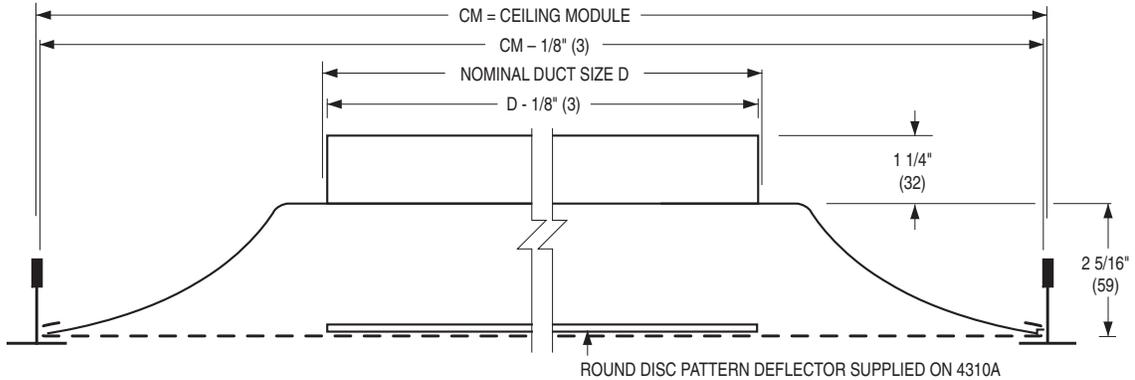




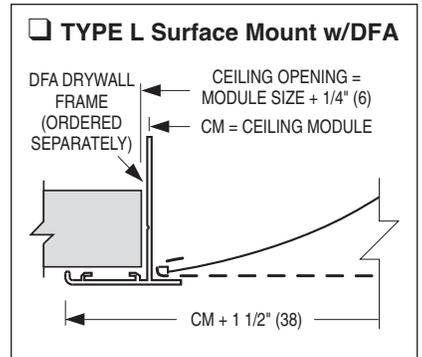
PERFORATED CEILING DIFFUSER
 FLUSH FACE • ROUND NECK • ALL ALUMINUM
 CONSTRUCTION • MRI SUITABLE
MODELS: 4310A SUPPLY • 4310AR RETURN

TYPE L Lay-in T-Bar



Available Combinations of Ceiling Module vs. Neck Size

Ceiling Module CM		Nominal Duct Size D	
Imperial Modules	Metric Modules	Round Neck	
		Imperial Units (in.)	Metric Units (mm)
24 x 24	600 x 600	6, 8,	152, 203,
		10, 12,	254, 305,
		14, 15,	356, 381



DESCRIPTION:

1. Material: All aluminum construction. Suitable for MRI rooms.
2. Diffuser features a smoothly contoured die-formed back pan and wrap-around fixed perforated face. The round disc pattern deflector provides a true 360° radial horizontal air pattern. A tight air pattern protects the ceiling against smudging, providing excellent performance in VAV systems.
3. Perforated face has 3/16" (5) diameter holes on 1/4" (6) staggered centers.
4. Return model 4310AR is the same construction, but omits pattern deflector. It is suitable for ducted return applications.
5. Standard finish is AW (Appliance White) face and border.

OPTIONS:

- Finish:
- BA Black back pan and deflectors with Appliance White face.
 - SP Special _____.

SCHEDULE TYPE:	
PROJECT:	
ENGINEER:	
CONTRACTOR:	

Dimensions are in inches (mm).

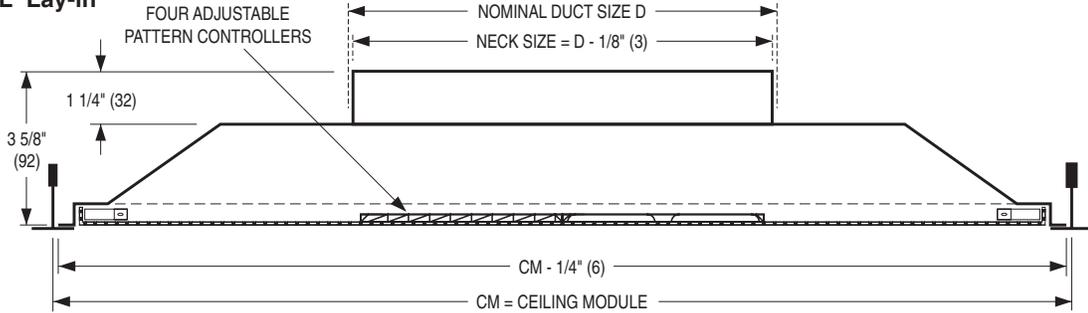
DATE	B SERIES	SUPERSEDES	DRAWING NO.
2 - 6 - 17	4300	11 - 5 - 07	4310A



PERFORATED CEILING DIFFUSERS

SUPPLY • FLUSH FACE • FACE MOUNTED DEFLECTORS
1, 2, 3 OR 4-WAY • ADJUSTABLE DISCHARGE
MODELS: 4320, 4320A, 4320AA

TYPE L Lay-in



Available Combinations of Ceiling Module vs. Neck Size

Ceiling Module CM		Nominal Duct Size D			
Imperial Modules	Metric Modules	Round Neck		Square Neck	
		Imperial Units (inches)	Metric Units (mm)	Imperial Units (inches)	Metric Units (mm)
12 x 12	300 x 300	6, 8	152, 203	6 x 6, 8 x 8	152 x 152, 203 x 203
16 x 16	400 x 400	6, 8, 10, 12	152, 203, 254, 305	6 x 6, 8 x 8, 10 x 10, 12 x 12	152 x 152, 203 x 203, 254 x 254, 305 x 305
24 x 12	600 x 300	6, 8	152, 203	6 x 6, 8 x 8, 18 x 6	152 x 152, 203 x 203, 457 x 152
20 x 20	500 x 500	6, 8, 10, 12, 14	152, 203, 254, 305, 356	6 x 6, 8 x 8, 10 x 10	152 x 152, 203 x 203, 254 x 254
24 x 24	600 x 600	6, 8, 10, 12, 14, 15, 16	152, 203, 254, 305, 356, 381, 406	6 x 6, 8 x 8, 10 x 10, 12 x 12, 14 x 14	152 x 152, 203 x 203, 254 x 254, 305 x 305, 356 x 356
48 x 24	1200 x 600				

DESCRIPTION:

1. Material: Corrosion-resistant steel.
2. Discharge pattern can adjust to vertical or 1, 2, 3 or 4-way horizontal, before or after installation.
Discharge pattern is adjusted by dropping the perforated face and rotating the pattern deflectors. Diffusers are shipped from the factory with a 4-way discharge pattern.
3. Hinged, removable face for easy access to core and optional damper.
4. Perforated face has 3/16" (5) diameter holes on 1/4" (6) staggered centers (51% free area).
5. Excellent performance in VAV systems.
6. Standard finish is AW Appliance White.

