

FM Series

- MODULAR SQUARE CEILING DIFFUSER
- COMPLIMENTS FLOWLINE™ LINEAR DIFFUSER SYSTEM
- ROUND NECK (SUPPLY)

Models:

Supply 1" (25) Slot

FM(I)10 Standard 1⁵/₁₆" (24) or 9¹/₁₆" (14) Flat T-Bar

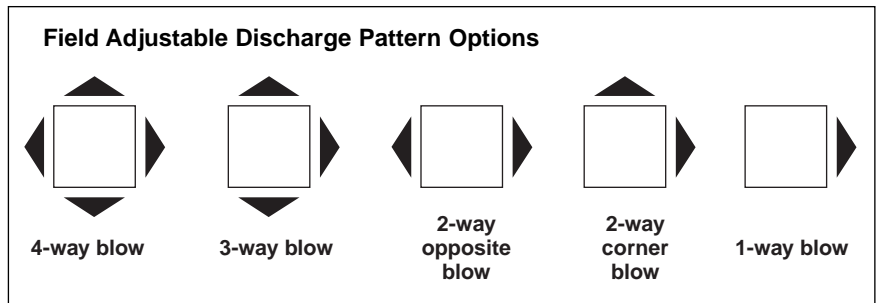
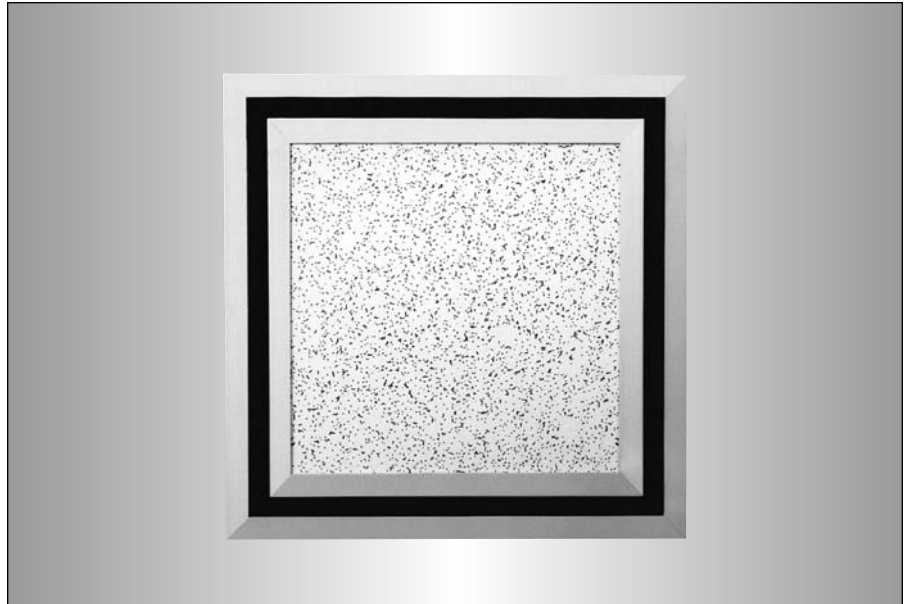
FMB(I)10 Bolt-Slot (Fineline® Type) T-Bar

(I) Adds Internal Insulation.

Return 1" (25) Slot

FMR10 Standard 1⁵/₁₆" (24) or 9¹/₁₆" (14) Flat T-Bar

FMBR10 Bolt-Slot (Fineline® Type) T-Bar



The FM Series modular square ceiling diffusers are ideal for interior spaces and compliment the Nailor FlowLine™ Linear Diffuser system. Designed with the architect in mind, these single slot diffusers provide a high capacity capability with high performance. To fully integrate into the ceiling system, the FM Series diffusers incorporate a field cut center ceiling tile (by others) that matches and blends in with the surrounding ceiling system.

This product is available in a nominal ceiling module size of 24" x 24" (600 x 600) with a 1" (25) slot to suit either imperial or metric exposed grid ceiling systems. The 4-way blow linear slot design utilizes the FlowLine™ Horizontal High Throw adjustable pattern controller, providing a tight air pattern along the ceiling and making it an excellent choice for VAV systems.

