

ADJUSTABLE 'ICE TONG' PATTERN CONTROLLER

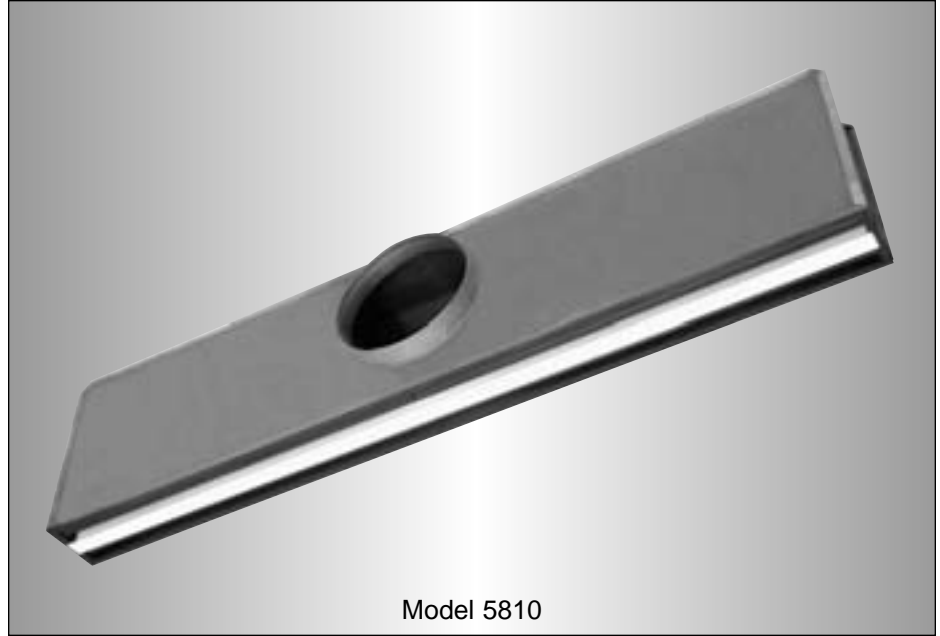
- FOR STANDARD LAY-IN T-BAR
- SUPPLY

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

The **5800 Series 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.

The **5800 Series** 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. The **5800 Series** therefore provides excellent performance in variable air volume applications.

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 48" (1200) and longer, permitting a 2-way opposite blow pattern from a single slot.

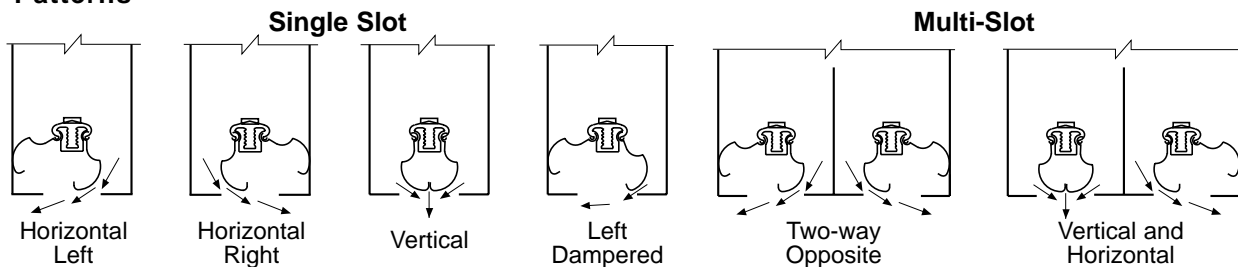
Options:

- Internal insulation (add suffix 'I' to model number).
- A full range of options and accessories are available, see page C53.

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

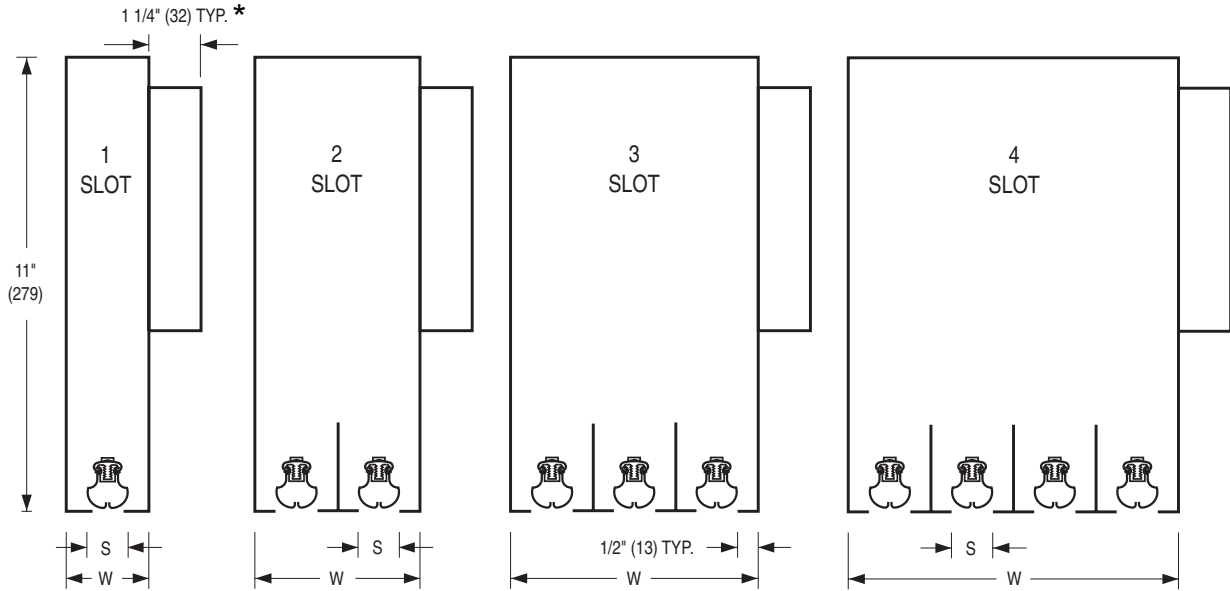
Finish: Black on pattern controllers and exposed surfaces. AW Appliance White baked enamel on center T-Bars.