OPTIONS:

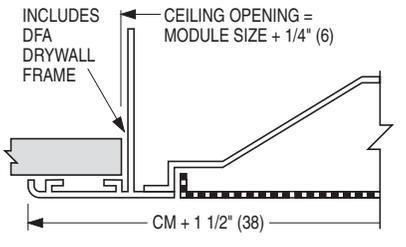
- Aluminum perforated face/steel backpan. (Model 4320A).
- Aluminum perforated face and backpan. (Model 4320AA).
- EX External Foil-Back Insulation, installed - R-4.2 (24 x 24 max.)
- EXB External Foil-Back Insulation, ships loose - R-4.2 (24 x 24 max.)
- MIB Molded Insulation Blanket - R-6.0 (24 x 24 only)

Finish:

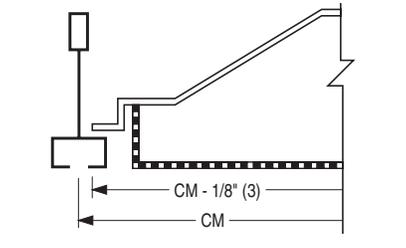
- BA Black back pan and deflectors with Appliance White face.
- SP Special _____.

Fineline® is a registered trademark of USG Interiors Inc.

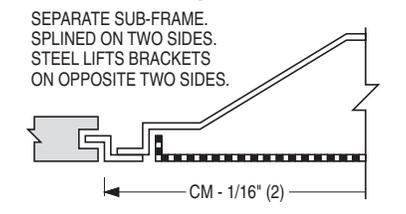
TYPE S Surface Mount



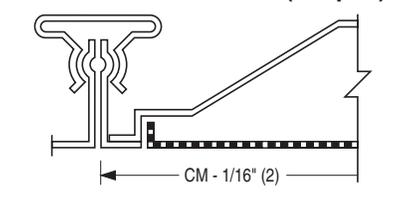
TYPE F Fineline® T-Bar



TYPE SP Spline



TYPE M Metal Pan (Snap-in)



Dimensions are in inches (mm).

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

DATE

B SERIES

SUPERSEDES

DRAWING NO.

8 - 7 - 19

4300

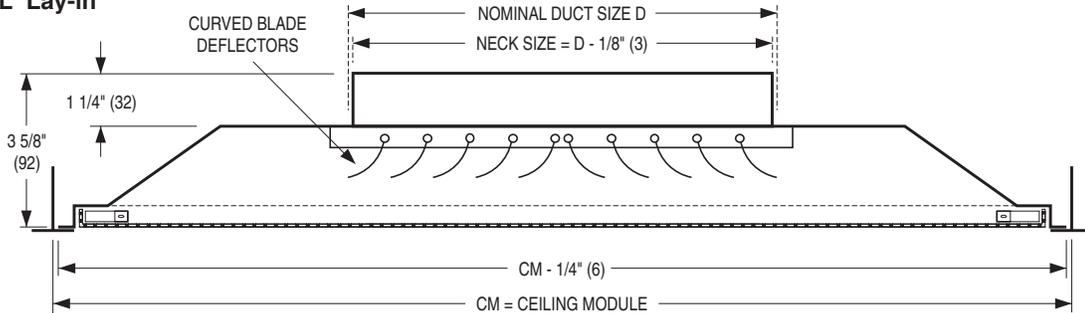
3 - 22 - 16

4320



PERFORATED CEILING DIFFUSERS
CURVED BLADE • SUPPLY • FLUSH FACE
4-WAY ADJUSTABLE DISCHARGE PATTERN
MODELS: 4320CB, 4320CBA, 4320CBAA

TYPE L Lay-in



Available Combinations of Ceiling Module vs. Neck Size

Ceiling Module CM		Nominal Duct Size D			
Imperial Modules	Metric Modules	Round Neck		Square Neck	
		Imperial Units (inches)	Metric Units (mm)	Imperial Units (inches)	Metric Units (mm)
12 x 12	300 x 300	6, 8	152, 203	6 x 6, 8 x 8	152 x 152, 203 x 203
16 x 16	400 x 400	6, 8, 10, 12	152, 203, 254, 305	6 x 6, 8 x 8, 10 x 10, 12 x 12	152 x 152, 203 x 203, 254 x 254, 305 x 305
24 x 12	600 x 300	6, 8	152, 203	6 x 6, 8 x 8	152 x 152, 203 x 203
20 x 20	500 x 500	6, 8, 10, 12, 14	152, 203, 254, 305, 356	6 x 6, 8 x 8, 10 x 10, 12 x 12	152 x 152, 203 x 203, 254 x 254, 305 x 305
24 x 24	600 x 600	6, 8, 10, 12, 14, 15, 16, 18	152, 203, 254, 305, 356, 381, 406, 457	6 x 6, 8 x 8, 10 x 10, 12 x 12, 14 x 14, 15 x 15, 16 x 16, 18 x 18	152 x 152, 203 x 203, 254 x 254, 305 x 305, 356 x 356, 381 x 381, 406 x 406, 457 x 457
48 x 24	1200 x 600				

DESCRIPTION:

1. Material: Corrosion-resistant steel.
2. Discharge pattern adjustable from horizontal to vertical. Blades are individually adjustable. Standard diffuser has a 4-way (B4) discharge pattern.
3. Hinged, removable face for easy access to core and optional damper.
4. Perforated face has 3/16" (5) diameter holes on 1/4" (6) staggered centers (51% free area).
5. Excellent performance in VAV systems.
6. Standard finish is AW Appliance White.

OPTIONS:

- Aluminum perforated face/steel backpan. (Model 4320CBA).
- Aluminum perforated face and backpan. (Model 4320CBAA).
- EX External Foil-Back Insulation, installed - R-4.2 (24 x 24 max.)
- EXB External Foil-Back Insulation, ships loose - R-4.2 (24 x 24 max.)
- MIB Molded Insulation Blanket - R-6.0 (24 x 24 only)

Finish:

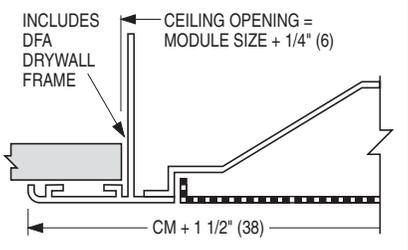
- BA Black back pan and deflectors with Appliance White face.
- SP Special _____.

Blow Pattern:

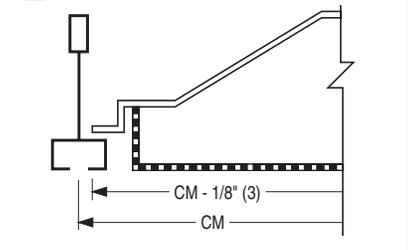
- B3 3-way
- B2 2-way opposite
- C2 2-way corner
- B1 1-way

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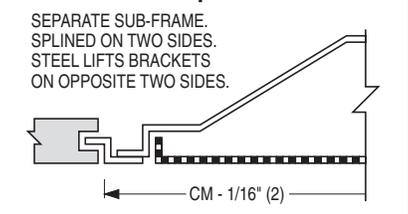
TYPE S Surface Mount



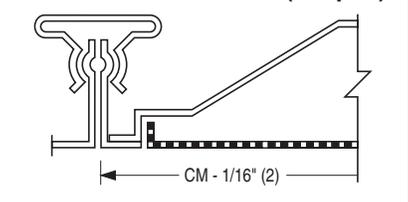
TYPE F Fineline® T-Bar



TYPE SP Spline



TYPE M Metal Pan (Snap-in)



Dimensions are in inches (mm).

