127	.158	.193
	Noise Criteria	13	20	26	31	35	38	42
	Throw	8-12-21	11-15-23	13-17-26	14-19-28	16-21-29	17-22-31	18-23-32
10" Oval Inlet	Airflow, CFM	80	140	195	250	305	365	420
	Total Pressure	.040	.069	.103	.145	.194	.251	.314
	Static Pressure	.030	.051	.078	.110	.149	.192	.242
	Noise Criteria	9	17	24	29	33	37	41
	Throw	5-8-18	8-12-22	10-15-26	12-18-29	13-20-32	15-21-34	16-23-36
12" Oval Inlet	Airflow, CFM	180	240	300	360	420	480	540
	Total Pressure	.048	.078	.113	.155	.201	.254	.312
	Static Pressure	.042	.067	.098	.133	.173	.218	.267
	Noise Criteria	14	21	26	31	35	39	42
	Throw	8-13-22	11-16-25	14-19-28	16-21-30	17-23-32	19-24-34	20-26-35

2 Slot • 60" (1524) Long

8" Round Inlet	Airflow, CFM	120	170	220	270	320	370	420
	Total Pressure	.049	.080	.117	.163	.217	.279	.349
	Static Pressure	.024	.039	.058	.080	.109	.140	.178
	Noise Criteria	12	20	26	31	35	39	42
	Throw	4-7-15	6-10-18	8-13-21	10-15-23	12-18-28	13-20-29	15-21-31
10" Oval Inlet	Airflow, CFM	100	160	215	270	325	385	440
	Total Pressure	.043	.071	.105	.146	.194	.250	.315
	Static Pressure	.029	.047	.070	.097	.132	.169	.215
	Noise Criteria	15	20	25	29	34	38	41
	Throw	5-8-16	7-11-20	9-15-23	12-17-25	13-19-27	14-21-29	15-22-31
12" Oval Inlet	Airflow, CFM	200	260	320	380	440	500	560
	Total Pressure	.037	.061	.091	.125	.168	.217	.273
	Static Pressure	.029	.046	.069	.095	.130	.167	.212
	Noise Criteria	10	19	25	30	34	38	42
	Throw	10-15-24	12-19-25	15-21-27	17-23-31	19-23-32	20-25-36	22-27-39

3 Slot • 24" (610) Long

6" Round Inlet	Airflow, CFM	85	110	140	175	200	235	270
	Total Pressure	.039	.063	.096	.138	.180	.236	.299
	Static Pressure	.026	.041	.061	.084	.110	.139	.171
	Noise Criteria	10	15	23	28	32	36	39
	Throw	6-11-21	10-15-24	12-18-28	14-20-29	16-21-32	17-24-34	18-25-34
8" Round Inlet	Airflow, CFM	100	130	160	195	230	270	310
	Total Pressure	.036	.058	.087	.122	.161	.206	.255
	Static Pressure	.030	.047	.070	.097	.126	.160	.196
	Noise Criteria	10	16	24	28	33	37	40
	Throw	8-14-24	13-18-28	15-22-32	18-25-34	21-26-37	22-29-39	24-31-40
10" Oval Inlet	Airflow, CFM	115	155	195	240	280	330	375
	Total Pressure	.039	.063	.094	.131	.172	.219	.271
	Static Pressure	.036	.057	.085	.117	.153	.193	.238
	Noise Criteria	9	16	22	29	32	36	40
	Throw	9-16-26	15-21-31	18-25-35	21-28-37	25-30-40	26-33-43	28-35-44

See page C44 for performance data notes.

PERFORMANCE DATA • MODEL SERIES 5800

MODEL: 5810(I) • 1" (25) SLOT WIDTH

3 Slot • 36" (914) Long

6" Round Inlet	Airflow, CFM	130	170	210	250	290	330	370
	Total Pressure	.054	.090	.134	.186	.248	.317	.396
	Static Pressure	.024	.038	.055	.075	.098	.123	.152
	Noise Criteria	10	16	24	29	33	37	41
	Throw	7-11-22	9-15-24	12-16-28	13-19-29	15-20-32	16-21-34	16-23-34
8" Round Inlet	Airflow, CFM	140	190	235	280	325	375	420
	Total Pressure	.038	.064	.094	.129	.170	.219	.271
	Static Pressure	.028	.044	.063	.086	.112	.142	.174
	Noise Criteria	10	17	25	30	34	38	42
	Throw	9-14-25	12-18-28	15-20-32	17-23-34	19-25-37	21-26-39	21-28-40
10" Oval Inlet	Airflow, CFM	155	210	265	320	375	430	485
	Total Pressure	.039	.064	.094	.129	.170	.216	.268
	Static Pressure	.033	.053	.077	.104	.136	.172	.211
	Noise Criteria	9	18	24	30	34	38	42
	Throw	10-16-27	14-20-31	17-23-35	20-26-37	22-28-40	24-30-42	25-32-44
12" Oval Inlet	Airflow, CFM	210	270	330	390	450	510	570
	Total Pressure	.035	.060	.090	.127	.168	.216	.269
	Static Pressure	.029	.050	.076	.106	.141	.181	.225
	Noise Criteria	11	19	25	30	34	37	40
	Throw	10-16-28	15-22-34	19-26-39	22-29-43	25-32-46	27-34-48	29-36-51

3 Slot • 48" (1219) Long

6" Round Inlet	Airflow, CFM	170	220	275	315	360	400	440
	Total Pressure	.080	.133	.202	.275	.364	.459	.572
	Static Pressure	.029	.046	.068	.092	.120	.151	.186
	Noise Criteria	18	22	28	32	36	38	41
	Throw	8-11-19	9-14-22	11-16-24	13-18-28	13-20-30	14-21-31	16-23-32
8" Round Inlet	Airflow, CFM	190	250	310	365	425	485	520
	Total Pressure	.056	.089	.128	.172	.226	.286	.354
	Static Pressure	.032	.049	.069	.092	.118	.147	.180
	Noise Criteria	6	21	26	32	36	38	41
	Throw	8-11-21	9-15-25	12-18-28	14-19-29	17-21-31	18-22-33	19-24-34
10" Oval Inlet	Airflow, CFM	200	250	320	385	450	520	590
	Total Pressure	.047	.076	.113	.154	.202	.257	.318
	Static Pressure	.033	.054	.078	.107	.139	.176	.216
	Noise Criteria	15	20	26	31	35	38	41
	Throw	9-15-23	11-17-27	14-20-30	16-22-32	18-24-34	20-25-36	20-27-37
12" Oval Inlet	Airflow, CFM	220	280	340	405	475	560	635
	Total Pressure	.044	.072	.105	.144	.189	.239	.295
	Static Pressure	.036	.058	.084	.114	.149	.188	.231
	Noise Criteria	5	20	26	30	34	38	41
	Throw	9-13-23	12-17-26	15-20-29	17-22-31	19-24-34	21-26-36	23-28-39

3 Slot • 60" (1524) Long

8" Round Inlet	Airflow, CFM	210	260	310	370	425	480	535
	Total Pressure	.063	.094	.131	.174	.224	.280	.342
	Static Pressure	.028	.041	.058	.078	.101	.126	.155
	Noise Criteria	15	22	27	32	35	39	42
	Throw	6-12-20	8-15-24	11-17-27	13-19-29	15-22-31	17- 25-35	20-26-37
10" Oval Inlet	Airflow, CFM	275	330	395	460	525	595	630
	Total Pressure	.056	.083	.115	.154	.197	.247	.303
	Static Pressure	.032	.047	.066	.088	.114	.143	.175
	Noise Criteria	20	24	28	34	35	40	43
	Throw	11-16-26	13-20-30	14-21-32	17-23-35	20-25-37	22-30-39	24-33-42
12" Oval Inlet	Airflow, CFM	250	300	350	420	500	610	680
	Total Pressure	.048	.072	.100	.134	.171	.215	.263
	Static Pressure	.035	.053	.074	.099	.127	.159	.195
	Noise Criteria	11	18	23	29	34	38	40
	Throw	8-14-24	11-17-26	13-19-29	15-22-31	19-26-35	22-28-37	24-30-41

See page C44 for performance data notes.