Air Patterns



Dimensional Data

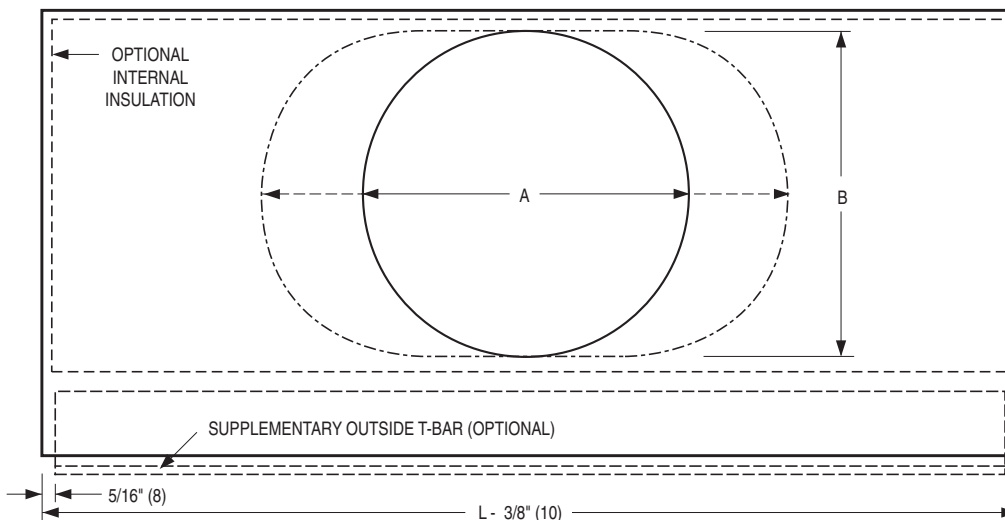
Model Series 5800 • Standard Lay-in T-Bar Models



		S Slot Width		
		1/2 (13)	3/4 (19)	1 (25)
W Width	1 Slot	1 1/2 (38)	1 3/4 (31)	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 (378)
B	—	—	7 7/8 (200)	7 7/8 (200)

*4" (102) with optional ID Inlet Damper



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

Dimensions are in inches (mm).

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 Supply 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 series **5800-F** two slot units incorporate a center hat channel and are designed to straddle, longitudinally, along a main T-Bar runner. The series **5800-F2** multi-slot units incorporate factory installed 1" (25) flat face T-Bars.

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 supplied 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.

Options:

- Internal insulation (add suffix 'I' to model number).
- A full range of options and accessories are available, see page C53.

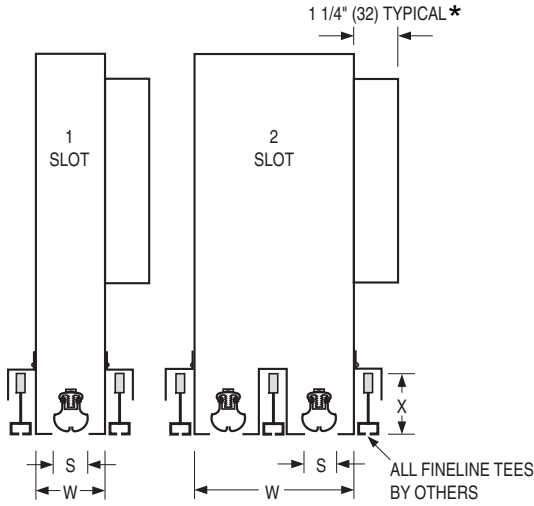
Material: Corrosion-resistant steel. The series **5800-F2** includes center T-Bars on multi-slot units that are extruded aluminum.

Finish: Black on pattern controllers and exposed surfaces. AW Appliance White baked enamel on center T-Bars.



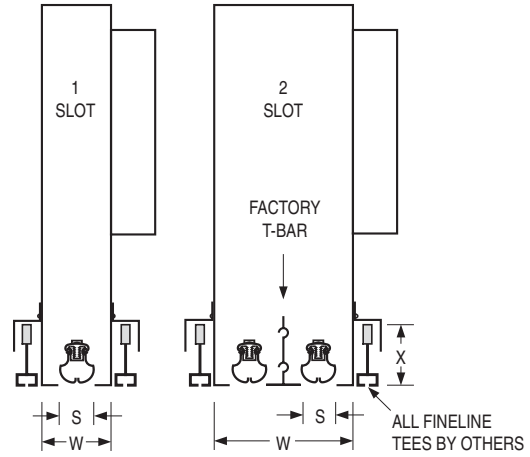
Dimensional Data

Model Series 5800-F and 5800-F2 • Narrow Regressed T-Bar



Model Series 5800-F

S SLOT WIDTH	WIDTH W	
	1 SLOT	2 SLOT
1/2 (13)	1 1/2 (38)	3 5/8 (92)
3/4 (19)	1 3/4 (44)	4 1/8 (105)
1 (25)	2 (51)	4 5/8 (117)

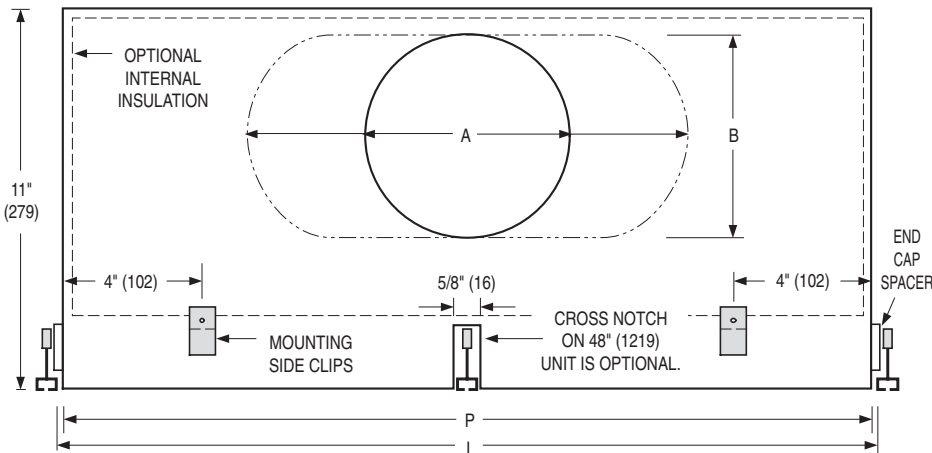


Model Series 5800-F2

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

	NOMINAL INLET SIZE			
	6 ROUND	8 ROUND	10 OVAL	12 OVAL
A	5 7/8 (149)	7 7/8 (200)	11 (279)	14 1/8 (378)
B	-	-	7 7/8 (200)	7 7/8 (200)

* 4" (102) with optional ID Inlet Damper



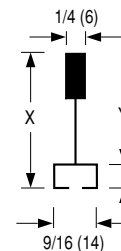
Imperial Ceiling Modules (inches)

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 ARMSTRONG SILHOUETTE	1 3/4 (44)	5/16 (8)
C CHICAGO METALLIC ULTRALINE	1 5/8 (41)	5/16 (8)
D DONN FINELINE®	1 25/32 (45)	5/16 (8)



Fineline® is a registered trademark of USG Interiors Inc.

Dimensions are in inches (mm).

HOW TO SPECIFY OR TO ORDER

(Show complete Model Number and Size, unless "Default" is desired).