SCHEDULE TYPE:				
PROJECT:				
ENGINEER:		DATE	B SERIES	SUPERSEDES
CONTRACTOR:		8 - 7 - 19	4300	3 - 28 - 16
				DRAWING NO.
				4320CB

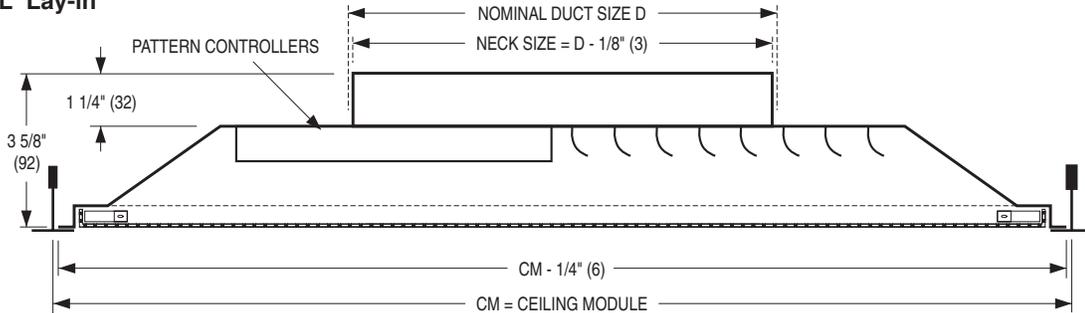


PERFORATED CEILING DIFFUSERS

SUPPLY • FLUSH FACE • NECK MOUNTED DEFLECTORS
1, 2, 3 OR 4-WAY • ADJUSTABLE DISCHARGE

MODELS: 4320F, 4320FA, 4320FAA

TYPE L Lay-in



Available Combinations of Ceiling Module vs. Neck Size

Ceiling Module CM		Nominal Duct Size D			
Imperial Modules	Metric Modules	Round Neck		Square Neck	
		Imperial Units (inches)	Metric Units (mm)	Imperial Units (inches)	Metric Units (mm)
24 x 24	600 x 600	6, 8, 10, 12, 14, 15, 16	152, 203, 254, 305, 356, 381, 406	6 x 6, 8 x 8, 10 x 10, 12 x 12, 14 x 14, 15 x 15, 16 x 16	152 x 152, 203 x 203, 254 x 254, 305 x 305, 356 x 356, 381 x 381, 406 x 406

DESCRIPTION:

1. Material: Corrosion-resistant steel.
2. Designed to maximize throw, the diffuser features heavy gauge stamped pattern controllers mounted directly under the neck. The controllers are factory set with a 4-way discharge. The discharge pattern can be field adjusted to a 1, 2, or 3-way pattern. The air pattern controller has curved vanes that optimize airflow projection.
3. Hinged, removable face for easy access to core and optional damper.
4. Perforated face has 3/16" (5) diameter holes on 1/4" (6) staggered centers (51% free area).
5. Excellent performance in VAV systems.
6. Standard finish is AW Appliance White.

OPTIONS:

- Aluminum perforated face/steel backpan. (Model 4320FA).
- Aluminum perforated face and backpan. (Model 4320FAA).
- EX External Foil-Back Insulation, installed - R-4.2 (24 x 24 max.)
- EXB External Foil-Back Insulation, ships loose - R-4.2 (24 x 24 max.)
- MIB Molded Insulation Blanket - R-6.0 (24 x 24 only)

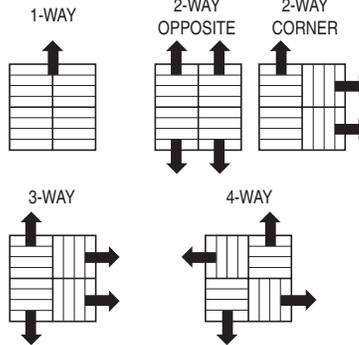
Finish:

- BA Black back pan and deflectors with Appliance White face.
- SP Special _____.

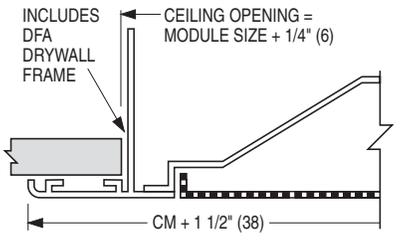
Fineline® is a registered trademark of USG Interiors Inc.

PATTERN CONTROLLER ADJUSTMENTS

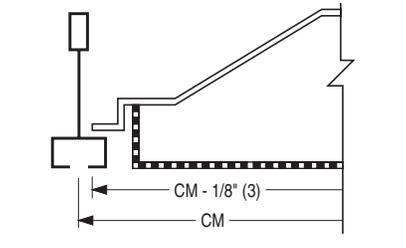
(THE DIFFUSER IS SHIPPED WITH A 4-WAY DISCHARGE).



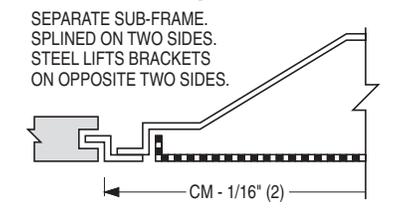
TYPE S Surface Mount



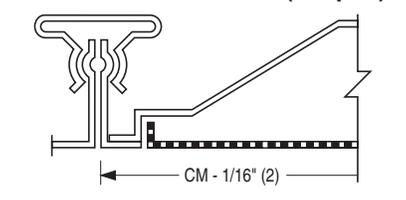
TYPE F Fineline® T-Bar



TYPE SP Spline



TYPE M Metal Pan (Snap-in)



Dimensions are in inches (mm).

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

DATE

B SERIES

SUPERSEDES

DRAWING NO.

8 - 7 - 19

4300

3 - 22 - 16

4320F



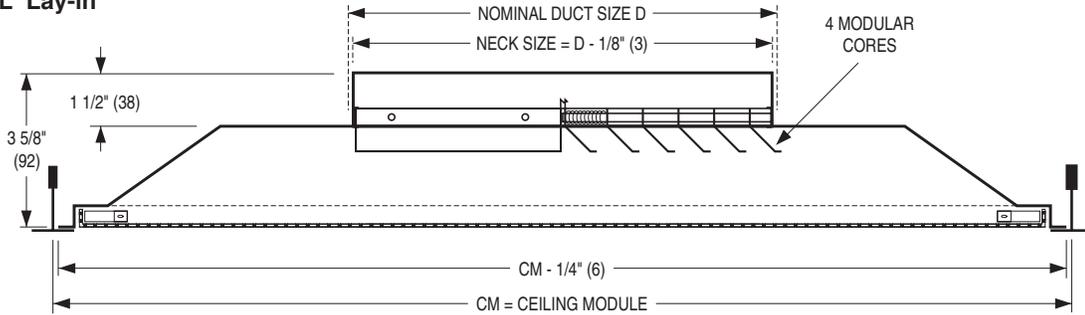
PERFORATED CEILING DIFFUSERS

MODULAR CORE • SUPPLY • FLUSH FACE

1, 2, 3 OR 4-WAY ADJUSTABLE DISCHARGE PATTERN

MODELS: 4320M, 4320MA

TYPE L Lay-in



Available Combinations of Ceiling Module vs. Neck Size

Ceiling Module CM		Nominal Duct Size D	
Imperial Modules	Metric Modules	Square Neck	
		Imperial Units (inches)	Metric Units (mm)
12 x 12	300 x 300	6 x 6, 8 x 8	152 x 152, 203 x 203
24 x 24	600 x 600	6 x 6, 8 x 8,	152 x 152, 203 x 203,
		10 x 10, 12 x 12,	254 x 254, 305 x 305,
		14 x 14, 15 x 15,	356 x 356, 381 x 381,
		16 x 16, 18 x 18,	406 x 406, 457 x 457,
		20 x 20	508 x 508

DESCRIPTION:

- Material: Corrosion-resistant steel.
- The engineered design, (four individual, spring-loaded, modular pattern controllers), maintains a tight, uniform horizontal throw pattern from maximum to minimum cataloged air volumes.
Discharge pattern can adjust to 1, 2, 3 or 4-way horizontal, before or after installation.
Discharge pattern is adjusted by dropping the perforated face and rotating the pattern deflectors. Diffusers are shipped from the factory with a 4-way discharge pattern.
- Hinged, removable face for easy access to core and optional damper.
- Perforated face has 3/16" (5) diameter holes on 1/4" (6) staggered centers (51% free area).
- Excellent performance in VAV systems.
- Standard finish is AW Appliance White.