PLENUM SLOT AND LIGHT TROFFER DIFFUSERS

PERFORMANCE DATA • MODEL SERIES 5800

MODEL: 5810(I) • 1" (25) SLOT WIDTH

4 Slot • 24" (610) Long

6" Round Inlet	Airflow, CFM	125	150	170	200	235	270	320
	Total Pressure	.046	.075	.116	.162	.220	.281	.356
	Static Pressure	.023	.035	.052	.072	.095	.121	.150
	Noise Criteria	10	20	25	28	33	36	40
	Throw	6-11-21	9-15-24	12-17-28	14-20-30	16-22-32	18-24-34	18-26-35
8" Round Inlet	Airflow, CFM	125	160	205	250	295	340	385
	Total Pressure	.035	.054	.083	.117	.157	.202	.253
	Static Pressure	.026	.040	.060	.083	.109	.139	.172
	Noise Criteria	10	17	23	29	33	37	40
	Throw	8-14-24	12-18-28	15-21-32	18-25-35	21-27-37	23-30-39	24-32-41
10" Oval Inlet	Airflow, CFM	145	185	210	270	320	370	420
	Total Pressure	.037	.056	.086	.121	.160	.205	.256
	Static Pressure	.032	.048	.072	.100	.132	.168	.208
	Noise Criteria	15	17	23	28	33	37	40
	Throw	9-16-26	14-21-31	18-24-35	21-28-38	25-31-40	27-34-43	28-36-45

4 Slot • 36" (914) Long

6" Round Inlet	Airflow, CFM	145	190	240	285	335	380	430
	Total Pressure	.059	.099	.153	.214	.290	.371	.469
	Static Pressure	.022	.035	.051	.069	.090	.113	.139
	Noise Criteria	9	17	24	29	32	35	39
	Throw	7-11-22	8-15-24	11-16-27	12-18-28	14-20-31	15-20-32	16-21-34
8" Round Inlet	Airflow, CFM	160	225	285	345	405	470	530
	Total Pressure	.039	.068	.102	.144	.193	.251	.313
	Static Pressure	.025	.040	.058	.079	.103	.130	.160
	Noise Criteria	10	18	24	30	33	36	40
	Throw	9-14-25	11-18-28	14-20-31	16-22-33	18-24-36	20-25-37	21-26-39
10" Oval Inlet	Airflow, CFM	190	265	335	405	475	550	620
	Total Pressure	.039	.065	.097	.135	.179	.230	.286
	Static Pressure	.030	.048	.070	.096	.125	.157	.194
	Noise Criteria	9	18	24	29	33	36	40
	Throw	10-16-27	13-20-31	16-23-34	19-25-36	21-27-39	23-29-40	24-30-42
12" Oval Inlet	Airflow, CFM	235	310	385	455	530	605	680
	Total Pressure	.035	.060	.092	.129	.172	.221	.276
	Static Pressure	.027	.047	.072	.101	.134	.172	.214
	Noise Criteria	10	17	23	28	33	36	40
	Throw	10-16-26	14-20-30	17-23-33	20-25-35	22-27-38	24-29-39	25-30-41

4 Slot • 48" (1219) Long

8" Round Inlet	Airflow, CFM	225	300	370	440	510	580	650
	Total Pressure	.060	.101	.151	.210	.278	.356	.444
	Static Pressure	.032	.052	.076	.104	.136	.173	.213
	Noise Criteria	12	19	26	31	34	39	42
	Throw	6-12-20	10-16-27	13-18-30	15-22-33	16-25-35	18-27-37	20-28-40
10" Oval Inlet	Airflow, CFM	240	320	400	480	565	645	730
	Total Pressure	.047	.079	.117	.162	.214	.273	.340
	Static Pressure	.031	.050	.073	.100	.131	.166	.205
	Noise Criteria	15	19	26	30	34	38	41
	Throw	10-14-24	12-18-29	15-21-31	17-23-34	19-25-36	21-27-37	22-28-39
12" Oval Inlet	Airflow, CFM	275	360	445	530	615	700	785
	Total Pressure	.040	.065	.097	.133	.176	.224	.279
	Static Pressure	.030	.048	.070	.096	.125	.158	.195
	Noise Criteria	15	21	25	30	34	37	40
	Throw	10-14-24	13-18-28	16-21-30	18-23-33	20-25-35	22-27-36	23-28-38

See page C44 for performance data notes.

PERFORMANCE DATA • MODEL SERIES 5800

MODEL: 5810(I) • 1" (25) SLOT WIDTH

4 Slot • 60" (1524) Long

8" Round Inlet	Airflow, CFM	310	370	430	490	550	610	670
	Total Pressure	.078	.112	.154	.202	.256	.318	.386
	Static Pressure	.025	.038	.053	.071	.091	.115	.141
	Noise Criteria	18	23	28	32	36	39	42
	Throw	8-11-19	9-13-21	10-15-22	11-16-23	12-17-25	12-18-26	13-19-27
10" Oval Inlet	Airflow, CFM	350	420	495	565	640	710	785
	Total Pressure	.058	.085	.119	.157	.202	.251	.308
	Static Pressure	.029	.043	.060	.080	.104	.130	.159
	Noise Criteria	15	19	26	31	35	38	41
	Throw	9-13-23	11-16-28	13-19-28	15-20-30	16-21-32	17-23-33	18-25-35
12" Oval Inlet	Airflow, CFM	385	470	555	640	725	810	895
	Total Pressure	.052	.078	.109	.145	.187	.233	.286
	Static Pressure	.032	.048	.067	.090	.116	.145	.178
	Noise Criteria	12	19	25	29	34	37	41
	Throw	11-16-28	14-19-32	16-22-34	18-24-37	20-26-39	22-28-41	23-30-42

Performance Data Notes:

1. Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
2. Total and Static Pressure are in in. w.g..
3. Noise Criteria [NC] values based on a room absorption of 10 dB, re 10⁻¹² watts. Dash (-) in space denotes a Noise Criteria level less than 15.
4. Cataloged throws are for a one-way horizontal air pattern. For divided airflow, deduce the airflow in each direction according to the number of slots, with the total airflow apportioned between the slots. Look up throw for the airflow in each direction according to the number of slots in that direction.
5. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2006.

PLENUM SLOT AND LIGHT TROFFER DIFFUSERS

HOW TO SPECIFY

MODELS 5850(I), 5875(I) AND 5810(I)
'ICE TONG' SUPPLY AIR PLENUM SLOT DIFFUSERS

SUGGESTED SPECIFICATION:

Standard Lay-in T-Bar
 Furnish and install **Nailor Model** (select one) **5850(I)** (1/2" [13] slot), **5875(I)** (3/4" [19] slot) or **5810(I)** (1" [25] slot) **Plenum Slot Supply Diffusers** of the sizes and capacities as shown on the plans and air distribution schedules. The plenum shall be manufactured from corrosion-resistant steel and include an adjustable, 'ice tong' style pattern deflector mounted within each slot. The pattern deflector shall allow the direction of airflow to be adjusted through a full 180° from the face of the diffuser. The plenum shall have a side inlet with a neck not less than 1 1/4" (32) deep for connection to the duct. The diffuser shall be supplied in nominal standard lengths of 20", 24", 30", 36", 48" and 60" (500, 600, 750, 900, 1200 and 1500) and have one, two, three or four slots as specified. Multi-slot units shall include extruded aluminum center T-Bars. The pattern controllers and all exposed edges shall have a BK Black finish and the center T-Bars shall have an AW Appliance White finish. Models 5850I, 5875I or 5810I shall be lined internally with insulation.