'Ice Tong' Supply Air Plenum Slot Diffusers for Lay-in T-Bar – Model Series 5800

5875I - 48 x 2 - 08 - - - -

MODEL SERIES

- 'Ice Tong' Pattern Controller 58

SLOT WIDTH (mm)

1/2" (13) 50(I)
 3/4" (19) 75(I)
 1" (25) 10(I)

(Add Suffix 'I' for Internal Insulation)

NOMINAL LENGTH

inches (mm)
 - 20 (500)
 - 24 (600)
 - 30 (750)
 - 36 (900)
 - 48 (1200)
 - 60 (1500)

NO. OF SLOTS

- 1
 - 2
 - 3
 - 4

ACCESSORIES

- None (default) —
 - Cross Notch CN
 - Plaster Frame PF
 - Supplementary T-Bars
 One (Inlet Side) T1
 One (Opposite Inlet Side) TO
 Two (One Each Side) T2
 - T-Bar Mounting Clips (2) M1
 - T-Bar Mounting Clips (4) M2
 - External Foil Back Insulation EX
 - Straddle T-Bar ST
 (available with 2 slot and
 4 slot models only)

DAMPER

- None (default) —
 - Inlet Damper ID

INLET SIZE

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

Note:

1. If more than one accessory is desired, list in order.

SUGGESTED SPECIFICATION:

Standard Lay-in T-Bar

Furnish and install **Nailor Model** (select one) **5850/5850I** (1/2" (13) slot), **5875/5875I** (3/4" (19) slot) or **5810/5810I** (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" (38) 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 baked enamel 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 – 1991.

HOW TO SPECIFY OR TO ORDER

(Show complete Model Number and Size, unless "Default" is desired).

'Ice Tong' Supply Air Plenum Slot Diffusers for Narrow Regressed Ceiling Grids – Model Series 5800-F and 5800-F2

5875I-F - 48 x 2 - 08 - CN - ST - M2 - D - —

<p>MODEL SERIES</p> <ul style="list-style-type: none"> - 'Ice Tong' Pattern Controller 58 <p>SLOT WIDTH (mm)</p> <table border="0"> <tr> <td>1/2" (13)</td> <td>50(I)</td> </tr> <tr> <td>3/4" (19)</td> <td>75(I)</td> </tr> <tr> <td>1" (25)</td> <td>10(I)</td> </tr> </table> <p>(Add Suffix 'I' for Internal Insulation)</p> <p>STYLE</p> <ul style="list-style-type: none"> - Straddle Mount (on 2 slot unit) F - Flat Face T-Bars (on multi-slot units) F2 <p>NOMINAL LENGTH</p> <p>inches (mm)</p> <ul style="list-style-type: none"> - 24 (600) - 48 (1200) <p>NO. OF SLOTS</p> <ul style="list-style-type: none"> - 1, 2, 3 or 4 <p>Notes:</p> <ol style="list-style-type: none"> 1. Model 5800-F is only available with 1 or 2 slots. 2. If more than one accessory is desired, list in order. 	1/2" (13)	50(I)	3/4" (19)	75(I)	1" (25)	10(I)	<p>OPTIONAL ACCESSORIES</p> <ul style="list-style-type: none"> - None (default) — - Inlet Damper ID - External Foil Back Insulation EX - Earthquake Tabs EQT <p>SPECIFIED T-BAR</p> <ul style="list-style-type: none"> - 1 3/4" (44) high A - 1 5/8" (41) high C - 1 25/32" (45) high D <p>INCLUDED ACCESSORIES</p> <ul style="list-style-type: none"> - Cross Notch on 48" (1219) unit (default) CN - Straddle T-Bar on -F 2 slot models (default) ST - T-Bar Mounting Clips (4) (default) M2 <p>INLET SIZE</p> <table border="0"> <tr> <td>4" (102)</td> <td>Round</td> <td>04</td> </tr> <tr> <td>5" (127)</td> <td>Round</td> <td>05</td> </tr> <tr> <td>6" (152)</td> <td>Round</td> <td>06</td> </tr> <tr> <td>7" (178)</td> <td>Round</td> <td>07</td> </tr> <tr> <td>8" (203)</td> <td>Round</td> <td>08</td> </tr> <tr> <td>10" (254)</td> <td>Oval</td> <td>10</td> </tr> <tr> <td>12" (305)</td> <td>Oval</td> <td>12</td> </tr> </table>	4" (102)	Round	04	5" (127)	Round	05	6" (152)	Round	06	7" (178)	Round	07	8" (203)	Round	08	10" (254)	Oval	10	12" (305)	Oval	12
1/2" (13)	50(I)																											
3/4" (19)	75(I)																											
1" (25)	10(I)																											
4" (102)	Round	04																										
5" (127)	Round	05																										
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12" (305)	Oval	12																										

PLENUM SLOT AND LIGHT TROFFER DIFFUSERS

SUGGESTED SPECIFICATION:

Narrow Regressed T-Bar, Straddle Mount

Furnish and install **Nailor Model** (select one) **5850-F/5850I-F** (1/2" (13) slot), **5875-F/5875I-F** (3/4" (19) slot), **5810-F/5810I-F** (1" (25) slot) or **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" (38) 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 – 1991.

Narrow Regressed T-Bar, Flat Face T-Bar(s)

Furnish and install **Nailor Model** (select one) **5850-F2/5850I-F2** (1/2" (13) slot), **5875-F2/5875I-F2** (3/4" (19) slot) or **5810-F2/5810I-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" (38) 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 baked enamel 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 – 1991.

Performance Data

Model Series 5800 • 1/2" (13) Slot Width

1 Slot • 24" (610) Long • Models 5850(I), 5850(I)-F, 5850(I)-F2

6" Round Inlet	Airflow, CFM	20	30	40	50	60	70	80	90
	TP	.014	.031	.055	.087	.125	.170	.221	.280
	NC	—	14	20	26	30	34	38	40
	T	1-1-6	1-3-7	3-6-9	4-7-9	5-7-10	6-7-10	7-8-12	7-9-13

1 Slot • 48" (1219) Long • Models 5850(I), 5850(I)-F, 5850(I)-F2

6" Round Inlet	Airflow, CFM	35	50	65	80	95	110	125	140
	TP	.011	.022	.037	.055	.078	.105	.135	.170
	NC	—	16	22	27	31	34	37	40
	T	1-2-7	2-3-9	2-5-10	4-8-12	6-9-13	7-10-14	7-10-15	7-11-15

8" Round Inlet	Airflow, CFM	50	65	80	95	110	125	140	155
	TP	.024	.041	.063	.088	.118	.153	.191	.235
	NC	—	18	23	27	30	33	36	39
	T	2-3-9	2-5-10	4-8-12	6-9-13	7-10-14	7-10-15	7-11-15	8-11-16

1 Slot • 60" (1524) Long • Models 5850(I)

6" Round Inlet	Airflow, CFM	50	65	80	95	110	125	140	155
	TP	.020	.034	.052	.074	.099	.128	.160	.196
	NC	—	17	23	27	31	34	37	39
	T	1-3-8	1-4-9	2-4-10	3-6-11	4-8-12	6-10-13	7-10-14	8-11-16

8" Round Inlet	Airflow, CFM	50	65	80	95	110	125	140	155
	TP	.023	.039	.059	.083	.111	.143	.180	.221
	NC	—	14	19	23	27	31	34	36
	T	1-3-8	1-4-9	2-4-10	3-6-11	4-8-12	6-10-13	7-10-14	8-11-16

CFM - cubic feet per minute

TP - total pressure - inches w.g.

T - throw in feet

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

Performance Notes:

1. Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
2. 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.
3. Dash (—) in space indicates an NC level of less than 15.

4. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 1991.

Number of Slots	Ak Factor per foot	
	Supply	Return
1	.013	.033
2	.025	.066
3	.036	.099
4	.041	.132

Performance Data

Model Series 5800 • 1/2" (13) Slot Width

2 Slot • 24" (610) Long • Models 5850(I), 5850(I)-F, 5850(I)-F2

6" Round Inlet	Airflow, CFM	35	50	65	80	95	110	125	140
	TP	.017	.034	.058	.088	.124	.166	.214	.269
	NC	—	15	21	26	31	34	37	40
	T	1-3-7	2-5-8	3-7-9	5-8-11	6-8-12	7-9-13	8-10-14	8-10-15

2 Slot • 48" (1219) Long • Models 5850(I), 5850(I)-F, 5850(I)-F2

6" Round Inlet	Airflow, CFM	60	80	100	120	140	160	180	200
	TP	.020	.036	.057	.082	.111	.145	.184	.227
	NC	—	16	21	25	29	33	35	38
	T	1-3-9	2-4-11	3-6-12	4-8-13	5-9-14	6-10-15	7-11-16	8-13-17

8" Round Inlet	Airflow, CFM	80	100	120	140	160	180	200	220
	TP	.024	.037	.053	.072	.095	.120	.148	.179
	NC	—	18	22	26	29	32	35	37
	T	2-4-11	3-6-12	4-8-13	5-9-14	6-10-15	7-11-16	8-13-17	9-13-19

10" Oval Inlet	Airflow, CFM	100	120	140	160	180	200	220	240
	TP	.043	.063	.085	.111	.141	.174	.210	.250
	NC	15	19	23	26	29	32	34	36
	T	3-6-12	4-8-13	5-9-14	6-10-15	7-11-16	8-13-17	9-13-19	10-14-20

2 Slot • 60" (1524) Long • Models 5850(I)

8" Round Inlet	Airflow, CFM	120	140	160	180	200	220	240	260
	TP	.058	.078	.102	.130	.160	.194	.230	.270
	NC	18	22	25	28	31	33	35	37
	T	2-5-10	4-7-12	4-8-13	5-9-14	6-10-15	7-11-16	7-12-16	8-13-17

10" Oval Inlet	Airflow, CFM	140	160	180	200	220	240	260	280
	TP	.053	.069	.087	.107	.130	.155	.182	.211
	NC	19	22	25	28	30	32	34	36
	T	4-7-12	4-8-13	5-9-14	6-10-15	7-11-16	7-12-16	8-13-17	8-13-19

CFM - cubic feet per minute

TP - total pressure - inches w.g.

T - throw in feet

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

Performance Notes:

1. Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
2. 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.
3. Dash (—) in space indicates an NC level of less than 15.

4. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 1991.

Number of Slots	Ak Factor per foot	
	Supply	Return
1	.013	.033
2	.025	.066
3	.036	.099
4	.041	.132



Performance Data

Model Series 5800 • 3/4" (19) Slot Width

1 Slot • 24" (610) Long • Models 5875(I), 5875(I)-F, 5875(I)-F2

6" Round Inlet	Airflow, CFM	20	30	40	50	60	70	80	90
	TP	.011	.025	.044	.069	.100	.136	.177	.224
	NC	—	—	18	24	28	32	35	38
	T	1-2-4	1-3-6	2-4-7	3-6-9	5-7-10	6-7-10	7-8-11	7-9-12

8" Round Inlet	Airflow, CFM	30	40	50	60	70	80	90	100
	TP	.031	.055	.087	.125	.170	.221	.280	.346
	NC	—	16	21	25	29	31	34	37
	T	1-3-6	2-4-7	3-6-9	5-7-10	6-7-10	7-8-11	7-9-12	8-10-13

10" Oval Inlet	Airflow, CFM	40	50	60	70	80	90	100	110
	TP	.071	.111	.160	.218	.284	.360	.444	.538
	NC	—	16	21	25	28	31	34	36
	T	2-4-7	3-6-9	5-7-10	6-7-10	7-8-11	7-9-12	8-10-13	8-10-14

1 Slot • 48" (1219) Long • Models 5875(I), 5875(I)-F, 5875(I)-F2

6" Round Inlet	Airflow, CFM	35	50	65	80	95	110	125	140
	TP	.003	.019	.033	.044	.070	.093	.121	.151
	NC	—	15	20	25	28	31	34	37
	T	1-2-4	2-4-7	3-5-8	4-6-11	5-7-12	6-9-13	6-10-13	7-11-14

8" Round Inlet	Airflow, CFM	50	65	80	95	110	125	140	155
	TP	.016	.028	.042	.059	.080	.103	.129	.158
	NC	—	16	21	25	28	30	33	36
	T	2-4-7	3-5-8	4-6-11	5-7-12	6-9-13	6-10-13	7-11-14	7-11-15

10" Oval Inlet	Airflow, CFM	65	80	95	110	125	140	155	170
	TP	.031	.047	.066	.088	.114	.143	.175	.211
	NC	—	18	22	26	29	31	33	36
	T	3-5-8	4-6-11	5-7-12	6-9-13	6-10-13	7-11-14	7-11-15	8-12-16

12" Oval Inlet	Airflow, CFM	80	95	110	125	140	155	170	185
	TP	.052	.079	.099	.128	.160	.196	.236	.279
	NC	14	18	21	24	27	29	32	34
	T	4-6-11	5-7-12	6-9-13	6-10-13	7-11-14	7-11-15	8-12-16	8-13-18

1 Slot • 60" (1524) Long • Models 5875(I)

8" Round Inlet	Airflow, CFM	80	95	110	125	140	155	170	185
	TP	.032	.045	.060	.077	.097	.119	.143	.169
	NC	17	21	25	28	31	33	35	37
	T	3-5-8	4-6-10	5-7-11	5-8-12	6-9-14	7-10-15	7-11-16	8-12-17

10" Oval Inlet	Airflow, CFM	95	110	125	140	155	170	185	200
	TP	.041	.055	.071	.089	.109	.131	.155	.181
	NC	19	22	25	28	30	32	34	36
	T	4-6-10	5-7-11	5-8-12	6-9-14	7-10-15	7-11-16	8-12-17	8-13-18

12" Oval Inlet	Airflow, CFM	110	125	140	155	170	185	200	215
	TP	.055	.071	.089	.109	.131	.155	.181	.209
	NC	19	22	24	27	29	31	33	35
	T	5-7-11	5-8-12	6-9-14	7-10-15	7-11-16	8-12-17	8-13-18	9-14-19

CFM - cubic feet per minute

TP - total pressure - inches w.g.

T - throw in feet

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

Performance Notes:

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

2. 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.

3. Dash (—) in space indicates an NC level of less than 15.

4. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 1991.