OPTIONS:

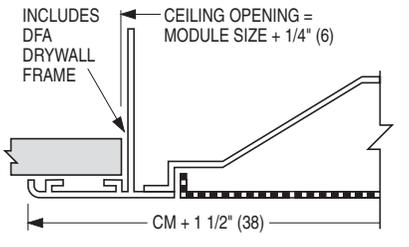
- Aluminum perforated face/steel backpan. (Model 4320MA).
- EX External Foil-Back Insulation, installed - R-4.2 (24 x 24 max.)
- EXB External Foil-Back Insulation, ships loose - R-4.2 (24 x 24 max.)
- MIB Molded Insulation Blanket - R-6.0 (24 x 24 only)

Finish:

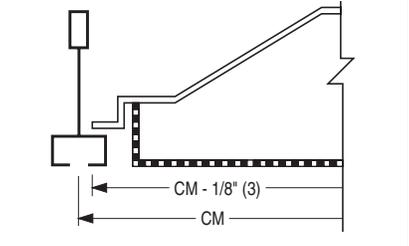
- BA Black back pan and deflectors with Appliance White face.
- SP Special _____.

Fineline® is a registered trademark of USG Interiors Inc.

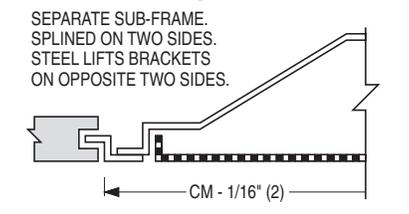
TYPE S Surface Mount



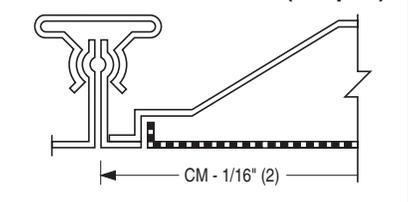
TYPE F Fineline® T-Bar



TYPE SP Spline



TYPE M Metal Pan (Snap-in)



Dimensions are in inches (mm).

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

DATE

B SERIES

SUPERSEDES

DRAWING NO.

8 - 7 - 19

4300

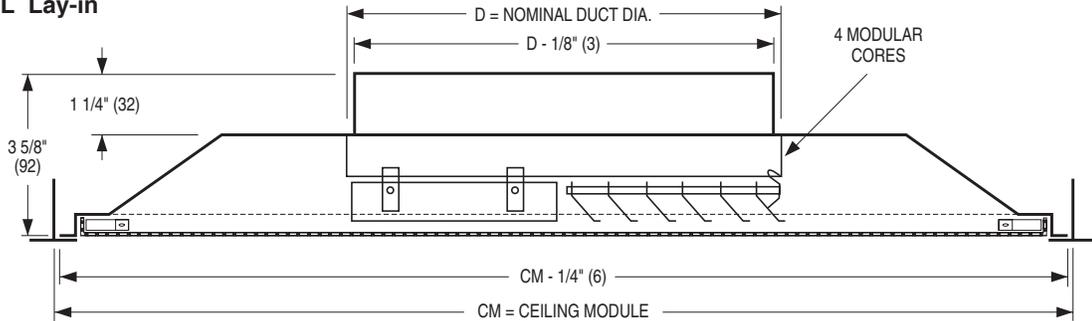
3 - 22 - 16

4320M



PERFORATED CEILING DIFFUSERS
MODULAR CORE • ROUND NECK • FLUSH FACE
ADJUSTABLE DISCHARGE PATTERN
MODELS: 4320MR, 4320MRA

TYPE L Lay-in

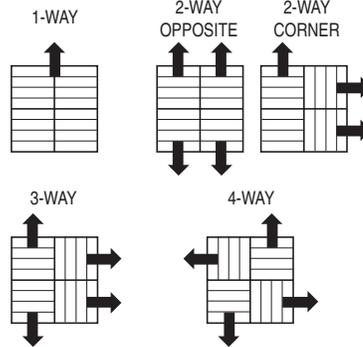


Available Combinations of Ceiling Module vs. Neck Size

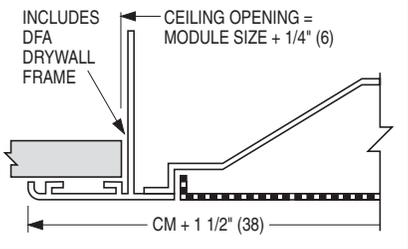
Ceiling Module CM		Nominal Duct Size D	
Imperial Modules	Metric Modules	Round Neck	
		Imperial Units (inches)	Metric Units (mm)
12 x 12	300 x 300	6, 8	152, 203
24 x 24	600 x 600	6, 8,	152, 203,
		10, 12,	254, 305,
		14, 15,	356, 381,
		16	406

MODULAR CORE ADJUSTMENTS

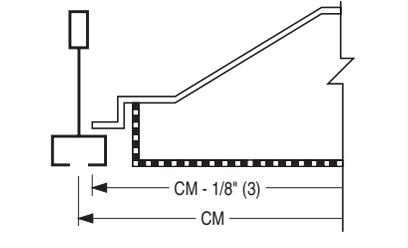
(THE DIFFUSER IS SHIPPED WITH THE CORE SET FOR 4-WAY DISCHARGE).



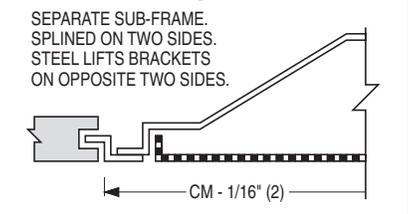
TYPE S Surface Mount



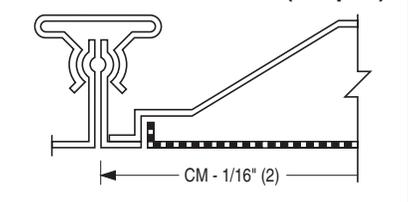
TYPE F Finline® T-Bar



TYPE SP Spline



TYPE M Metal Pan (Snap-in)



DESCRIPTION:

1. Material: Corrosion-resistant steel.
2. Low profile back pan features an integral 'blow-thru' round neck which eliminates the need for adaptors. Four individual spring-loaded adjustable modular pattern controllers are mounted inside the backpan. This positions the leading edge of the pattern controllers near the perforated face and flush with ceiling for optimum performance. The engineered design maintains a tight, uniform horizontal throw pattern from maximum to minimum cataloged air volumes. Discharge pattern can adjust to 1, 2, 3 or 4-way horizontal, before or after installation. Discharge pattern is adjusted by dropping the perforated face and rotating the pattern deflectors. Diffusers are shipped from the factory with a 4-way discharge pattern.
3. Hinged, removable face for easy access to core.
4. Perforated face has 3/16" (5) diameter holes on 1/4" (6) staggered centers (51% free area).
5. Excellent performance in VAV systems.
6. Standard finish is AW Appliance White.