The manufacturer shall provide published performance data for the plenum slot diffuser, which shall be tested in accordance with ANSI/ASHRAE Standard 70–2006.

MODELS 5850(I)-F, 5875(I)-F, 5810(I)-F, 5850(I)-F2, 5875(I)-F2 AND 5810(I)-F2
'ICE TONG' SUPPLY AIR PLENUM SLOT DIFFUSERS FOR NARROW REGRESSED CEILING GRIDS

SUGGESTED SPECIFICATION:

Narrow Regressed T-Bar, Straddle Mount
 Furnish and install **Nailor Model** (select one) **5850(I)-F** (1/2" [13] slot), **5875(I)-F** (3/4" [19] slot) or **5810(I)-F** (1" [25] slot) **Plenum Slot Supply Diffusers for Narrow Regressed T-Bar** of the sizes and capacities as shown on the plans and air distribution schedules. The diffuser shall fit within a Narrow Regressed T-Bar ceiling system. The plenum shall be manufactured from corrosion-resistant steel and include an adjustable 'ice tong' style pattern deflector mounted within each slot. The pattern deflector shall allow the direction of airflow to be adjusted through a full 180° from the face of the diffuser. The plenum shall have a side inlet with a neck not less than 1 1/4" (32) deep for connection to the duct. The diffuser shall be supplied in nominal standard lengths of 24" or 48" (600 or 1200) and have one or two slots as specified. Two slot models shall straddle the T-Bar lengthwise. The pattern controllers and all exposed edges shall have a BK Black finish. Models 5850I-F, 5875I-F or 5810I-F shall be lined internally with insulation.

The manufacturer shall provide published performance data for the plenum slot diffuser, which shall be tested in accordance with ANSI/ASHRAE Standard 70–2006.

Narrow Regressed T-Bar, Flat Face T-Bar(s)
 Furnish and install **Nailor Model** (select one) **5850(I)-F2** (1/2" [13] slot), **5875(I)-F2** (3/4" [19] slot) or **5810(I)-F2** (1" [25] slot) **Plenum Slot Supply Diffusers for Narrow Regressed T-Bar** of the sizes and capacities as shown on the plans and air distribution schedules. The diffuser shall fit within a Narrow Regressed T-Bar ceiling system. The plenum shall be manufactured from corrosion-resistant steel and include an adjustable, 'ice tong' style pattern deflector mounted within each slot. The pattern deflector shall allow the direction of airflow to be adjusted through a full 180° from the face of the diffuser. The plenum shall have a side inlet with a neck not less than 1 1/4" (32) deep for connection to the duct. The diffuser shall be supplied in nominal standard lengths of 24" or 48" (600 or 1200) and have one, two, three or four slots as specified. Multi-slot units shall include extruded aluminum center T-Bars. The pattern controllers and all exposed edges shall have a BK Black finish and the center T-Bars shall have an AW Appliance White finish. Models 5850I-F2, 5875I-F2 or 5810I-F2 shall be lined internally with insulation.

The manufacturer shall provide published performance data for the plenum slot diffuser, which shall be tested in accordance with ANSI/ASHRAE Standard 70–2006.

C
PLENUM SLOT AND LIGHT TROFFER DIFFUSERS

RETURN AIR PLENUMS

- FOR STANDARD LAY-IN T-BAR
- COMPLIMENTS THE SUPPLY SERIES
- INCLUDES LIGHT BARRIERS

5700R Series:

- 5775R(I) 3/4" (19) Slot Width
- 5710R(I) 1" (25) Slot Width
- 5715R(I) 1 1/2" (38) Slot Width

5800R Series:

- 5850R(I) 1/2" (13) Slot Width
- 5875R(I) 3/4" (19) Slot Width
- 5810R(I) 1" (25) Slot Width

5600R Series:

- 5675R(I) 3/4" (19) Slot Width
- 5610R(I) 1" (25) Slot Width
- Suffix 'I' adds internal insulation



Models 5675R, 5775R

These models have been designed as a matching return to compliment their respective supply models. They return room air to the ceiling plenum and are designed for ductless return applications.

The design incorporates a light shield which blocks any stray light in the ceiling plenum, emitted from the rear of the light fixtures, from emerging through the face. At the same time, it prevents see-through in the opposite direction.

STANDARD FEATURES:

- Available in 20", 24", 30", 36", 48" and 60" (500, 600, 750, 900, 1200 and 1500 mm) nominal lengths to suit both imperial and metric ceiling systems.
- Choice of 1, 2, 3 or 4 parallel slots.
- Standard height is 7" (178) for 1 and 2 slot units and 11" (279) for 3 and 4 slot units.
- Factory installed center T-Bars on multi-slot models are standard. They are dropped slightly below the diffuser face to align flush with the ceiling grid.

- Series 5700R is available in 3 slot widths.
- Series 5800R is available in 3 slot widths.
- Series 5600R is available in 2 slot widths.

CONSTRUCTION MATERIAL:

Corrosion-resistant steel plenum casing, extruded aluminum center T-Bars.

FINISH OPTIONS:

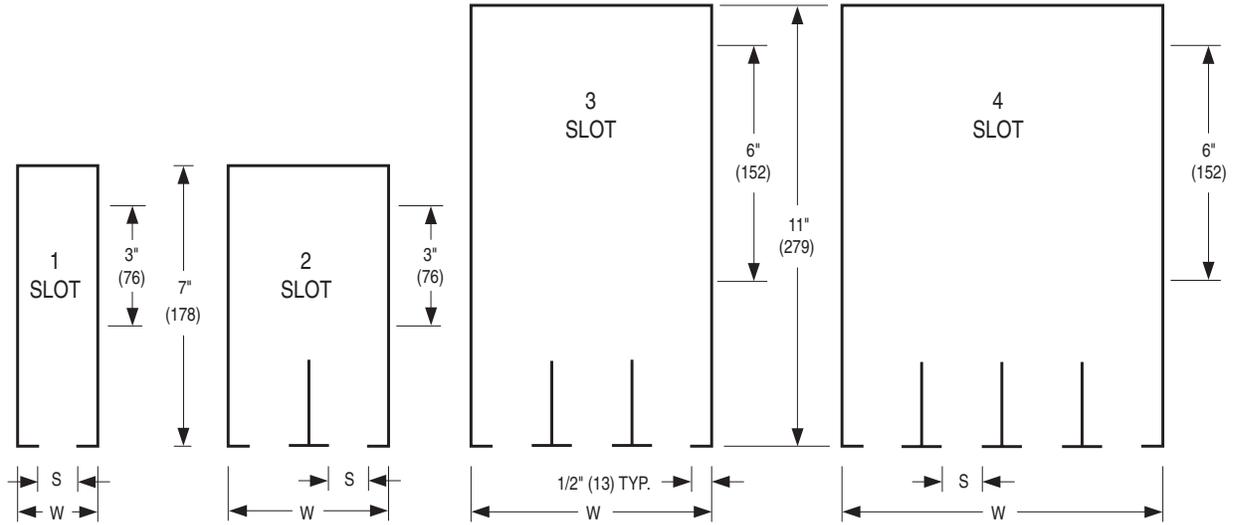
Black on exposed surfaces. AW Appliance White on center T-Bars.

