

ADJUSTABLE 'FLIP FLOP' PATTERN CONTROLLER

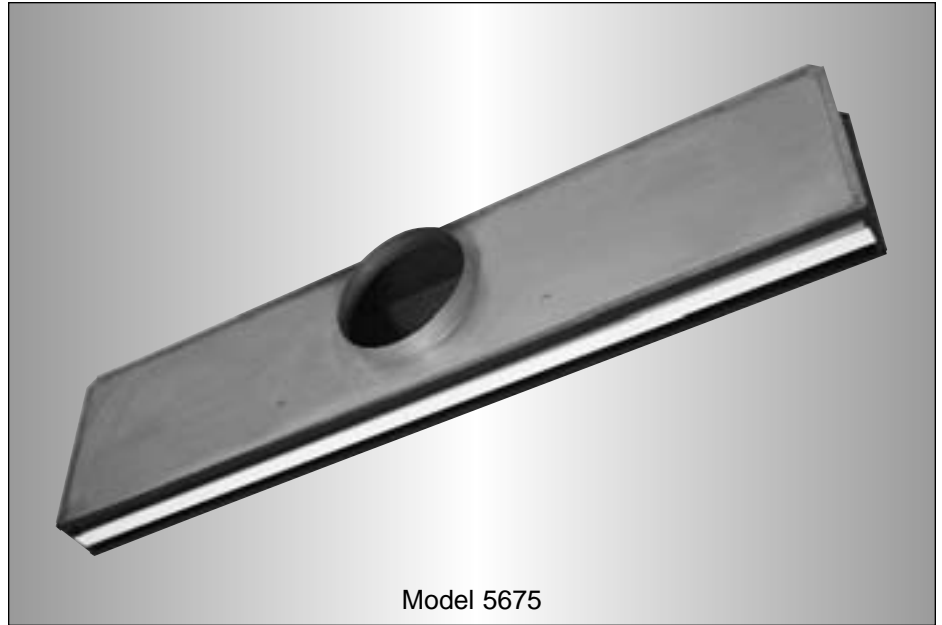
- FOR STANDARD LAY-IN T-BAR SUPPLY

Uninsulated Model:

5675 3/4" (19) Slot Width

Insulated Model:

5675I 3/4" (19) Slot Width



Model 5675

The **5600 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. Designed with the popular 3/4" (19) slot spacing, the **5600 Series** design offers high performance and extremely good value, where budgetary restraints are a consideration.

The **5600 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 diffuser face for either a left or right discharge direction.

In either 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 and the **5600 Series** therefore provides excellent performance in variable air volume applications.

FEATURES:

- Simple 'Flip-Flop' pattern controller adjustment, from face of diffuser for left or right blow pattern.
- 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 unit is 11" (279) in height.

- Factory installed center T-Bars on multi-slot models are standard.
- Blades are shipped locked. They may be set for left or right airflow pattern after installation.

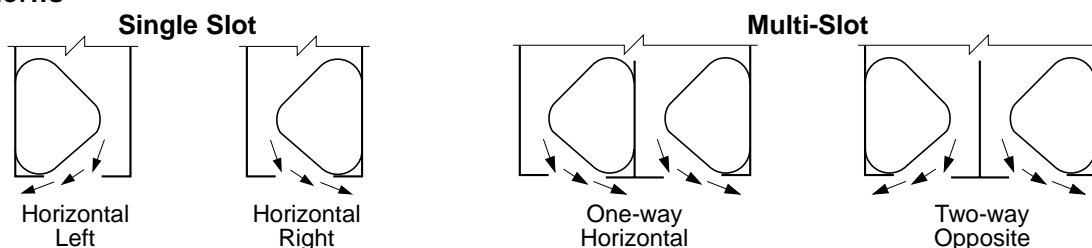
Options:

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

Material: Corrosion-resistant steel.

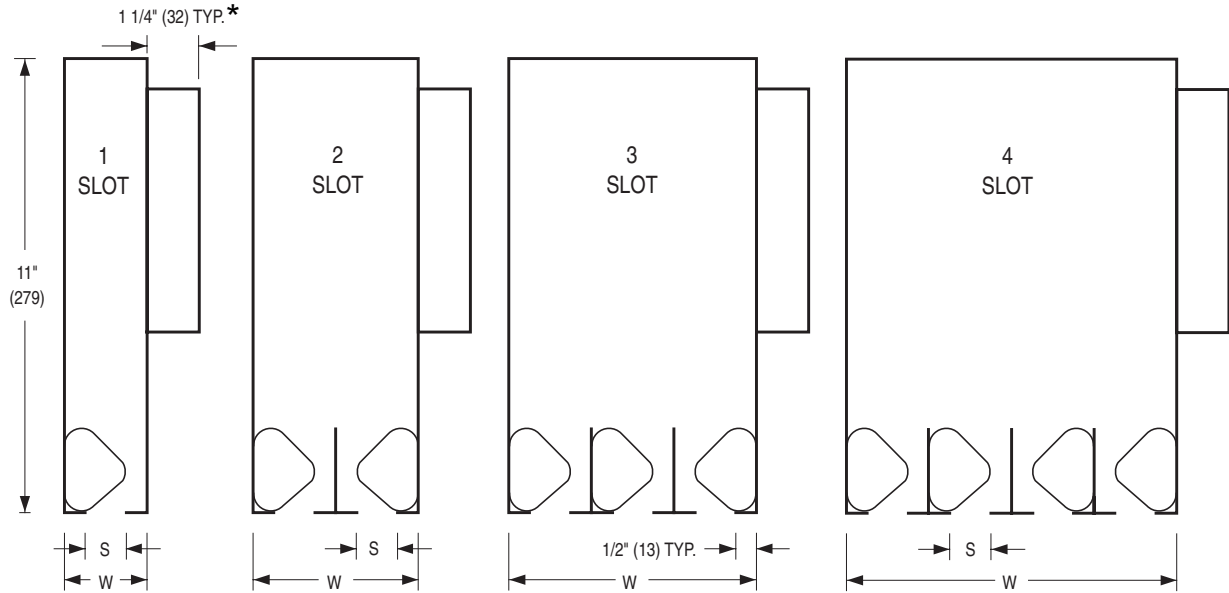
Finish: Black on pattern controllers and exposed surfaces. AW Appliance White baked enamel on center T-Bars.