Number of Slots	Ak Factor per foot	
	Supply	Return
1	.019	.039
2	.034	.078
3	.046	.117
4	.062	.156

PLENUM SLOT AND LIGHT TROFFER DIFFUSERS

Performance Data

Model Series 5800 • 3/4" (19) Slot Width

2 Slot • 24" (610) Long • Models 5875(I), 5875(I)-F, 5875(I)-F2

6" Round Inlet	Airflow, CFM	50	65	80	95	110	125	140	155
	TP	.022	.037	.055	.078	.105	.135	.170	.208
	NC	—	19	24	28	32	35	38	41
	T	1-3-8	2-5-9	3-7-10	5-9-12	6-9-13	7-10-14	8-10-15	8-11-17

8" Round Inlet	Airflow, CFM	65	80	95	110	125	140	155	170
	TP	.029	.044	.063	.084	.108	.136	.166	.200
	NC	16	21	25	28	31	34	37	40
	T	2-5-9	3-7-10	5-9-12	6-9-13	7-10-14	8-10-15	8-11-17	9-11-19

10" Oval Inlet	Airflow, CFM	80	95	110	125	140	155	170	185
	TP	.049	.070	.093	.121	.151	.185	.223	.264
	NC	15	21	25	29	32	35	38	40
	T	3-7-10	5-9-12	6-9-13	7-10-14	8-10-15	8-11-17	9-11-19	10-12-20

2 Slot • 48" (1219) Long • Models 5875(I), 5875(I)-F, 5875(I)-F2

6" Round Inlet	Airflow, CFM	60	80	100	120	140	160	180	200
	TP	.018	.032	.049	.071	.097	.126	.160	.198
	NC	—	14	19	23	27	30	33	36
	T	1-4-10	2-5-12	2-6-13	3-6-13	4-7-14	4-10-14	5-11-16	6-12-17

8" Round Inlet	Airflow, CFM	80	100	120	140	160	180	200	220
	TP	.018	.028	.040	.054	.071	.090	.111	.134
	NC	—	15	19	23	27	30	33	36
	T	2-5-12	2-6-13	3-6-13	4-7-14	4-10-14	5-11-16	6-12-17	7-13-18

10" Oval Inlet	Airflow, CFM	100	120	140	160	180	200	220	240
	TP	.020	.029	.040	.052	.066	.082	.099	.118
	NC	—	17	21	24	27	30	33	35
	T	2-6-13	3-6-13	4-7-14	4-10-14	5-11-16	6-12-17	7-13-18	8-14-20

12" Oval Inlet	Airflow, CFM	120	140	160	180	200	220	240	260
	TP	.031	.042	.055	.078	.087	.105	.125	.146
	NC	—	16	19	24	27	30	33	35
	T	3-6-13	4-7-14	4-10-14	5-11-16	6-12-17	7-13-18	8-14-20	9-15-21

2 Slot • 60" (1524) Long • Models 5875(I)

8" Round Inlet	Airflow, CFM	140	160	180	200	220	240	260	280
	TP	.044	.057	.072	.089	.108	.128	.151	.175
	NC	20	23	26	28	31	33	35	37
	T	2-6-13	3-7-14	5-8-15	5-8-16	6-9-17	6-10-18	7-11-19	8-13-20

10" Oval Inlet	Airflow, CFM	160	180	200	220	240	260	280	300
	TP	.040	.051	.063	.076	.090	.106	.123	.141
	NC	20	23	25	28	30	32	34	36
	T	3-7-14	5-8-15	5-8-16	6-9-17	6-10-18	7-11-19	8-13-20	8-15-21

12" Oval Inlet	Airflow, CFM	180	200	220	240	260	280	300	320
	TP	.036	.044	.054	.064	.075	.087	.100	.113
	NC	19	22	24	26	28	30	32	34
	T	5-8-15	5-8-16	6-9-17	6-10-18	7-11-19	8-13-20	8-15-21	9-16-22

CFM - cubic feet per minute

TP - total pressure - inches w.g.

T - throw in feet

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

Performance Notes:

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

2. 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.

3. Dash (—) in space indicates an NC level of less than 15.

4. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 1991.

Number of Slots	Ak Factor per foot	
	Supply	Return
1	.019	.039
2	.034	.078
3	.046	.117
4	.062	.156



PLENUM SLOT AND LIGHT TROFFER DIFFUSERS

Performance Data

Model Series 5800 • 3/4" (19) Slot Width

3 Slot • 24" (610) Long • Models 5875(I), 5875(I)-F2

6" Round Inlet	Airflow, CFM	60	80	100	120	140	160	180	200
	TP	.021	.038	.059	.086	.117	.152	.193	.238
	NC	—	18	24	28	32	35	38	41
	T	2-5-10	3-6-11	4-7-12	5-8-13	6-9-16	7-10-18	9-12-20	10-13-21

8" Round Inlet	Airflow, CFM	80	100	120	140	160	180	200	220
	TP	.025	.038	.055	.075	.098	.125	.154	.186
	NC	14	19	24	28	31	34	36	38
	T	3-6-11	4-7-12	5-8-13	6-9-16	7-10-18	9-12-20	10-13-21	10-14-22

10" Oval Inlet	Airflow, CFM	100	120	140	160	180	200	220	240
	TP	.040	.058	.078	.102	.130	.160	.194	.230
	NC	17	21	25	28	31	33	35	37
	T	4-7-12	5-8-13	6-9-16	7-10-18	9-12-20	10-13-21	10-14-22	11-14-23

3 Slot • 48" (1219) Long • Models 5875(I), 5875(I)-F2

6" Round Inlet	Airflow, CFM	125	150	175	200	225	250	275	300
	TP	.060	.087	.118	.154	.195	.240	.291	.346
	NC	18	22	26	30	33	35	37	39
	T	2-6-14	3-7-15	5-9-16	6-10-17	6-11-18	7-12-19	7-13-20	8-14-21

8" Round Inlet	Airflow, CFM	150	175	200	225	250	275	300	325
	TP	.046	.063	.082	.103	.128	.154	.184	.216
	NC	18	22	25	28	31	33	35	37
	T	3-7-15	5-9-16	6-10-17	6-11-18	7-12-19	7-13-20	8-14-21	9-15-23

10" Oval Inlet	Airflow, CFM	175	200	225	250	275	300	325	350
	TP	.041	.054	.068	.085	.102	.122	.143	.166
	NC	20	23	25	28	30	32	34	36
	T	5-9-16	6-10-17	6-11-18	7-12-19	7-13-20	8-14-21	9-15-23	10-16-25

12" Oval Inlet	Airflow, CFM	200	225	250	275	300	325	350	375
	TP	.033	.042	.052	.063	.074	.087	.101	.116
	NC	18	21	24	26	28	30	32	34
	T	6-10-17	6-11-18	7-12-19	7-13-20	8-14-21	9-15-23	10-16-25	11-17-27

3 Slot • 60" (1524) Long • Models 5875(I)

8" Round Inlet	Airflow, CFM	180	210	240	270	300	330	360	390
	TP	.056	.076	.100	.126	.156	.189	.224	.263
	NC	19	23	26	29	32	34	36	38
	T	3-8-15	5-10-16	6-11-18	7-12-19	7-13-20	8-14-21	8-15-22	9-16-23

10" Oval Inlet	Airflow, CFM	210	240	270	300	330	360	390	420
	TP	.052	.068	.086	.106	.129	.153	.186	.208
	NC	21	24	26	29	31	33	35	37
	T	5-10-16	6-11-18	7-12-19	7-13-20	8-14-21	8-15-22	9-16-23	9-17-24

12" Oval Inlet	Airflow, CFM	240	270	300	330	360	390	420	450
	TP	.040	.057	.068	.076	.090	.106	.123	.141
	NC	20	22	25	27	29	31	33	35
	T	6-11-18	7-12-19	7-13-20	8-14-21	8-15-22	9-16-23	9-17-24	10-17-25

CFM - cubic feet per minute

TP - total pressure - inches w.g.