OPTIONS AND ACCESSORIES:

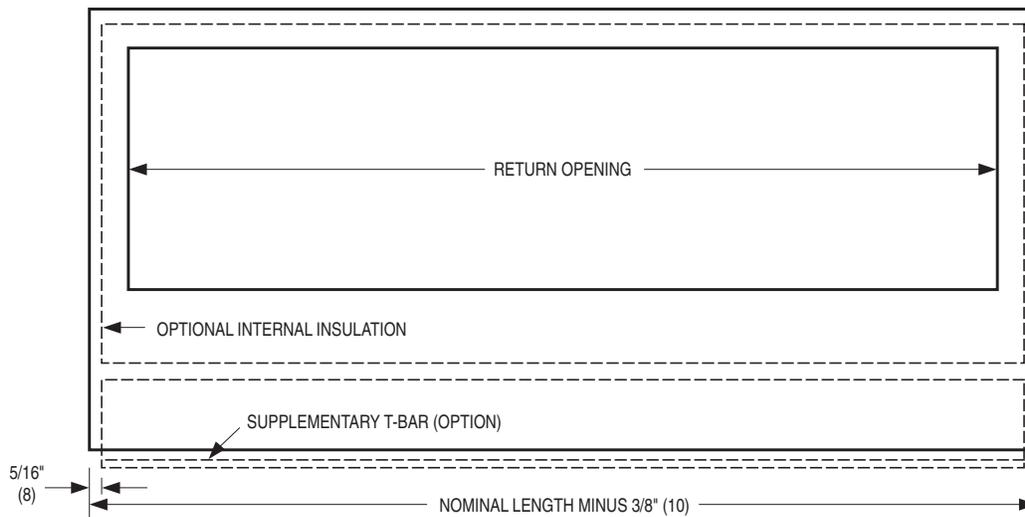
- Internal insulation (add suffix 'I' to model number).
- EQT Earthquake Tabs.
- For additional options and accessories, see page C61.

DIMENSIONAL DATA:

MODEL SERIES: 5700R, 5800R, 5600R • STANDARD LAY-IN T-BAR MODELS



		Models			
		5850R(I)	5675R(I)	5610R(I)	
		5875R(I)	5775R(I)	5710R(I)	5715R(I)
S Slot Width		1/2" (13)	3/4" (19)	1" (25)	1 1/2" (38)
W Width	1 Slot	1 1/2" (38)	1 3/4" (44)	2" (51)	2 1/2" (64)
	2 Slot	3" (76)	3 1/2" (89)	4" (102)	5" (127)
	3 Slot	4 1/2" (115)	5 1/4" (133)	6" (152)	7 1/2" (191)
	4 Slot	6" (152)	7" (178)	8" (203)	10" (254)



Nominal Length L	
Imperial Modules Inches (mm)	Metric Modules (mm)
20" (508)	500
24" (610)	600
30" (762)	750
36" (914)	900
48" (1219)	1200
60" (1524)	1500

RETURN AIR PLENUMS

- FOR NARROW REGRESSED T-BAR
- COMPLIMENTS THE SUPPLY SERIES
- INCLUDES LIGHT BARRIERS

Straddle Style:

- 5850R(I)-F 1/2" (13) Slot Width
- 5775R(I)-F 3/4" (19) Slot Width
- 5875R(I)-F 3/4" (19) Slot Width
- 5710R(I)-F 1" (25) Slot Width
- 5810R(I)-F 1" (25) Slot Width
- 5715R(I)-F 1 1/2" (38) Slot Width

1" (25) Flat Face T-Bar Styles:

- 5850R(I)-F2 1/2" (13) Slot Width
- 5775R(I)-F2 3/4" (19) Slot Width
- 5875R(I)-F2 3/4" (19) Slot Width
- 5710R(I)-F2 1" (25) Slot Width
- 5810R(I)-F2 1" (25) Slot Width
- 5715R(I)-F2 1 1/2" (38) Slot Width

- Suffix 'I' adds internal insulation



Models 5810R-F, 5775R-F2

These models have been designed as a matching return to compliment their respective supply models. They return room air to the ceiling plenum and are designed for ductless return applications.

The design incorporates a light shield which blocks any stray light in the ceiling plenum, emitted from the rear of the light fixtures, from emerging through the face. At the same time, it prevents see-through in the opposite direction.

The single slot units, for all models, are for installation alongside a main T-Bar runner. Model Series 5700R-F and 5800R-F two slot units incorporate a center hat channel and are designed to straddle, longitudinally, a main T-Bar runner. The Model Series 5700R-F2 and 5800R-F2 multi-slot units incorporate factory installed 1" (25) flat face T-Bars.

STANDARD FEATURES:

- Available in 24" (600) or 48" (1200) nominal lengths, to suit both imperial and metric ceiling grids.
- A cross notch is a recommended option on 48" (1200) long units which allows the plenum to be installed in a 24" x 24" (600 x 600) ceiling grid.
- Series 5700R-F and 5800R-F are available in one or two slot configurations.
- Series 5700R-F2 and 5800R-F2 are available in one, two, three or four slot configurations.

- The single slot units are for installation alongside a main T-Bar runner.

- 5700R-F and 5800R-F two slot unit has a center hat channel that is designed to straddle a main T-Bar runner.

- 5700R-F2 and 5800R-F2 multi-slot units include 1" (25) flat face tees.

CONSTRUCTION MATERIAL:

Corrosion-resistant steel. Series 5700-F2 and 5800-F2 include extruded aluminum center T-Bars on multi-slot units.

FINISH OPTIONS:

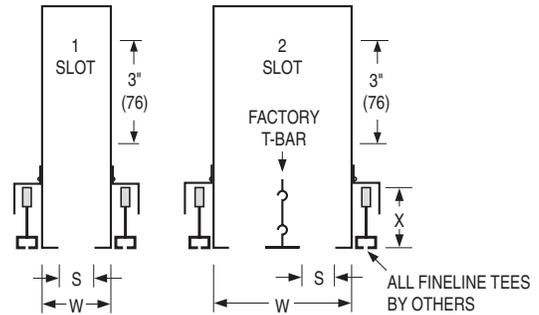
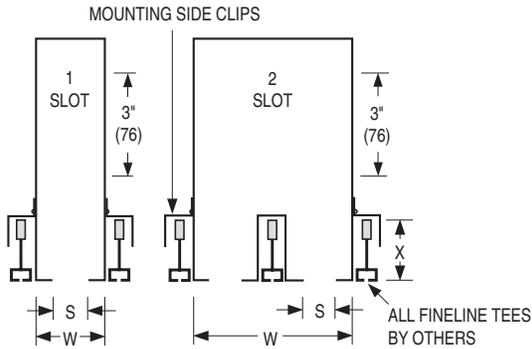
Black on exposed surfaces. AW Appliance White on center T-Bars.

OPTIONS AND ACCESSORIES:

- Internal insulation (add suffix 'I' to model number).
- EQT Earthquake Tabs.
- For additional options and accessories, see page C61.