Air Patterns



Dimensional Data

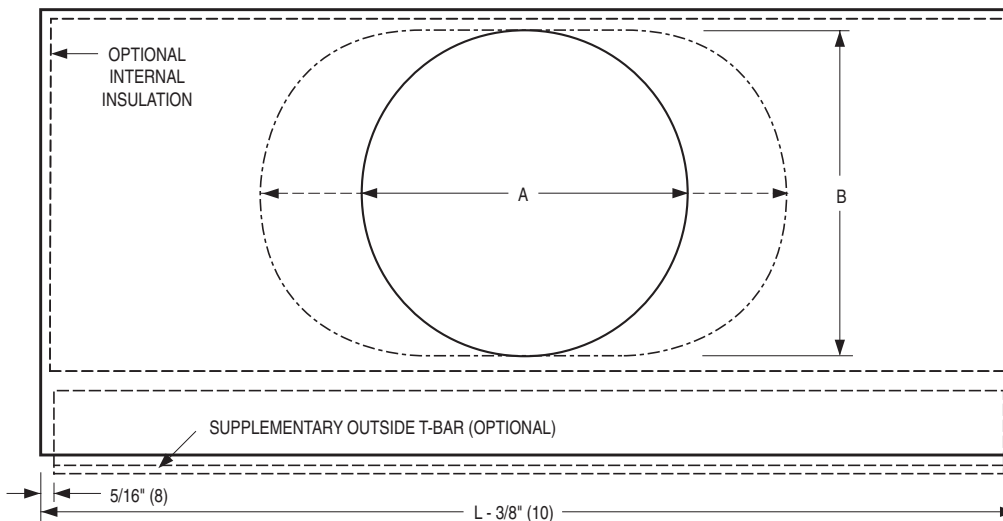
Model Series 5600 • Standard Lay-in T-Bar Models



		S	
		Slot Width	
		3/4 (19)	
W	Width	1 Slot	1 3/4 (31)
		2 Slot	3 1/2 (89)
		3 Slot	5 1/4 (133)
		4 Slot	7 (178)

	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).



PLENUM SLOT AND LIGHT TROFFER DIFFUSERS

HOW TO SPECIFY OR TO ORDER

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

'Flip Flop' Supply Air Plenum Slot Diffusers – Model Series 5600

5675I - 48 x 2 - 08 - - - -

MODEL SERIES

- 'Flip Flop' Pattern Controller 56

SLOT WIDTH (mm)

3/4" (19) 75

INTERNAL INSULATION

- None —
- Internal Insulation I

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

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

PLENUM SLOT AND LIGHT TROFFER DIFFUSERS

Note:

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

SUGGESTED SPECIFICATION:

Furnish and install **Nailor Model 5675/5675I** (3/4" (19) 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 a roll-formed, curved blade, 'flip flop' style pattern controller in each slot. The pattern deflector shall be adjustable from the face of the diffuser for a left or right blow pattern. 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. Model 5675I 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 Models 5675, 5675I

CFM PER FOOT	1 SLOT				2 SLOT				3 SLOT				4 SLOT			
	SP	NC	THROW		SP	NC	THROW		SP	NC	THROW		SP	NC	THROW	
			T1	T2			T1	T2			T1	T2			T1	T2
20	.027	20	3.3	11.5												
30	.059	23	6.3	15.0												
40	.104	27	8.0	19.0	.028	20	3.7	12.5								
50	.153	30	9.5	21.0												
60	.228	33	10.7	23.0	.061	24	7.7	16.0	.030	21	4.5	12.7				
70	.307	35	11.7	24.5												
80					.115	29	9.0	19.0					.034	22	5.2	13.5
90									.064	25	9.0	17.0				
100					.165	33	10.5	22.0								
120					.240	36	12.0	24.0	.120	30	10.2	20.0	.071	26	10.0	17.7
140					.335	38	13.0	25.5								
150									.184	35	11.5	23.0				
160													.134	31	11.2	21.0
180									.265	39	13.0	25.2				
200													.203	37	12.0	24.5
210									350	42	14.0	27.5				
240													.292	41	13.5	26.5
280													.392	45	15.0	29.0

- CFM** - cubic feet per minute
- FPM** - feet per minute velocity
- SP** - total pressure - inches w.g.
- T** - throw in feet under isothermal conditions
- T1** - T @ 150 fpm terminal velocity at 9'-0" ceiling height
- T2** - T @ 50 fpm terminal velocity at 9'-0" ceiling height
- NC** - Noise Criteria (values) based on 10 dB room absorption, re 10⁻¹² watts.

Performance Notes:

1. Throw data is for one-way blow in opposite direction to inlet collar under isothermal conditions.
2. NC values less than 20 are not shown.
3. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 1991.

Number of Slots	Ak Factor per foot	
	Supply	Return
1	.031	.039
2	.059	.079
3	.083	.117
4	.108	.156

PLENUM SLOT AND LIGHT TROFFER DIFFUSERS