STANDARD FEATURES:

- Extruded aluminum construction with corrosion-resistant steel pattern controllers.
- Factory precision welding on all mitered corners.
- Pattern controllers are individually adjustable for horizontal or vertical discharge air patterns.
- Can be field adjusted for one, two, three or four-way blow directional air patterns.
- Adjustable dual pattern controller design permits both dampering and full shut-off without adding blank-offs.
- Supply diffusers have a round neck for flexible or hard duct connection.
- Matching return air units for ductless plenum return applications incorporate a light shield to block out light and prevent see-through.
- Plenum is secured with steel S-clips and is easily removed for installation of a field cut ceiling tile (by others) into the face of the diffuser.
- Standard finish is AW Appliance White baked enamel face with black pattern controllers. Other finishes are available.

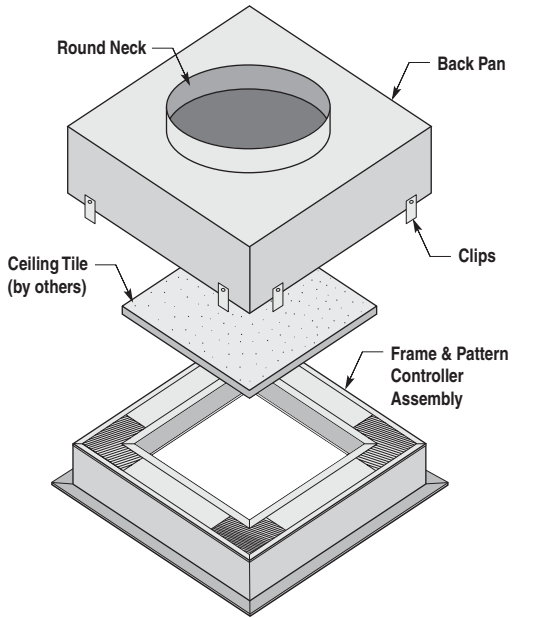
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FLOWLINE™ LINEAR DIFFUSERS

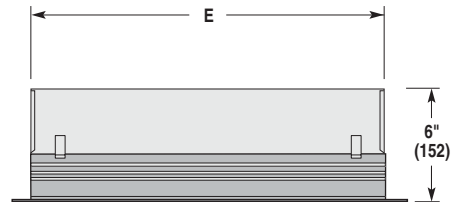
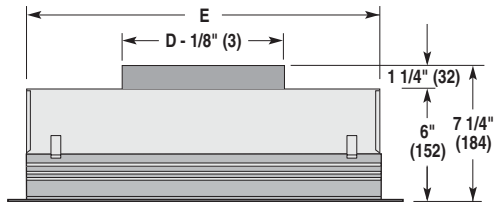
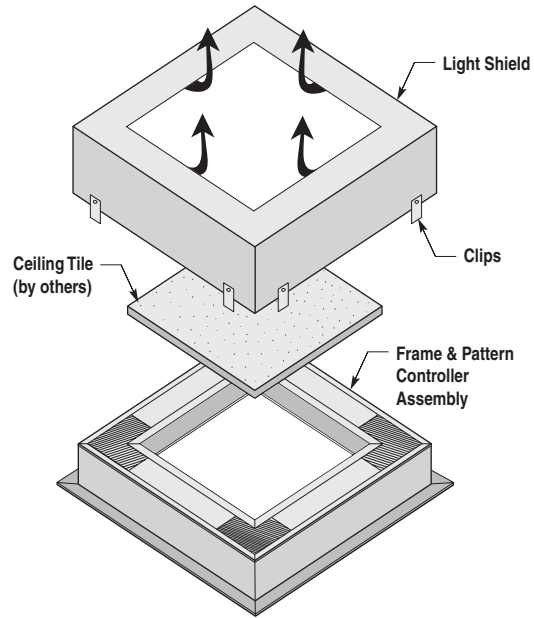
FM Series Square Ceiling Diffusers

Standard Ceiling Module (CM) Sizes: Imperial 24" x 24" (610 x 610) • Metric 600 x 600mm
 (Frame/Border Type AA Illustrated)