DIMENSIONAL DATA:

MODEL SERIES: 5700R-F, 5700R-F2, 5800R-F AND 5800R-F2 • NARROW REGRESSED T-BAR

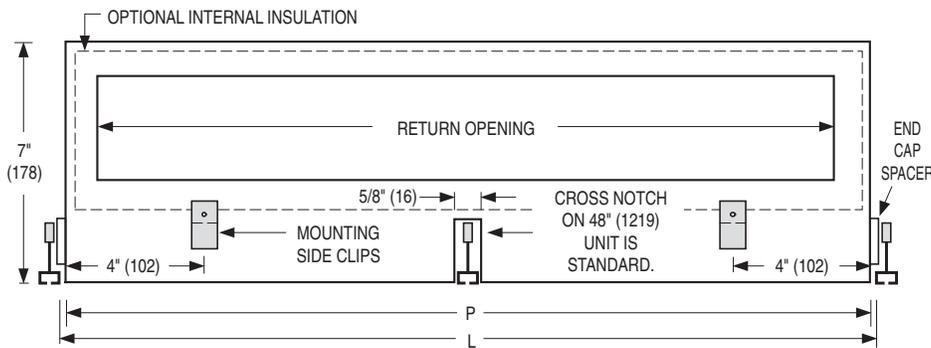


MODEL SERIES 5700R-F AND 5800R-F

MODEL SERIES 5700R-F2 AND 5800R-F2

		Models				
		5850R(I)-F	5875R(I)-F	5810R(I)-F	5775R(I)-F	5710R(I)-F
S Slot Width		1/2" (13)	3/4" (19)	1" (25)	1 1/2" (38)	
W Width	1 Slot	1 1/2" (38)	1 3/4" (44)	2" (51)	2 1/2" (64)	
	2 Slot	3 5/8" (92)	4 1/8" (105)	4 5/8" (117)	5 5/8" (143)	

		Models				
		5850R(I)-F2	5875R(I)-F2	5810R(I)-F2	5775R(I)-F2	5710R(I)-F2
S Slot Width		1/2" (13)	3/4" (19)	1" (25)	1 1/2" (38)	
W Width	1 Slot	1 1/2" (38)	1 3/4" (44)	2" (51)	2 1/2" (64)	
	2 Slot	3" (76)	3 1/2" (89)	4" (102)	5" (127)	
	3 Slot	4 1/2" (114)	5 1/4" (133)	6" (152)	7 1/2" (191)	
	4 Slot	6" (152)	7" (178)	8" (203)	10" (254)	



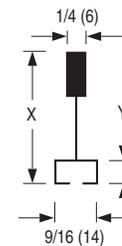
Imperial Ceiling Modules (inches)

Nominal Length	Overall Length L	Plenum Length P
24	23 3/4	23 3/8
48	47 3/4	47 3/8

Metric Ceiling Modules (mm)

Nominal Length	Overall Length L	Plenum Length P
600	594	584
1200	1194	1184

T-Bar Type (Manufacturer)	X	Y
A Chicago Metallic Ultraline	1 3/4" (44)	5/16" (8)
C Certainteed Smoothline	1 5/8" (41)	5/16" (8)
D Donn Finline	1 25/32" (45)	5/16" (8)



C

PLENUM SLOT AND LIGHT TROFFER DIFFUSERS

PERFORMANCE DATA • MODEL SERIES 5800R

MODEL: 5850R(I)

1/2" (13) Slot • 24" (610) Long

1 Slot	Airflow, CFM	20	30	40	50	60	70	80	90	100
	Negative Static Pressure	.010	.021	.038	.059	.085	.116	.152	.192	.238
	Noise Criteria	–	–	–	–	18	22	26	29	32
2 Slot	Airflow, CFM	40	60	80	100	120	140	160	180	200
	Negative Static Pressure	.010	.021	.038	.059	.085	.116	.152	.192	.238
	Noise Criteria	–	–	–	15	21	25	29	32	35
3 Slot	Airflow, CFM	60	90	120	150	180	210	240	270	300
	Negative Static Pressure	.010	.021	.038	.059	.085	.116	.152	.192	.238
	Noise Criteria	–	–	–	17	23	27	31	34	37
4 Slot	Airflow, CFM	80	120	160	200	240	280	320	360	400
	Negative Static Pressure	.010	.021	.038	.059	.085	.116	.152	.192	.238
	Noise Criteria	–	–	–	18	24	28	32	35	38

1/2" (13) Slot • 48" (1219) Long

1 Slot	Airflow, CFM	40	60	80	100	120	140	160	180	200
	Negative Static Pressure	.010	.021	.038	.059	.085	.116	.152	.192	.238
	Noise Criteria	–	–	–	–	18	22	26	29	32
2 Slot	Airflow, CFM	80	120	160	200	240	280	320	360	400
	Negative Static Pressure	.010	.021	.038	.059	.085	.116	.152	.192	.238
	Noise Criteria	–	–	–	15	21	25	29	32	35
3 Slot	Airflow, CFM	120	180	240	300	360	420	480	540	600
	Negative Static Pressure	.010	.021	.038	.059	.085	.116	.152	.192	.238
	Noise Criteria	–	–	–	17	23	27	31	34	37
4 Slot	Airflow, CFM	160	240	320	400	480	560	640	720	800
	Negative Static Pressure	.010	.021	.038	.059	.085	.116	.152	.192	.238
	Noise Criteria	–	–	–	18	24	28	32	35	38

MODEL: 5875R(I)

3/4" (19) Slot • 24" (610) Long

1 Slot	Airflow, CFM	30	45	60	75	90	105	120	135	150
	Negative Static Pressure	.010	.021	.038	.059	.085	.116	.152	.192	.238
	Noise Criteria	–	–	–	–	18	22	26	29	32
2 Slot	Airflow, CFM	60	90	120	150	180	210	240	270	300
	Negative Static Pressure	.010	.021	.038	.059	.085	.116	.152	.192	.238
	Noise Criteria	–	–	–	15	21	25	29	32	35
3 Slot	Airflow, CFM	90	135	180	225	270	315	360	405	450
	Negative Static Pressure	.010	.021	.038	.059	.085	.116	.152	.192	.238
	Noise Criteria	–	–	–	17	23	27	31	34	37
4 Slot	Airflow, CFM	120	180	240	300	360	420	480	540	600
	Negative Static Pressure	.010	.021	.038	.059	.085	.116	.152	.192	.238
	Noise Criteria	–	–	–	18	24	28	32	35	38

3/4" (19) Slot • 48" (1219) Long

1 Slot	Airflow, CFM	60	90	120	150	180	210	240	270	300
	Negative Static Pressure	.010	.021	.038	.059	.085	.116	.152	.192	.238
	Noise Criteria	–	–	–	–	18	22	26	29	32
2 Slot	Airflow, CFM	120	180	240	300	360	420	480	540	600
	Negative Static Pressure	.010	.021	.038	.059	.085	.116	.152	.192	.238
	Noise Criteria	–	–	–	15	21	25	29	32	35
3 Slot	Airflow, CFM	180	270	360	450	540	630	720	810	900
	Negative Static Pressure	.010	.021	.038	.059	.085	.116	.152	.192	.238
	Noise Criteria	–	–	–	17	23	27	31	34	37
4 Slot	Airflow, CFM	240	360	480	600	720	840	960	1080	1200
	Negative Static Pressure	.010	.021	.038	.059	.085	.116	.152	.192	.238
	Noise Criteria	–	–	–	18	24	28	32	35	38

Performance Notes:

1. Neg. Static Pressure is in inches w.g..
2. Noise Criteria [NC] values based on 10 dB room absorption, re 10⁻¹² watts.
3. Dash (–) in space indicates an Noise Criteria level of less than 15.
4. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70–2006.