T - throw in feet

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

Performance Notes:

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

2. 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.

3. Dash (—) in space indicates an NC level of less than 15.

4. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 1991.

Number of Slots	Ak Factor per foot	
	Supply	Return
1	.019	.039
2	.034	.078
3	.046	.117
4	.062	.156

Performance Data

Model Series 5800 • 3/4" (19) Slot Width

4 Slot • 24" (610) Long • Models 5875(I), 5875(I)-F2

6" Round Inlet	Airflow, CFM	75	100	125	150	175	200	225	250
	TP	.027	.047	.074	.106	.145	.189	.239	.295
	NC	—	19	25	29	33	36	39	42
	T	2-6-11	3-7-13	5-8-14	7-10-15	8-11-17	9-12-20	9-13-21	10-14-23

8" Round Inlet	Airflow, CFM	100	125	150	175	200	225	250	275
	TP	.025	.039	.057	.077	.101	.128	.157	.191
	NC	15	20	24	29	32	35	37	39
	T	3-7-13	5-8-14	7-10-15	8-11-17	9-12-20	9-13-21	10-14-23	11-16-24

10" Oval Inlet	Airflow, CFM	125	150	175	200	225	250	275	300
	TP	.034	.049	.066	.087	.109	.135	.164	.195
	NC	19	22	25	29	32	34	36	38
	T	5-8-14	7-10-15	8-11-17	9-12-20	9-13-21	10-14-23	11-16-24	13-19-26

4 Slot • 48" (1219) Long • Models 5875(I), 5875(I)-F2

6" Round Inlet	Airflow, CFM	160	190	220	250	280	310	340	370
	TP	.091	.129	.172	.222	.279	.342	.412	.487
	NC	20	24	27	30	32	35	37	39
	T	3-8-15	4-10-16	5-12-18	6-13-20	7-14-21	9-15-22	10-16-24	11-17-26

8" Round Inlet	Airflow, CFM	190	220	250	280	310	340	370	400
	TP	.058	.078	.100	.126	.154	.185	.219	.256
	NC	20	23	26	29	31	34	36	38
	T	4-10-16	5-12-18	6-13-20	7-14-21	9-15-22	10-16-24	11-17-26	12-17-28

10" Oval Inlet	Airflow, CFM	220	250	280	310	340	370	400	430
	TP	.051	.066	.083	.102	.123	.145	.170	.197
	NC	20	23	26	29	31	33	35	37
	T	5-12-18	6-13-20	7-14-21	9-15-22	10-16-24	11-17-26	12-17-28	12-18-29

12" Oval Inlet	Airflow, CFM	250	280	310	340	370	400	430	460
	TP	.037	.046	.057	.068	.081	.095	.109	.125
	NC	19	22	25	27	29	31	33	35
	T	6-13-20	7-14-21	9-15-22	10-16-24	11-17-26	12-17-28	12-18-29	13-19-30

4 Slot • 60" (1524) Long • Models 5875(I)

8" Round Inlet	Airflow, CFM	220	260	300	340	380	420	460	500
	TP	.072	.101	.134	.172	.215	.262	.315	.372
	NC	20	24	27	30	33	35	37	39
	T	3-10-16	4-11-18	6-12-20	8-13-22	10-15-24	11-16-26	12-17-28	13-19-31

10" Oval Inlet	Airflow, CFM	260	300	340	380	420	460	500	540
	TP	.063	.083	.107	.134	.163	.196	.231	.270
	NC	21	24	27	30	33	35	37	39
	T	4-11-18	6-12-20	8-13-22	10-15-24	11-16-26	12-17-28	13-19-31	14-20-32

12" Oval Inlet	Airflow, CFM	300	340	380	420	460	500	540	580
	TP	.043	.055	.069	.084	.101	.119	.139	.160
	NC	20	23	26	28	31	33	35	37
	T	6-12-20	8-13-22	10-15-24	11-16-26	12-17-28	13-19-31	14-20-32	14-21-34

CFM - cubic feet per minute

TP - total pressure - inches w.g.

T - throw in feet

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

Performance Notes:

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

2. 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.

3. Dash (—) in space indicates an NC level of less than 15.

4. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 1991.

Number of Slots	Ak Factor per foot	
	Supply	Return
1	.019	.039
2	.034	.078
3	.046	.117
4	.062	.156

Performance Data

Model Series 5800 • 1" (25) Slot Width

1 Slot • 24" (610) Long • Models 5810(I), 5810(I)-F, 5810(I)-F2

6" Round Inlet	Airflow, CFM	20	30	40	50	60	70	80	90
	TP	.006	.014	.026	.040	.058	.078	.102	.130
	NC	—	—	16	22	26	30	33	36
	T	1-2-4	2-3-5	2-4-6	3-5-7	4-6-8	4-6-9	5-6-9	5-7-10

8" Round Inlet	Airflow, CFM	30	40	50	60	70	80	90	100
	TP	.019	.033	.052	.074	.101	.132	.167	.207
	NC	—	—	16	22	26	29	31	34
	T	2-3-5	2-4-6	3-5-7	4-6-8	4-6-9	5-6-9	5-7-10	6-7-10

10" Oval Inlet	Airflow, CFM	40	50	60	70	80	90	100	110
	TP	.040	.063	.090	.123	.160	.203	.250	.303
	NC	—	14	19	23	26	28	31	34
	T	2-4-6	3-5-7	4-6-8	4-6-9	5-6-9	5-7-10	6-7-10	6-7-10

1 Slot • 48" (1219) Long • Models 5810(I), 5810(I)-F, 5810(I)-F2

6" Round Inlet	Airflow, CFM	50	65	80	95	110	125	140	155
	TP	.016	.026	.040	.056	.076	.098	.123	.150
	NC	—	17	22	25	29	32	35	37
	T	1-2-5	1-3-7	1-3-9	2-4-10	2-5-10	3-5-11	3-6-12	4-7-12

8" Round Inlet	Airflow, CFM	65	80	95	110	125	140	155	170
	TP	.018	.027	.038	.050	.065	.082	.100	.120
	NC	—	18	22	25	28	31	33	36
	T	1-3-7	1-3-9	2-4-10	2-5-10	3-5-11	3-6-12	4-7-12	5-8-13