Supply Model



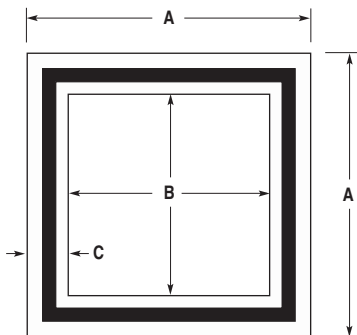
Return Model



FLOWLINE™ LINEAR DIFFUSERS

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Face View



Ceiling Tile Cutting Dimensions

Models	Border Type	Imperial Module 24" x 24" (610 x 610)	Metric Module 600 x 600mm
FM(I)10, FMR10	AA	17 3/16 x 17 3/16 (437 x 437)	427 x 427
FMB(I)10, FMBR10	GA	17 5/8 x 17 5/8 (448 x 448)	438 x 438

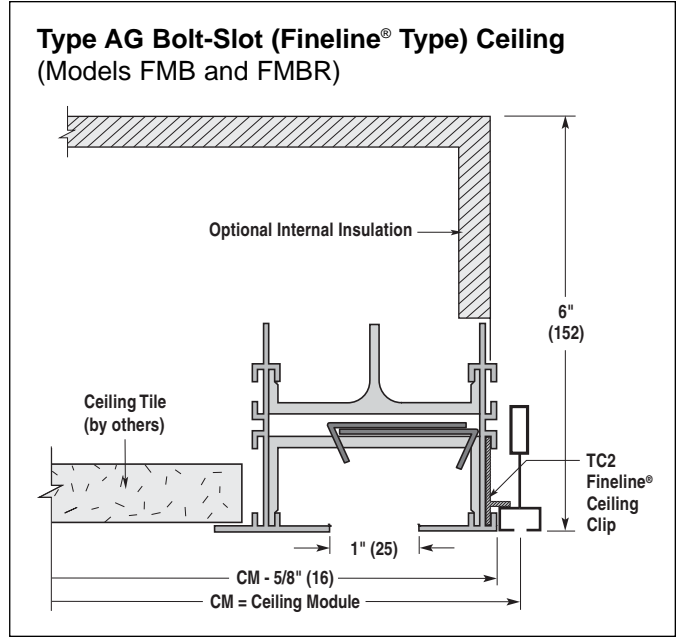
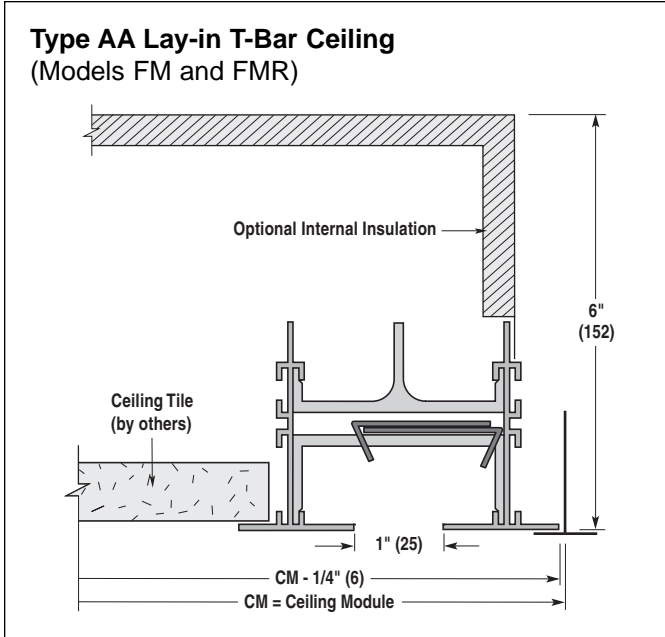
Standard Round Inlet Sizes (Supply Units):

(Nominal D Diameter)
 6" (152), 8" (203), 10" (254).