PERFORMANCE DATA • MODEL SERIES 5800R

MODEL: 5810R(I)

1" (25) Slot • 24" (610) Long

1 Slot	Airflow, CFM	40	60	80	100	120	140	160	180	200
	Negative Static Pressure	.010	.021	.038	.059	.085	.116	.152	.192	.238
	Noise Criteria	–	–	–	–	18	22	26	29	32
2 Slot	Airflow, CFM	80	120	160	200	240	280	320	360	400
	Negative Static Pressure	.010	.021	.038	.059	.085	.116	.152	.192	.238
	Noise Criteria	–	–	–	15	21	25	29	32	35
3 Slot	Airflow, CFM	120	180	240	300	360	420	480	540	600
	Negative Static Pressure	.010	.021	.038	.059	.085	.116	.152	.192	.238
	Noise Criteria	–	–	–	17	23	27	31	34	37
4 Slot	Airflow, CFM	160	240	320	400	480	560	640	720	800
	Negative Static Pressure	.010	.021	.038	.059	.085	.116	.152	.192	.238
	Noise Criteria	–	–	–	18	24	28	32	35	38

1" (25) Slot • 48" (1219) Long

1 Slot	Airflow, CFM	80	120	160	200	240	280	320	360	400
	Negative Static Pressure	.010	.021	.038	.059	.085	.116	.152	.192	.238
	Noise Criteria	–	–	–	–	18	22	26	29	32
2 Slot	Airflow, CFM	160	240	320	400	480	560	640	720	800
	Negative Static Pressure	.010	.021	.038	.059	.085	.116	.152	.192	.238
	Noise Criteria	–	–	–	15	21	25	29	32	35
3 Slot	Airflow, CFM	240	360	480	600	720	840	960	1080	1200
	Negative Static Pressure	.010	.021	.038	.059	.085	.116	.152	.192	.238
	Noise Criteria	–	–	–	17	23	27	31	34	37
4 Slot	Airflow, CFM	320	480	640	800	960	1120	1280	1440	1600
	Negative Static Pressure	.010	.021	.038	.059	.085	.116	.152	.192	.238
	Noise Criteria	–	–	–	18	24	28	32	35	38

PERFORMANCE DATA • MODEL SERIES 5600R

MODEL: 5675R(I)

3/4" (19) Slot • 24" (610) Long

1 Slot	Airflow, CFM	30	45	60	75	90	105	120	135	150
	Negative Static Pressure	.010	.021	.038	.059	.085	.116	.152	.192	.238
	Noise Criteria	–	–	–	–	18	22	26	29	32
2 Slot	Airflow, CFM	60	90	120	150	180	210	240	270	300
	Negative Static Pressure	.010	.021	.038	.059	.085	.116	.152	.192	.238
	Noise Criteria	–	–	–	15	21	25	29	32	35

3/4" (19) Slot • 48" (1219) Long

1 Slot	Airflow, CFM	60	90	120	150	180	210	240	270	300
	Negative Static Pressure	.010	.021	.038	.059	.085	.116	.152	.192	.238
	Noise Criteria	–	–	–	–	18	22	26	29	32
2 Slot	Airflow, CFM	120	180	240	300	360	420	480	540	600
	Negative Static Pressure	.010	.021	.038	.059	.085	.116	.152	.192	.238
	Noise Criteria	–	–	–	15	21	25	29	32	35

Performance Notes:

1. Neg. Static Pressures is in inches w.g..
2. Noise Criteria [NC] values based on 10 dB room absorption, re 10⁻¹² watts.
3. Dash (–) in space indicates an Noise Criteria level of less than 15.
4. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70–2006.

PLENUM SLOT AND LIGHT TROFFER DIFFUSERS

Options and Accessories

MODEL SERIES: 5600, 5700, 5800 – SUPPLY AND 5600R, 5700R, 5800R – RETURN

PF SLOT DIFFUSER PLASTER FRAME

The PF Plaster Frame, for plenum slot diffusers enables the installation of Lay-in T-Bar style diffusers to be installed in drywall or plaster ceilings. Installation of the frame in the ceiling is by others.

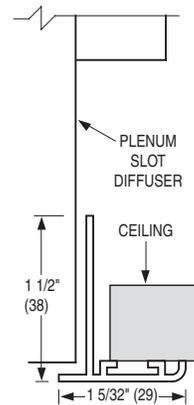
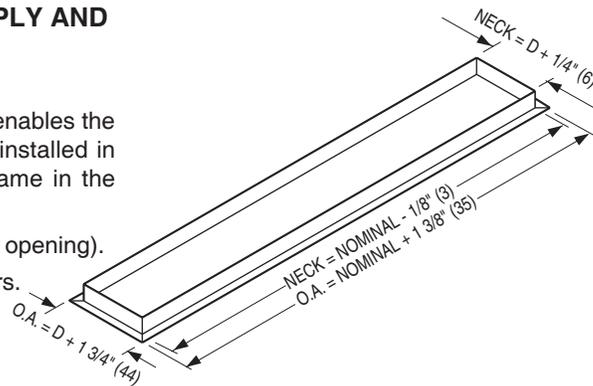
(Note: Diffuser will not fit through a plaster frame opening).

Material: Extruded aluminum with mitered corners.

Recommended Ceiling Opening dimensions:

Width = Diffuser Width (D) + 1/2" (13)

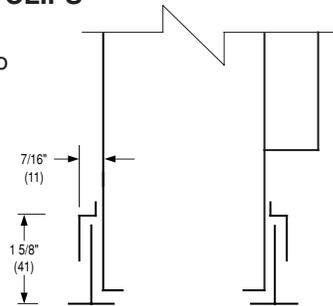
Length = Nominal Diffuser Length + 1/4" (6)



T-BAR MOUNTING CLIPS

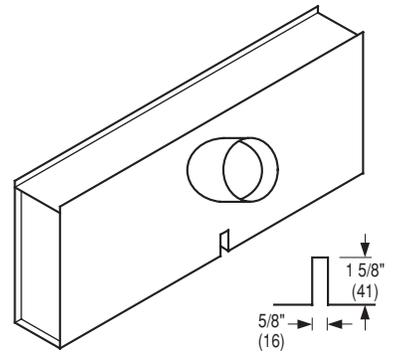
The factory installed mounting clips assist to reinforce and stabilize the plenum during and after installation.

- M1** One Side (2 supplied opposite inlet side)
- M2** Both sides (4 total supplied)



CN CROSS DAMPER

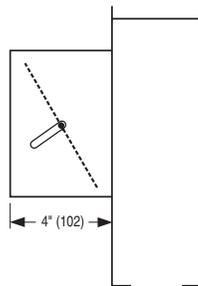
The CN Cross Notch option allows a 48" (1200) plenum unit to be installed in a 24" x 24" (600 x 600) ceiling grid. Available on both supply and return models.



ID INLET DAMPER

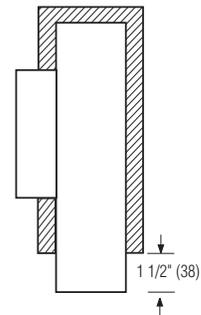
(Supply models only)

This single blade damper is an economical factory installed option that permits air balancing of the device at the plenum inlet. Ceiling access is required.



EX EXTERNAL FOIL BACK INSULATION

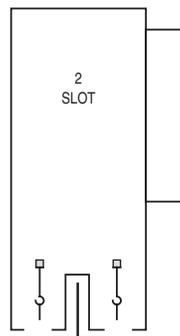
1/2" (13) thick fiberglass blanket with a reinforced aluminum foil scrim-kraft (FSK) facing that provides a vapor barrier. The insulation is wrapped around the outside of the plenum. It is an option on all non-insulated models.



ST STRADDLE T-BAR

The ST Straddle T-Bar option is a center channel that allows the plenum to straddle the T-Bar.