10" Oval Inlet	Airflow, CFM	80	95	110	125	140	155	170	185
	TP	.029	.041	.055	.071	.089	.109	.131	.155
	NC	15	19	23	26	29	31	33	35
	T	1-3-9	2-4-10	2-5-10	3-5-11	3-6-12	4-7-12	5-8-13	6-9-14

12" Oval Inlet	Airflow, CFM	95	110	125	140	155	170	185	200
	TP	.045	.060	.077	.097	.119	.143	.169	.198
	NC	15	18	21	24	27	30	32	34
	T	2-4-10	2-5-10	3-5-11	3-6-12	4-7-12	5-8-13	6-9-14	7-10-15

1 Slot • 60" (1524) Long • Models 5810(I)

8" Round Inlet	Airflow, CFM	80	95	110	125	140	155	170	185
	TP	.021	.030	.040	.052	.065	.079	.096	.113
	NC	15	19	23	26	29	31	33	35
	T	1-3-7	1-3-9	2-4-9	3-5-10	3-5-11	4-6-11	5-7-12	6-8-13

10" Oval Inlet	Airflow, CFM	95	110	125	140	155	170	185	200
	TP	.025	.034	.043	.054	.067	.080	.095	.111
	NC	15	19	23	25	28	30	32	34
	T	1-3-9	2-4-9	3-5-10	3-5-11	4-6-11	5-7-12	6-8-13	6-9-14

12" Oval Inlet	Airflow, CFM	110	125	140	155	170	185	200	215
	TP	.033	.042	.053	.065	.078	.092	.107	.124
	NC	16	19	21	25	27	29	31	33
	T	2-4-9	3-5-10	3-5-11	4-6-11	5-7-12	6-8-13	6-9-14	7-10-15

CFM - cubic feet per minute

TP - total pressure - inches w.g.

T - throw in feet

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

Performance Notes:

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

2. 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.

3. Dash (—) in space indicates an NC level of less than 15.

4. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 1991.

Number of Slots	Ak Factor per foot	
	Supply	Return
1	.025	.051
2	.045	.104
3	.060	.155
4	.082	.206

Performance Data

Model Series 5800 • 1" (25) Slot Width

2 Slot • 24" (610) Long • Models 5810(I), 5810(I)-F, 5810(I)-F2

6" Round Inlet	Airflow, CFM	50	65	80	95	110	125	140	155
	TP	.016	.028	.042	.059	.080	.103	.129	.158
	NC	—	16	22	26	30	33	36	39
	T	2-4-7	2-5-8	4-6-9	5-6-10	6-7-10	6-8-12	7-8-14	7-9-15

8" Round Inlet	Airflow, CFM	65	80	95	110	125	140	155	170
	TP	.021	.032	.045	.060	.077	.097	.119	.143
	NC	—	19	22	26	29	32	35	38
	T	2-5-8	4-6-9	5-6-10	6-7-10	6-8-12	7-8-14	7-9-15	8-10-15

10" Oval Inlet	Airflow, CFM	80	95	110	125	140	155	170	185
	TP	.035	.049	.065	.085	.106	.130	.156	.185
	NC	15	19	23	26	29	32	35	37
	T	4-6-9	5-6-10	6-7-10	6-8-12	7-8-14	7-9-15	8-10-15	8-10-16

2 Slot • 48" (1219) Long • Models 5810(I), 5810(I)-F, 5810(I)-F2

6" Round Inlet	Airflow, CFM	100	120	140	160	180	200	220	240
	TP	.043	.063	.085	.111	.141	.174	.210	.250
	NC	17	21	25	28	31	34	36	38
	T	1-4-8	2-6-9	4-7-12	5-8-13	6-9-14	6-10-14	7-11-15	8-12-17

8" Round Inlet	Airflow, CFM	120	140	160	180	200	220	240	260
	TP	.033	.045	.059	.074	.092	.111	.132	.155
	NC	17	21	24	27	30	32	34	36
	T	2-6-9	4-7-12	5-8-13	6-9-14	6-10-14	7-11-15	8-12-17	8-12-17

10" Oval Inlet	Airflow, CFM	140	160	180	200	220	240	260	280
	TP	.031	.040	.051	.063	.076	.090	.106	.123
	NC	18	21	24	27	29	31	33	35
	T	4-7-12	5-8-13	6-9-14	6-10-14	7-11-15	8-12-17	8-12-17	9-13-19

12" Oval Inlet	Airflow, CFM	160	180	200	220	240	260	280	300
	TP	.026	.032	.040	.048	.058	.068	.078	.090
	NC	17	21	23	25	27	29	31	33
	T	5-8-13	6-9-14	6-10-14	7-11-15	8-12-17	8-12-17	9-13-19	9-13-21

2 Slot • 60" (1524) Long • Models 5810(I)

8" Round Inlet	Airflow, CFM	160	180	200	220	240	260	280	300
	TP	.048	.061	.075	.091	.108	.127	.147	.169
	NC	21	24	26	28	30	32	34	36
	T	3-6-10	4-7-12	6-9-14	7-9-15	7-10-16	8-11-17	8-12-18	9-13-19

10" Oval Inlet	Airflow, CFM	180	200	220	240	260	280	300	320
	TP	.042	.052	.063	.074	.087	.101	.116	.132
	NC	21	23	25	28	30	32	34	36
	T	4-7-12	6-9-14	7-9-15	7-10-16	8-11-17	8-12-18	9-13-19	9-14-21

12" Oval Inlet	Airflow, CFM	200	220	240	260	280	300	320	340
	TP	.036	.044	.052	.061	.071	.082	.093	.105
	NC	20	23	25	27	29	31	33	35
	T	6-9-14	7-9-15	7-10-16	8-11-17	8-12-18	9-13-19	9-14-21	10-15-22

- CFM - cubic feet per minute
- TP - total pressure - inches w.g.
- T - throw in feet
- NC - Noise Criteria (values) based on 10 dB room absorption, re 10⁻¹² watts.

Performance Notes:

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

2. 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.
3. Dash (—) in space indicates an NC level of less than 15.

4. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 1991.

Number of Slots	Ak Factor per foot	
	Supply	Return
1	.025	.051
2	.045	.104
3	.060	.155
4	.082	.206

Performance Data

Model Series 5800 • 1" (25) Slot Width

3 Slot • 24" (610) Long • Models 5810(I), 5810(I)-F2

6" Round Inlet	Airflow, CFM	60	80	100	120	140	160	180	200
	TP	.019	.035	.054	.078	.106	.138	.175	.216
	NC	—	16	21	25	29	32	35	38
	T	2-4-8	3-5-9	4-6-10	5-7-11	6-8-12	7-9-14	7-10-15	8-10-16

8" Round Inlet	Airflow, CFM	80	100	120	140	160	180	200	220
	TP	.018	.028	.040	.054	.071	.090	.111	.134
	NC	—	17	22	25	28	31	34	36
	T	3-5-9	4-6-10	5-7-11	6-8-12	7-9-14	7-10-15	8-10-16	8-11-17

10" Oval Inlet	Airflow, CFM	100	120	140	160	180	200	220	240
	TP	.024	.034	.046	.061	.077	.095	.115	.136
	NC	15	19	22	25	28	31	33	35
	T	4-6-10	5-7-11	6-8-12	7-9-14	7-10-15	8-10-16	8-11-17	9-11-18