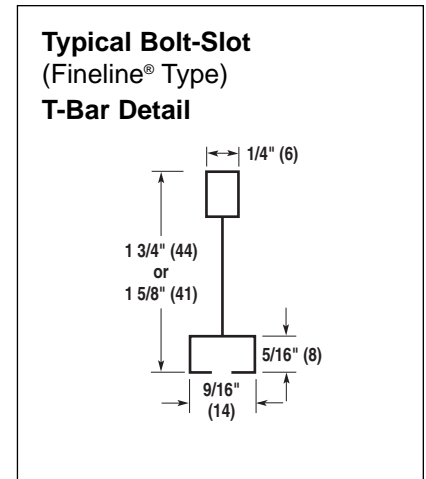
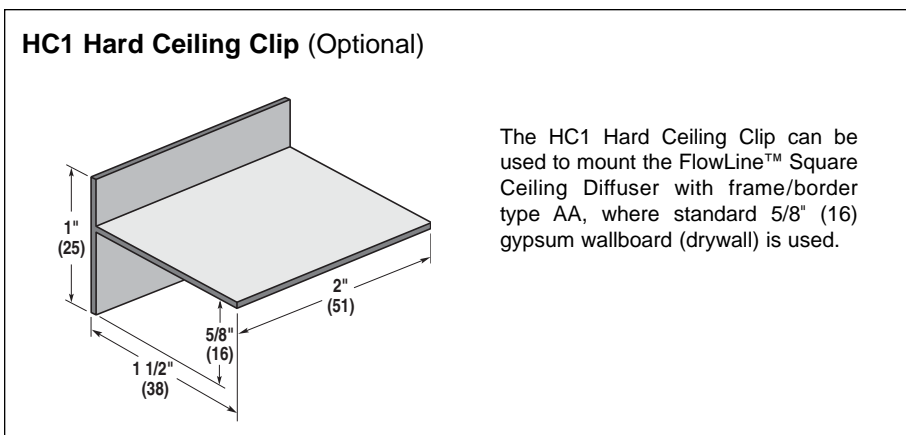
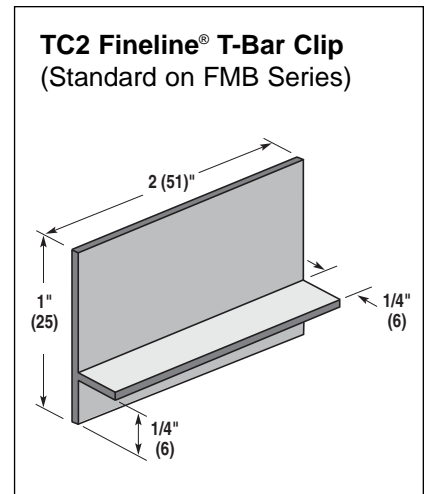
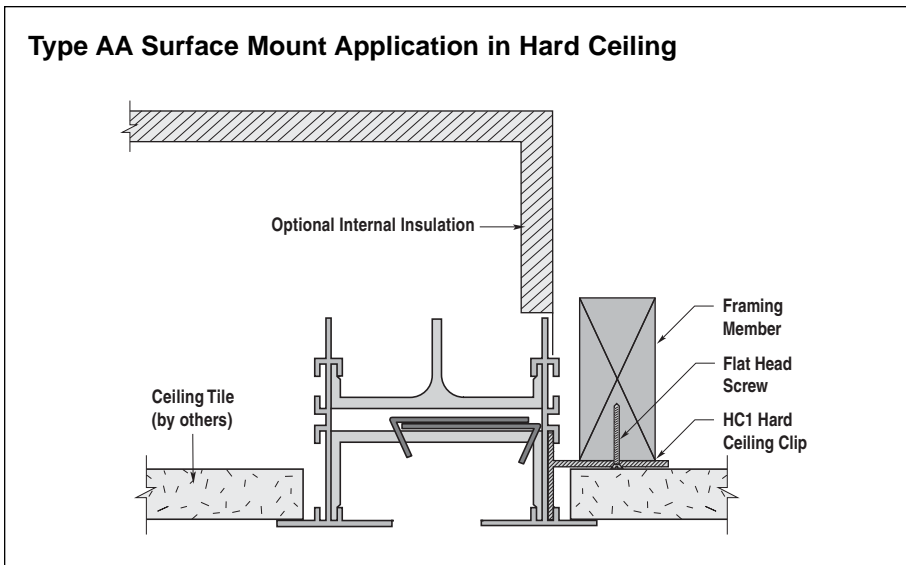
Dimensional Data:

Models	Imperial Module 24" x 24" (610 x 610)				Metric Module 600 x 600mm			
	A	B	C	E	A	B	C	E
FM(I)10, FMR10	23 3/4 (603)	16 5/8 (422)	3 9/16 (90)	22 15/16 (583)	594	413	90	573
FMB(I)10, FMBR10	23 3/8 (594)	17 1/16 (433)	3 5/32 (80)	22 9/16 (573)	584	423	80	584

FM Series Square Ceiling Diffusers • Frame/Border Types



Optional Hanger & Mounting Clips



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FLOWLINE™ LINEAR DIFFUSERS

Performance Data • Modular Square Ceiling Diffusers

Models: FM10 and FMB10

	Inlet Size	Neck Velocity, (fpm)	300	400	500	600	700	800	900	
		Velocity Pressure, (In. w.g.)	0.006	0.010	0.016	0.022	0.031	0.040	0.050	
1" Slot Width	6" Dia.	Airflow, cfm	59	79	98	118	137	157	177	
		Total Pressure	0.015	0.026	0.041	0.059	0.080	0.104	0.132	
		Inlet NC (Noise Criteria)	<15	<15	<15	16	20	24	28	
			Throw	0-1-5	1-2-7	2-4-10	2-5-11	3-6-12	4-7-13	5-8-14
	8" Dia.	Airflow, cfm	105	140	175	209	244	279	314	
		Total Pressure	0.029	0.052	0.081	0.117	0.160	0.209	0.264	
		Inlet NC (Noise Criteria)	<15	18	25	30	35	39	43	
			Throw	1-4-10	2-6-13	5-8-14	6-10-16	7-12-17	8-13-18	10-13-19
	10" Dia.	Airflow, cfm	164	218	273	327	382	436	491	
		Total Pressure	0.050	0.089	0.139	0.201	0.273	0.357	0.452	
		Inlet NC (Noise Criteria)	22	30	37	43	47	51	55	
			Throw	4-7-13	7-11-16	8-12-18	11-13-19	12-14-20	13-16-23	13-17-24

Performance Notes:

- All pressures are in inches w.g..
- Throw values are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
- NC (Noise criteria) values are based on 10 dB room absorption, re 10⁻¹² watts.
- Pressure, throw and NC values are based on 4-way air pattern.
- Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70-1991.

HOW TO SPECIFY OR TO ORDER

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

FlowLine™ Modular Square Ceiling Diffusers • FM Series

FM10 - 24 x 24 - 08 - AA - AW - —

MODELS

- Supply - 1" (25) Slot
- Standard T-Bar FM(I)10
- Bolt-Slot T-Bar FMB(I)10

(I) Adds Internal Insulation

- Return - 1" (25) Slot
- Standard T-Bar FMR10
- Bolt-Slot T-Bar FMBR10

CEILING MODULE SIZE

- Imperial (mm) 24 x 24 (610 x 610)
- Metric 600 x 600

PLENUM INLET SIZE

- 6" (152) 06
- 8" (203) 08
- 10" (254) 10

ACCESSORY 1 (Outside mounting hardware)

- None (default) —
- T-Bar Clip * TC1
- Fineline® T-Bar Clip ** TC2

FINISH

- Appliance White AW
- Off-White WH
- Special Custom Color SP

FRAME/BORDER TYPE

- Models FM and FMR (default) AA
- Models FMB and FMBR (default) AG

Notes:

- Mounting clips are not removable once mounted at factory.
- *TC1 T-Bar Clips are optional on FM models, where installation is required in a hard ceiling. Standard FM models are for lay-in flat T-Bar ceilings.
- **TC2 Fineline® T-Bar Clips are supplied as standard on FMB Bolt-Slot models and allow unit to sit flush and level in ceiling grid.

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FLOWLINE™ LINEAR DIFFUSERS