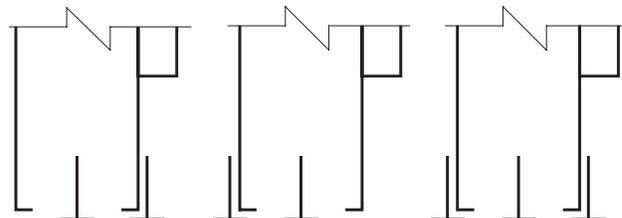
It is an option on both 2 or 4 slot units. (The T-Bar is supplied by others).



SUPPLEMENTARY T-BARS

- T1** One on inlet side
- T0** One opposite inlet side
- T2** Two on both sides

As standard, multiple slot plenums include factory installed center T-Bars. However, if required, supplementary T-Bars can be ordered as an optional accessory for either one side or both sides of the plenum.



C
PLENUM SLOT AND LIGHT TROFFER DIFFUSERS

HOW TO ORDER

MODEL SERIES: 5600, 5700 AND 5800

PLENUM SLOT DIFFUSERS

EXAMPLE: 5675I - 48 x 2 - 08 - ID - CN

1. Model Series

Supply

- 5675(I) "Flip Flop" Pattern Controller 3/4" (19) Slot Width
 - 5610(I) "Flip Flop" Pattern Controller 1" (25) Slot Width
 - 5775(I) "Wiper Blade" Pattern Controller 3/4" (19) Slot Width
 - 5710(I) "Wiper Blade" Pattern Controller 1" (25) Slot Width
 - 5715(I) "Wiper Blade" Pattern Controller 1 1/2" (38) Slot Width
 - 5850(I) "Ice Tong" Pattern Controller 1/2" (13) Slot Width
 - 5875(I) "Ice Tong" Pattern Controller 3/4" (19) Slot Width
 - 5810(I) "Ice Tong" Pattern Controller 1" (25) Slot Width
- (Add suffix "I" for optional internal insulation)

Return

- 5675R(I) "Flip Flop" Pattern Controller 3/4" (19) Slot Width
 - 5775R(I) "Wiper Blade" Pattern Controller 3/4" (19) Slot Width
 - 5710R(I) "Wiper Blade" Pattern Controller 1" (25) Slot Width
 - 5715R(I) "Wiper Blade" Pattern Controller 1 1/2" (38) Slot Width
 - 5850R(I) "Ice Tong" Pattern Controller 1/2" (13) Slot Width
 - 5875R(I) "Ice Tong" Pattern Controller 3/4" (19) Slot Width
 - 5810R(I) "Ice Tong" Pattern Controller 1" (25) Slot Width
- (Add suffix "I" for optional internal insulation)

2. Nominal Length

Imperial Sizes

- inches (mm's)
 20, 24, 30, 36, 48, 60
 (508, 610, 762, 914, 1219, 1524)

Metric Sizes

- (mm's)
 500 , 600, 750, 900, 1200, 1500

3. Number of Slots

- 1 One
- 2 Two
- 3 Three
- 4 Four

4. Inlet Size (supply only)

- 04 4" (102) Round
- 05 5" (127) Round
- 06 6" (152) Round
- 07 7" (178) Round
- 08 8" (203) Round
- 09 9" (229) Oval
- 10 10" (254) Oval
- 12 12" (305) Oval

5. Options & Accessories:

(Default is 'None' unless noted otherwise)

- ID Inlet Damper (supply only)
- CN Cross Notch
- PF Plaster Frame
- ST Straddle T-Bar
(available with 2 slot and 4 slot models only)

Supplementary T-Bars

- T1 One (inlet side)
- T0 One (opposite inlet side)
- T2 Two (both sides)
- M1 Mounting Clips - one side (2)
- M2 Mounting Clips - both sides (4)
- EX External Foil Back Insulation R-4.2 (installed)
- EIC Extended Inlet Collar (2.25" [57]) with bead *
- EQT Earthquake Tabs

Internal Insulation

- ("I" models only)
- FGI 1/4" (6.35) Coated fiberglass (default)
 - FFI 3/8" (9.53) Fiber-free foam

Notes:

1. **Model Series 5600** and **5800** are not available in a 1 1/2" (38) slot width.
2. If more than one accessory is desired, list in order.
3. Standard internal insulation ("I" suffix models) is 1/4" (6.35) coated fiberglass.
- 4.*Extended Inlet Collar option is available with 5600(I), 5700(I) and 5800(I) supply models only.

PLENUM SLOT AND LIGHT TROFFER DIFFUSERS

HOW TO ORDER

MODEL SERIES: 5700-F(2) AND 5800-F(2)

PLENUM SLOT DIFFUSERS FOR NARROW REGRESSED (FINELINE TYPE) CEILING GRIDS

EXAMPLE: 5775I-F - 48 x 2 - 08 - ID - CN - ST - M2 - D - -

1. Model Series

Supply

(Straddle Mount)

- 5675(I)-F "Flip Flop" Pattern Controller 3/4" (19) Slot Width
- 5610(I)-F "Flip Flop" Pattern Controller 1" (25) Slot Width
- 5775(I)-F "Wiper Blade" Pattern Controller 3/4" (19) Slot Width
- 5710(I)-F "Wiper Blade" Pattern Controller 1" (25) Slot Width
- 5715(I)-F "Wiper Blade" Pattern Controller 1 1/2" (38) Slot Width
- 5850(I)-F "Ice Tong" Pattern Controller 1/2" (13) Slot Width
- 5875(I)-F "Ice Tong" Pattern Controller 3/4" (19) Slot Width
- 5810(I)-F "Ice Tong" Pattern Controller 1" (25) Slot Width

(Add suffix "I" for optional internal insulation)

(Flat Face T-Bars)

- 5775(I)-F2 "Wiper Blade" Pattern Controller 3/4" (19) Slot Width
- 5710(I)-F2 "Wiper Blade" Pattern Controller 1" (25) Slot Width
- 5715(I)-F2 "Wiper Blade" Pattern Controller 1 1/2" (38) Slot Width
- 5850(I)-F2 "Ice Tong" Pattern Controller 1/2" (13) Slot Width
- 5875(I)-F2 "Ice Tong" Pattern Controller 3/4" (19) Slot Width
- 5810(I)-F2 "Ice Tong" Pattern Controller 1" (25) Slot Width

(Add suffix "I" for optional internal insulation)

Return

(Straddle Mount)

- 5775R(I)-F "Wiper Blade" Pattern Controller 3/4" (19) Slot Width
- 5710R(I)-F "Wiper Blade" Pattern Controller 1" (25) Slot Width
- 5715R(I)-F "Wiper Blade" Pattern Controller 1 1/2" (38) Slot Width
- 5850R(I)-F "Ice Tong" Pattern Controller 1/2" (13) Slot Width
- 5875R(I)-F "Ice Tong" Pattern Controller 3/4" (19) Slot Width
- 5810R(I)-F "Ice Tong" Pattern Controller 1" (25) Slot Width

(Add suffix "I" for optional internal insulation)

(Flat Face T-Bars)

- 5775R(I)-F2 "Wiper Blade" Pattern Controller 3/4" (19) Slot Width
- 5710R(I)-F2 "Wiper Blade" Pattern Controller 1" (25) Slot Width
- 5715R(I)-F2 "Wiper Blade" Pattern Controller 1 1/2" (38) Slot Width
- 5850R(I)-F2 "Ice Tong" Pattern Controller 1/2" (13) Slot Width
- 5875R(I)-F2 "Ice Tong" Pattern Controller 3/4" (19) Slot Width
- 5810R(I)-F2 "Ice Tong" Pattern Controller 1" (25) Slot Width