OPTIONS:

- Aluminum perforated face/steel backpan. (Model 4320MRA).
 - EX External Foil-Back Insulation, installed - R-4.2 (24 x 24 max.)
 - EXB External Foil-Back Insulation, ships loose - R-4.2 (24 x 24 max.)
 - MIB Molded Insulation Blanket - R-6.0 (24 x 24 only)
- Finish:
- BA Black back pan and deflectors with Appliance White face.
 - SP Special _____.

Finline® is a registered trademark of USG Interiors Inc.

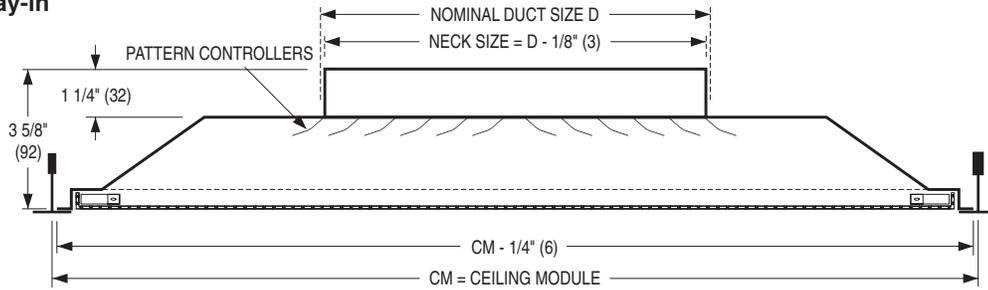
Dimensions are in inches (mm).

SCHEDULE TYPE:				
PROJECT:				
ENGINEER:	DATE	B SERIES	SUPERSEDES	DRAWING NO.
CONTRACTOR:	8 - 7 - 19	4300	3 - 22 - 16	4320MR



PERFORATED CEILING DIFFUSERS
SUPPLY • FLUSH FACE • ADJUSTABLE
STAR PATTERN CONTROLLER
MODELS: 4320S, 4320SA, 4320SAA

TYPE L Lay-in



Available Combinations of Ceiling Module vs. Neck Size

Ceiling Module CM		Nominal Duct Size D			
Imperial Modules	Metric Modules	Round Neck		Square Neck	
		Imperial Units (inches)	Metric Units (mm)	Imperial Units (inches)	Metric Units (mm)
12 x 12	300 x 300	6	152	6 x 6	152 x 152
24 x 24	600 x 600	6, 8, 10, 12, 14, 15, 16	152, 203, 254, 305, 356, 381, 406	6 x 6, 8 x 8, 10 x 10, 12 x 12	152 x 152, 203 x 203, 254 x 254, 305 x 305

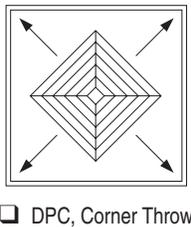
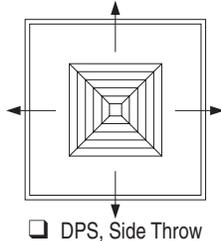
DESCRIPTION:

1. Material: Corrosion-resistant steel.
2. Designed to maximize throw, the diffuser features a stamped pattern controller mounted directly under the neck that produces a long throw 4-way 'Star Pattern'. The factory set pattern controller is easily rotated from side throw to corner throw in the field. Individual vanes can be field adjusted to produce a horizontal to vertical pattern or a 3-way horizontal pattern by turning one segment of blades in the opposite direction.
3. Hinged, removable face for easy access to optional damper.
4. Perforated face has 3/16" (5) diameter holes on 1/4" (6) staggered centers (51% free area).
5. Excellent performance in VAV systems.
6. Standard finish is AW Appliance White.

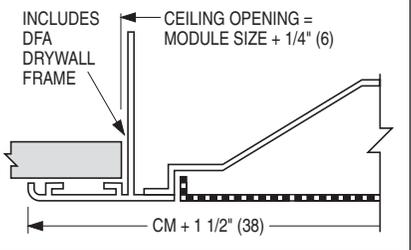
OPTIONS:

- Aluminum perforated face/steel backpan. (Model 4320SA).
 - Aluminum perforated face and backpan. (Model 4320SAA).
 - EX External Foil-Back Insulation, installed - R-4.2 (24 x 24 max.)
 - EXB External Foil-Back Insulation, ships loose - R-4.2 (24 x 24 max.)
 - MIB Molded Insulation Blanket - R-6.0 (24 x 24 only)
- Finish:
- BA Black back pan and deflectors with Appliance White face.
 - SP Special _____.

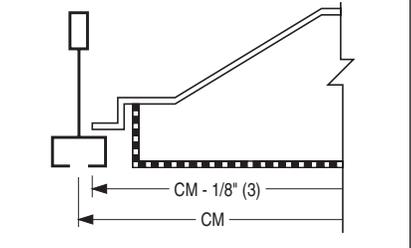
Factory Set Four-Way Discharge Pattern:



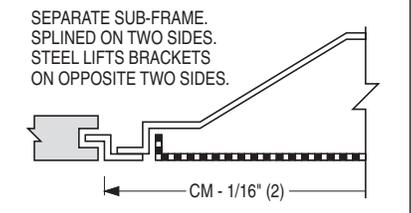
TYPE S Surface Mount



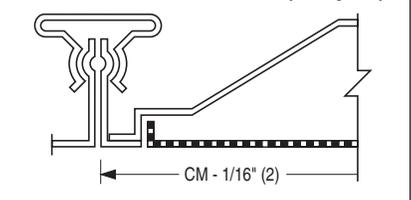
TYPE F Finline® T-Bar



TYPE SP Spline



TYPE M Metal Pan (Snap-in)



SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

Finline® is a registered trademark of USG Interiors Inc.
 Dimensions are in inches (mm).

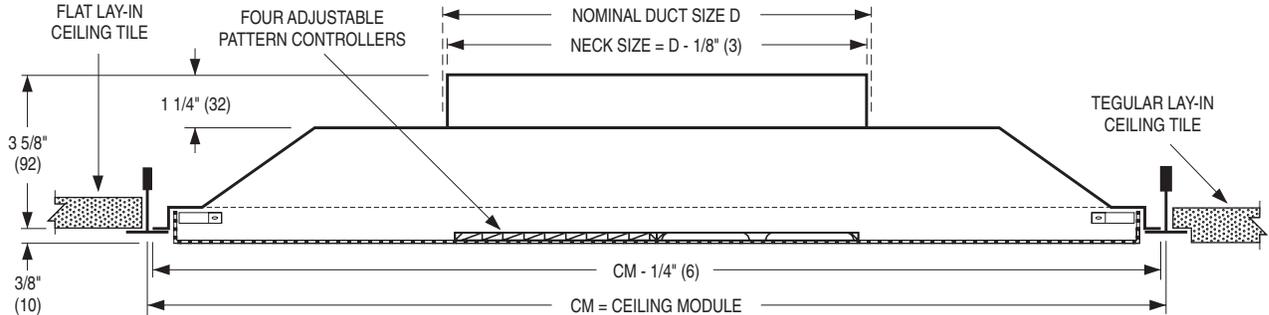
DATE	B SERIES	SUPERSEDES	DRAWING NO.
8 - 7 - 19	4300	3 - 29 - 16	4320S