3 Slot • 48" (1219) Long • Models 5810(I), 5810(I)-F2

6" Round Inlet	Airflow, CFM	125	150	175	200	225	250	275	300
	TP	.058	.083	.113	.148	.187	.231	.280	.333
	NC	16	20	24	27	30	33	35	37
	T	2-4-10	3-6-12	5-7-14	5-8-15	6-8-16	7-9-17	7-10-18	7-11-18

8" Round Inlet	Airflow, CFM	150	175	200	225	250	275	300	325
	TP	.039	.053	.069	.088	.108	.131	.156	.183
	NC	17	20	23	26	29	31	33	35
	T	3-6-12	5-7-14	5-8-15	6-8-16	7-9-17	7-10-18	7-11-18	8-12-20

10" Oval Inlet	Airflow, CFM	175	200	225	250	275	300	325	350
	TP	.036	.047	.060	.074	.089	.106	.125	.145
	NC	17	20	23	25	27	29	31	33
	T	5-7-14	5-8-15	6-8-16	7-9-17	7-10-18	7-11-18	8-12-20	8-13-22

12" Oval Inlet	Airflow, CFM	200	225	250	275	300	325	350	375
	TP	.026	.032	.040	.048	.058	.068	.078	.090
	NC	16	19	22	24	26	28	30	32
	T	5-8-15	6-8-16	7-9-17	7-10-18	7-11-18	8-12-20	8-13-22	9-14-23

3 Slot • 60" (1524) Long • Models 5810(I)

8" Round Inlet	Airflow, CFM	180	210	240	270	300	330	360	390
	TP	.051	.069	.090	.114	.141	.170	.203	.238
	NC	17	20	24	27	30	32	34	36
	T	3-7-13	4-8-15	6-9-17	6-10-18	7-11-19	7-12-20	8-13-22	8-14-23

10" Oval Inlet	Airflow, CFM	210	240	270	300	330	360	390	420
	TP	.044	.058	.073	.090	.109	.130	.152	.176
	NC	19	21	24	26	29	31	33	35
	T	4-8-15	6-9-17	6-10-18	7-11-19	7-12-20	8-13-22	8-14-23	9-15-24

12" Oval Inlet	Airflow, CFM	240	270	300	330	360	390	420	450
	TP	.029	.037	.046	.056	.066	.078	.090	.103
	NC	18	20	22	25	27	29	31	33
	T	6-9-17	6-10-18	7-11-19	7-12-20	8-13-22	8-14-23	9-15-24	10-16-26

CFM - cubic feet per minute

TP - total pressure - inches w.g.

T - throw in feet

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

Performance Notes:

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

2. 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.

3. Dash (—) in space indicates an NC level of less than 15.

4. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 1991.

Number of Slots	Ak Factor per foot	
	Supply	Return
1	.025	.051
2	.045	.104
3	.060	.155
4	.082	.206

Performance Data

Model Series 5800 • 1" (25) Slot Width

4 Slot • 24" (610) Long • Models 5810(I), 5810(I)-F2

6" Round Inlet	Airflow, CFM	75	100	125	150	175	200	225	250
	TP	.024	.043	.068	.098	.133	.174	.220	.271
	NC	—	17	22	26	30	33	36	38
	T	3-5-10	4-7-11	6-8-12	6-8-13	7-9-15	7-10-16	8-11-18	8-11-19

8" Round Inlet	Airflow, CFM	100	125	150	175	200	225	250	275
	TP	.022	.034	.049	.066	.087	.109	.135	.164
	NC	—	18	22	26	30	32	34	37
	T	4-7-11	6-8-12	6-8-13	7-9-15	7-10-16	8-11-18	8-11-19	9-13-21

10" Oval Inlet	Airflow, CFM	125	150	175	200	225	250	275	300
	TP	.023	.033	.046	.059	.075	.093	.112	.134
	NC	16	20	23	27	29	32	34	36
	T	6-8-12	6-8-13	7-9-15	7-10-16	8-11-18	8-11-19	9-13-21	9-14-22

4 Slot • 48" (1219) Long • Models 5810(I), 5810(I)-F2

6" Round Inlet	Airflow, CFM	160	190	220	250	280	310	340	370
	TP	.085	.119	.160	.207	.259	.318	.382	.453
	NC	17	21	25	28	31	33	35	37
	T	3-6-14	5-7-15	6-8-16	7-10-17	7-11-18	8-12-19	8-13-20	9-14-21

8" Round Inlet	Airflow, CFM	190	220	250	280	310	340	370	400
	TP	.052	.070	.091	.114	.139	.168	.199	.232
	NC	18	21	24	27	29	31	33	35
	T	5-7-15	6-8-16	7-10-17	7-11-18	8-12-19	8-13-20	9-14-21	9-14-22

10" Oval Inlet	Airflow, CFM	220	250	280	310	340	370	400	430
	TP	.044	.057	.071	.087	.105	.124	.145	.168
	NC	18	21	24	26	28	30	32	34
	T	6-8-16	7-10-17	7-11-18	8-12-19	8-13-20	9-14-21	9-14-22	10-15-24

12" Oval Inlet	Airflow, CFM	250	280	310	340	370	400	430	460
	TP	.032	.040	.049	.059	.070	.082	.094	.108
	NC	17	20	23	25	27	29	31	33
	T	7-10-17	7-11-18	8-12-19	8-13-20	9-14-21	9-14-22	10-15-24	10-16-26

4 Slot • 60" (1524) Long • Models 5810(I)

8" Round Inlet	Airflow, CFM	220	260	300	340	380	420	460	500
	TP	.069	.096	.128	.164	.205	.250	.300	.354
	NC	17	21	25	28	30	32	35	37
	T	4-6-13	6-8-15	7-10-17	8-12-19	9-13-21	9-14-22	10-15-23	10-16-24

10" Oval Inlet	Airflow, CFM	260	300	340	380	420	460	500	540
	TP	.058	.077	.099	.124	.151	.181	.214	.250
	NC	19	22	25	28	30	32	34	36
	T	6-8-15	7-10-17	8-12-19	9-13-21	9-14-22	10-15-23	10-16-24	11-18-26

12" Oval Inlet	Airflow, CFM	300	340	380	420	460	500	540	580
	TP	.035	.045	.056	.069	.083	.098	.114	.131
	NC	18	21	24	26	28	30	32	34
	T	7-10-17	8-12-19	9-13-21	9-14-22	10-15-23	10-16-24	11-18-26	12-19-28

CFM - cubic feet per minute

TP - total pressure - inches w.g.

T - throw in feet

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

Performance Notes:

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

2. 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.

3. Dash (—) in space indicates an NC level of less than 15.

4. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 1991.

Number of Slots	Ak Factor per foot	
	Supply	Return
1	.025	.051
2	.045	.104
3	.060	.155
4	.082	.206

PLENUM SLOT AND LIGHT TROFFER DIFFUSERS