(Add suffix "I" for optional internal insulation)

2. Nominal Length

Imperial Sizes

- inches (mm's)
- 24, 48
- (610, 1219)

Metric Sizes

- (mm's)
- 600, 1200

3. Number of Slots

- 1 One
- 2 Two
- 3 Three
- 4 Four

4. Inlet Size (supply only)

- 04 4" (102) Round
- 05 5" (127) Round
- 06 6" (152) Round
- 07 7" (178) Round
- 08 8" (203) Round
- 09 9" (229) Oval
- 10 10" (254) Oval
- 12 12" (305) Oval

5. Cross Notch

- 00 None
- CN Cross Notch on 48" (1219 or 1200) unit (default)

6. Included Accessories

- ST Straddle T-Bar on -F two slot models only (default)
- M2 T-Bar Mounting Clips - (4) (default)

7. Specified T-Bar *

- A 1 3/4" (44) high
- C 1 5/8" (41) high
- D 1 25/32" (45) high

8. Optional Accessories:

(Default is 'None' unless noted otherwise)

- ID Inlet Damper (supply only)
- EX External Foil Back Insulation R-4.2 (installed)
- EIC Extended Inlet Collar (2.25" [57]) with bead **
- EQT Earthquake Tabs

Internal Insulation

- ("I" models only)
- FGI 1/4" (6.35) Coated fiberglass (default)
- FFI 3/8" (9.53) Fiber-free foam

Notes:

1. **Model Series 5700-F(2)** is not available with a 1/2" (13) slot width. **Model Series 5800-F(2)** is not available with a 1 1/2" (38) slot width.
2. -F models are available in a 1, or 2 slot configuration. -F2 models are available in a 1, 2, 3 or 4 slot configuration.
3. *Specified T-Bar: Type A Chicago Metallic Ultraline. Type C Certainteed Smoothline. Type D USG Donn Fineline.
4. Standard Internal Insulation ("I" suffix models) is 1/4" (6.35) coated fiberglass.
5. **Extended Inlet Collar option is available with 5600(I)-F, 5700(I)-F(2) and 5800(I)-F(2) supply models only.

PLENUM SLOT AND LIGHT TROFFER DIFFUSERS

PERFORMANCE DATA

MODELS 59ND(I) & 59NDR(I) • HORIZONTAL/VERTICAL PATTERN • 7" (178) HIGH PLENUM (OPT.)

24" (610) Long with 8" Down-Blow

6" Oval Inlet	Airflow, CFM	60	80	100	120	140	160	180	200
	Total Pressure	.050	.082	.119	.162	.209	.263	.321	.385
	Static Pressure	.043	.068	.098	.131	.168	.208	.252	.300
	Noise Criteria	–	–	23	26	29	33	37	40
	Horizontal Throw	2-4-11	4-7-14	5-9-17	7-11-20	9-13-22	10-15-24	12-17-26	13-18-27
	Vertical Throw	2-3-11	4-6-14	5-8-16	6-10-18	7-12-20	8-13-22	10-15-23	11-16-24
8" Oval Inlet	Airflow, CFM	60	80	100	120	140	160	180	200
	Total Pressure	.036	.059	.086	.118	.154	.194	.238	.287
	Static Pressure	.033	.053	.077	.104	.135	.170	.208	.249
	Noise Criteria	–	–	20	23	26	29	33	36
	Horizontal Throw	2-4-11	4-7-14	5-9-17	7-11-20	9-13-22	10-15-24	12-17-26	13-18-27
	Vertical Throw	2-3-11	4-6-14	5-8-16	6-10-18	7-12-20	8-13-22	10-15-23	11-16-24

36" (914) Long with 12" Down-Blow

6" Oval Inlet	Airflow, CFM	90	120	150	180	210	240	270	300
	Total Pressure	.054	.093	.141	.198	.264	.340	.424	.518
	Static Pressure	.037	.062	.093	.129	.170	.217	.269	.326
	Noise Criteria	–	22	26	30	34	38	41	46
	Horizontal Throw	3-5-11	4-7-15	6-9-18	7-11-21	8-13-24	10-14-26	11-16-28	12-17-30
	Vertical Throw	2-4-11	3-6-15	5-9-19	6-11-14	8-9-16	9-10-17	11-11-19	8-11-20
8" Oval Inlet	Airflow, CFM	90	120	150	180	210	240	270	300
	Total Pressure	.048	.082	.122	.170	.224	.286	.355	.430
	Static Pressure	.041	.068	.101	.139	.183	.231	.286	.345
	Noise Criteria	–	–	22	26	30	33	37	40
	Horizontal Throw	3-5-11	4-7-15	6-9-19	7-11-21	8-13-24	10-14-26	11-16-28	12-17-30
	Vertical Throw	2-4-11	3-6-15	5-9-19	6-11-14	8-9-16	9-10-17	11-11-19	8-11-20

48" (1219) Long with 12" Down-Blow

8" Oval Inlet	Airflow, CFM	120	160	200	240	280	320	360	400
	Total Pressure	.063	.108	.164	.232	.310	.400	.501	.613
	Static Pressure	.049	.084	.127	.177	.236	.303	.379	.462
	Noise Criteria	–	20	24	28	32	36	40	43
	Horizontal Throw	7-11-20	9-14-24	11-16-27	12-19-30	14-21-32	16-23-34	17-25-36	19-26-37
	Vertical Throw	3-5-11	5-7-14	7-10-17	8-12-19	10-14-22	12-16-23	13-18-24	15-19-25
10" Oval Inlet	Airflow, CFM	120	160	200	240	280	320	360	400
	Total Pressure	.047	.083	.128	.183	.248	.322	.406	.500
	Static Pressure	.039	.069	.107	.153	.207	.268	.338	.416
	Noise Criteria	–	–	21	25	29	33	37	41
	Horizontal Throw	7-11-20	9-14-24	11-16-27	12-19-30	14-21-32	16-23-34	17-25-36	19-26-37
	Vertical Throw	3-5-11	5-7-14	7-10-17	8-12-19	10-14-22	12-16-23	13-18-24	15-19-25

60" (1524) Long with 15" Down-Blow

8" Oval Inlet	Airflow, CFM	150	200	250	300	350	400	450	500
	Total Pressure	.078	.136	.207	.292	.392	.506	.635	.778
	Static Pressure	.057	.098	.148	.207	.277	.355	.444	.542
	Noise Criteria	–	24	29	33	37	41	45	48
	Horizontal Throw	4-8-15	7-11-19	9-14-22	11-16-25	13-18-27	15-20-29	16-22-31	18-23-32
	Vertical Throw	3-5-13	5-8-16	7-11-19	9-14-22	11-16-25	13-18-27	15-20-28	16-22-29
10" Oval Inlet	Airflow, CFM	150	200	250	300	350	400	450	500
	Total Pressure	.071	.123	.188	.267	.358	.462	.579	.709
	Static Pressure	.059	.102	.155	.219	.293	.377	.472	.577
	Noise Criteria	–	21	26	30	34	38	42	45
	Horizontal Throw	4-8-15	7-11-19	9-14-22	11-16-25	13-18-27	15-20-29	16-22-31	18-23-32
	Vertical Throw	3-5-13	5-8-16	7-11-19	9-14-22	11-16-25	13-18-27	15-20-28	16-22-29

Return Section

R Models	Airflow, CFM/ft.	30	40	50	60	70	80	90	100
	Negative Static Pressure	-.010	-.018	-.027	-.038	-.050	-.063	-.079	-.098

See page C73 for performance data notes.