PERFORATED CEILING DIFFUSERS

SUPPLY • DROP FACE • FACE MOUNTED DEFLECTORS
 1, 2, 3 OR 4-WAY • ADJUSTABLE DISCHARGE
 MODELS: 4325, 4325A, 4325AA

TYPE L Lay-in



Available Combinations of Ceiling Module vs. Neck Size

Ceiling Module CM		Nominal Duct Size D			
Imperial Modules	Metric Modules	Round Neck		Square Neck	
		Imperial Units (inches)	Metric Units (mm)	Imperial Units (inches)	Metric Units (mm)
12 x 12	300 x 300	6, 8	152, 203	6 x 6, 8 x 8	152 x 152, 203 x 203
16 x 16	400 x 400	6, 8, 10, 12	152, 203, 254, 305	6 x 6, 8 x 8, 10 x 10, 12 x 12	152 x 152, 203 x 203, 254 x 254, 305 x 305
24 x 12	600 x 300	6, 8	152, 203	6 x 6, 8 x 8, 18 x 6	152 x 152, 203 x 203, 457 x 152
20 x 20	500 x 500	6, 8, 10, 12, 14	152, 203, 254, 305, 356	6 x 6, 8 x 8, 10 x 10	152 x 152, 203 x 203, 254 x 254
24 x 24	600 x 600	6, 8, 10, 12, 14, 15, 16	152, 203, 254, 305, 356, 381, 406	6 x 6, 8 x 8, 10 x 10, 12 x 12, 14 x 14	152 x 152, 203 x 203, 254 x 254, 305 x 305, 356 x 356
48 x 24	1200 x 600				

DESCRIPTION:

- Material: Corrosion-resistant steel.
- When Type L is used in a suspended T-Bar ceiling system with tegular ceiling tiles, the 3/8" (10) drop face on the diffuser, is level with the bottom of the ceiling tile, which improves the architectural appearance and performance. Discharge pattern can adjust to 1, 2, 3 or 4-way horizontal, before or after installation. Discharge pattern is adjusted by dropping the perforated face and rotating the pattern deflectors. Diffusers are shipped from the factory with a 4-way discharge pattern.
- Hinged, removable face for easy access to core and optional damper.
- Perforated face has 3/16" (5) diameter holes on 1/4" (6) staggered centers (51% free area).
- Excellent performance in VAV systems.
- Standard finish is AW Appliance White.

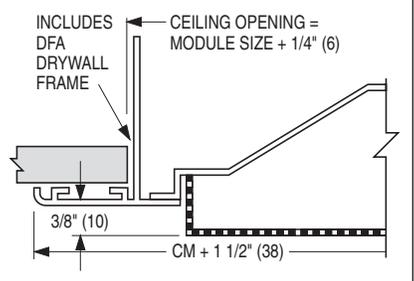
OPTIONS:

- Aluminum perforated face/steel backpan. (Model 4325A).
- Aluminum perforated face and backpan. (Model 4325AA).
- EX External Foil-Back Insulation, installed - R-4.2 (24 x 24 max.)
- EXB External Foil-Back Insulation, ships loose - R-4.2 (24 x 24 max.)
- MIB Molded Insulation Blanket - R-6.0 (24 x 24 only)

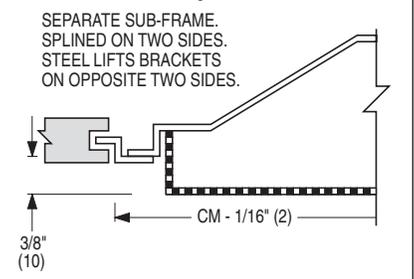
Finish:

- BA Black back pan and deflectors with Appliance White face.
- SP Special _____.

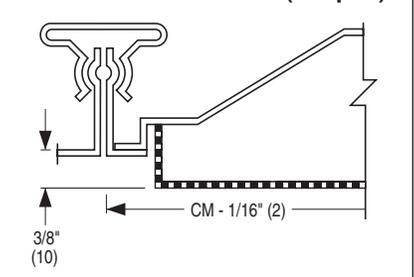
TYPE S Surface Mount



TYPE SP Spline



TYPE M Metal Pan (Snap-in)



SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

Dimensions are in inches (mm).

DATE

B SERIES

SUPERSEDES

DRAWING NO.

8 - 7 - 19

4300

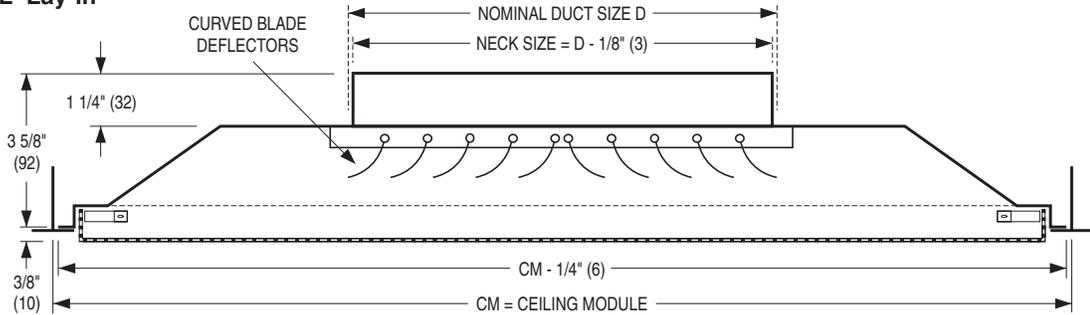
3 - 28 - 16

4325



PERFORATED CEILING DIFFUSERS
CURVED BLADE • SUPPLY • DROP FACE
4-WAY ADJUSTABLE DISCHARGE PATTERN
MODELS: 4325CB, 4325CBA, 4325CBAA

TYPE L Lay-in



Available Combinations of Ceiling Module vs. Neck Size

Ceiling Module CM		Nominal Duct Size D			
Imperial Modules	Metric Modules	Round Neck		Square Neck	
		Imperial Units (inches)	Metric Units (mm)	Imperial Units (inches)	Metric Units (mm)
12 x 12	300 x 300	6, 8	152, 203	6 x 6, 8 x 8	152 x 152, 203 x 203
16 x 16	400 x 400	6, 8, 10, 12	152, 203, 254, 305	6 x 6, 8 x 8, 10 x 10, 12 x 12	152 x 152, 203 x 203, 254 x 254, 305 x 305
24 x 12	600 x 300	6, 8	152, 203	6 x 6, 8 x 8	152 x 152, 203 x 203
20 x 20	500 x 500	6, 8, 10, 12, 14	152, 203, 254, 305, 356	6 x 6, 8 x 8, 10 x 10, 12 x 12	152 x 152, 203 x 203, 254 x 254, 305 x 305
24 x 24	600 x 600	6, 8, 10, 12, 14, 15, 16, 18	152, 203, 254, 305, 356, 381, 406, 457	6 x 6, 8 x 8, 10 x 10, 12 x 12, 14 x 14, 15 x 15, 16 x 16, 18 x 18	152 x 152, 203 x 203, 254 x 254, 305 x 305, 356 x 356, 381 x 381, 406 x 406, 457 x 457

DESCRIPTION:

1. Material: Corrosion-resistant steel.
2. Discharge pattern adjustable from horizontal to vertical.
Blades are individually adjustable. Standard diffuser has a 4-way (B4) discharge pattern.
3. Hinged, removable face for easy access to core and optional damper.
4. Perforated face has 3/16" (5) diameter holes on 1/4" (6) staggered centers (51% free area).
5. Excellent performance in VAV systems.
6. Standard finish is AW Appliance White.

OPTIONS:

- Aluminum perforated face/steel backpan. (Model 4325CBA).
- Aluminum perforated face and backpan. (Model 4325CBAA).
- EX External Foil-Back Insulation, installed - R-4.2 (24 x 24 max.)
- EXB External Foil-Back Insulation, ships loose - R-4.2 (24 x 24 max.)
- MIB Molded Insulation Blanket - R-6.0 (24 x 24 only)

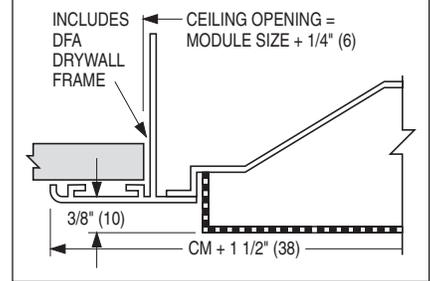
Finish:

- BA Black back pan and deflectors with Appliance White face.
- SP Special _____.

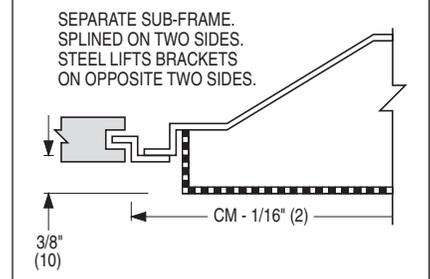
Blow Pattern:

- B3 3-way
- B2 2-way opposite
- C2 2-way corner
- B1 1-way

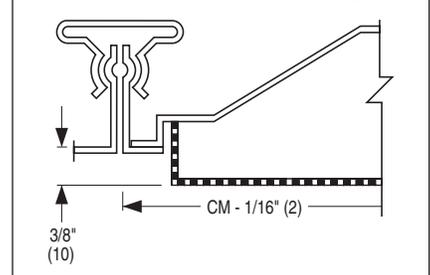
TYPE S Surface Mount



TYPE SP Spline



TYPE M Metal Pan (Snap-in)



SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

Dimensions are in inches (mm).

DATE

B SERIES

SUPERSEDES

DRAWING NO.

8 - 7 - 19

4300

3 - 28 - 16

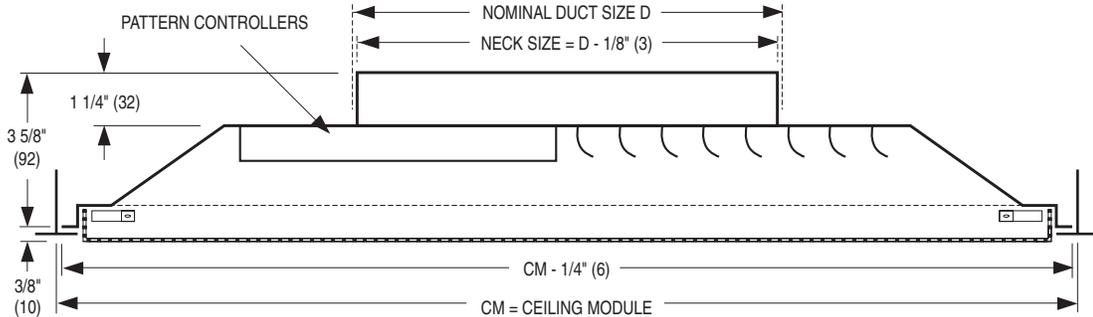
4325CB



PERFORATED CEILING DIFFUSERS

SUPPLY • DROP FACE • NECK MOUNTED DEFLECTORS
 1, 2, 3 OR 4-WAY • ADJUSTABLE DISCHARGE
 MODELS: 4325F, 4325FA, 4325FAA

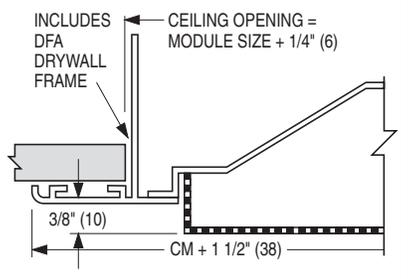
TYPE L Lay-in



Available Combinations of Ceiling Module vs. Neck Size

Ceiling Module CM		Nominal Duct Size D			
Imperial Modules	Metric Modules	Round Neck		Square Neck	
		Imperial Units (inches)	Metric Units (mm)	Imperial Units (inches)	Metric Units (mm)
24 x 24	600 x 600	6, 8, 10, 12, 14, 15, 16	152, 203, 254, 305, 356, 381, 406	6 x 6, 8 x 8, 10 x 10, 12 x 12, 14 x 14, 15 x 15, 16 x 16	152 x 152, 203 x 203, 254 x 254, 305 x 305, 356 x 356, 381 x 381, 406 x 406

TYPE S Surface Mount

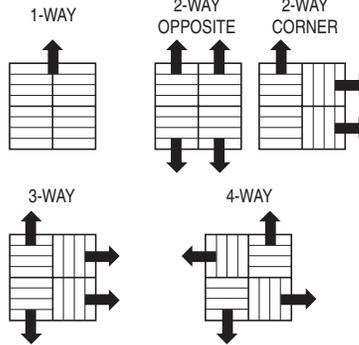


DESCRIPTION:

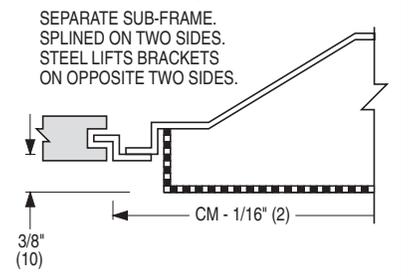
1. Material: Corrosion-resistant steel.
2. Designed to maximize throw, the diffuser features heavy gauge stamped pattern controllers mounted directly under the neck. The controllers are factory set with a 4-way discharge. The discharge pattern can be field adjusted to a 1, 2, or 3-way pattern. The air pattern controller has fixed curved vanes that optimize airflow projection.
3. Hinged, removable face for easy access to core and optional damper.
4. Perforated face has 3/16" (5) diameter holes on 1/4" (6) staggered centers (51% free area).
5. Excellent performance in VAV systems.
6. Standard finish is AW Appliance White.

PATTERN CONTROLLER ADJUSTMENTS

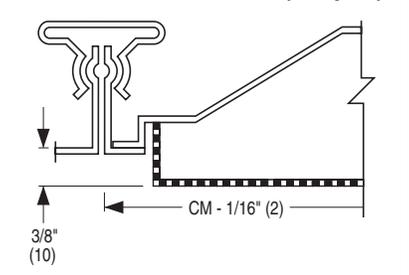
(THE DIFFUSER IS SHIPPED WITH A 4-WAY DISCHARGE).



TYPE SP Spline



TYPE M Metal Pan (Snap-in)



OPTIONS:

- Aluminum perforated face/steel backpan. (Model 4325FA).
 - Aluminum perforated face and backpan. (Model 4325FAA).
 - EX External Foil-Back Insulation, installed - R-4.2 (24 x 24 max.)
 - EXB External Foil-Back Insulation, ships loose - R-4.2 (24 x 24 max.)
 - MIB Molded Insulation Blanket - R-6.0 (24 x 24 only)
- Finish:
- BA Black back pan and deflectors with Appliance White face.
 - SP Special _____.

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

Dimensions are in inches (mm).

DATE	B SERIES	SUPERSEDES	DRAWING NO.
8 - 7 - 19	4300	3 - 28 - 16	4325F



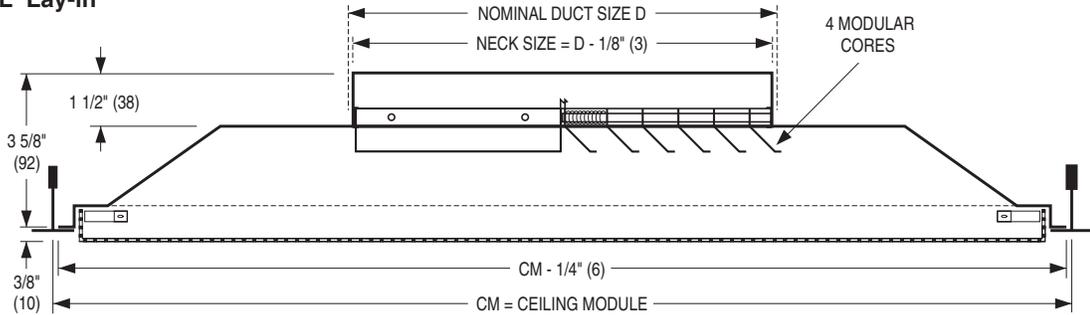
PERFORATED CEILING DIFFUSERS

MODULAR CORE • SUPPLY • DROP FACE

1, 2, 3 OR 4-WAY ADJUSTABLE DISCHARGE PATTERN

MODELS: 4325M, 4325MA

TYPE L Lay-in



Available Combinations of Ceiling Module vs. Neck Size

Ceiling Module CM		Nominal Duct Size D	
Imperial Modules	Metric Modules	Square Neck	
		Imperial Units (inches)	Metric Units (mm)
12 x 12	300 x 300	6 x 6, 8 x 8	152 x 152, 203 x 203
24 x 24	600 x 600	6 x 6, 8 x 8,	152 x 152, 203 x 203,
		10 x 10, 12 x 12,	254 x 254, 305 x 305,
		14 x 14, 15 x 15,	356 x 356, 381 x 381,
		16 x 16, 18 x 18,	406 x 406, 457 x 457,
		20 x 20	508 x 508

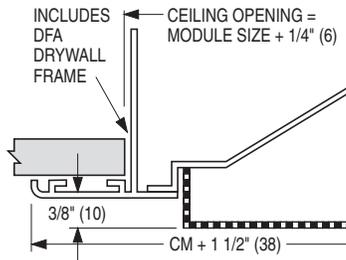
DESCRIPTION:

- Material: Corrosion-resistant steel.
- The engineered design, (four individual, spring-loaded, modular pattern controllers), maintains a tight, uniform horizontal throw pattern from maximum to minimum cataloged air volumes.
Discharge pattern can adjust to 1, 2, 3 or 4-way horizontal, before or after installation.
Discharge pattern is adjusted by dropping the perforated face and rotating the pattern deflectors. Diffusers are shipped from the factory with a 4-way discharge pattern.
- Hinged, removable face for easy access to core and optional damper.
- Perforated face has 3/16" (5) diameter holes on 1/4" (6) staggered centers (51% free area).
- Excellent performance in VAV systems.
- Standard finish is AW Appliance White.

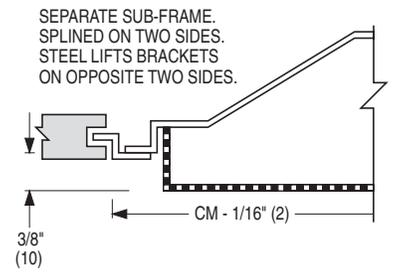
OPTIONS:

- Aluminum perforated face/steel backpan. (Model 4325MA).
 - EX External Foil-Back Insulation, installed - R-4.2 (24 x 24 max.)
 - EXB External Foil-Back Insulation, ships loose - R-4.2 (24 x 24 max.)
 - MIB Molded Insulation Blanket - R-6.0 (24 x 24 only)
- Finish:
- BA Black back pan and deflectors with Appliance White face.
 - SP Special _____.

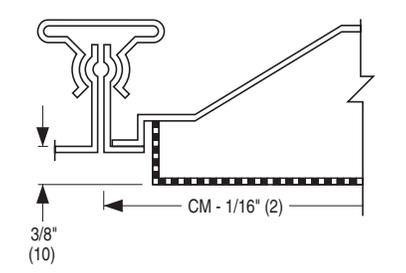
TYPE S Surface Mount



TYPE SP Spline



TYPE M Metal Pan (Snap-in)



SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

Dimensions are in inches (mm).

DATE

B SERIES

SUPERSEDES

DRAWING NO.

8 - 7 - 19

4300

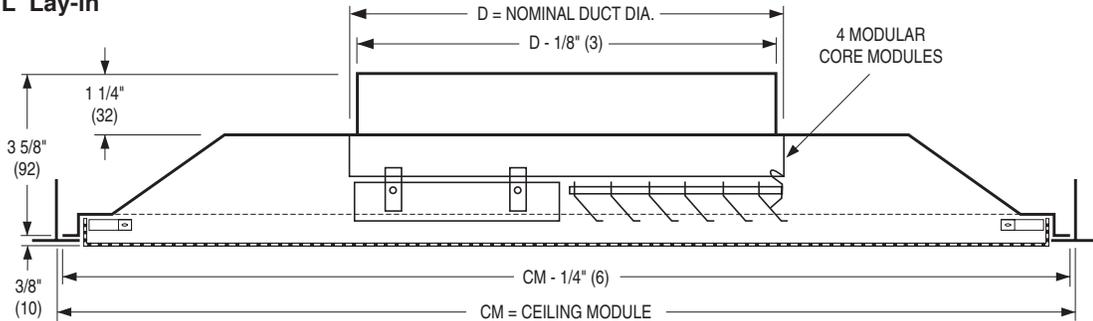
3 - 22 - 16

4325M



PERFORATED CEILING DIFFUSERS
MODULAR CORE • ROUND NECK • DROP FACE
ADJUSTABLE DISCHARGE PATTERN
MODELS: 4325MR, 4325MRA

TYPE L Lay-in

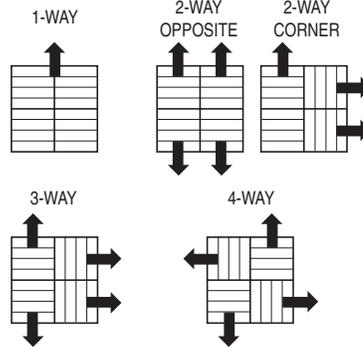


Available Combinations of Ceiling Module vs. Neck Size

Ceiling Module CM		Nominal Duct Size D	
Imperial Modules	Metric Modules	Round Neck	
		Imperial Units (inches)	Metric Units (mm)
12 x 12	300 x 300	6, 8	152, 203
24 x 24	600 x 600	6, 8,	152, 203,
		10, 12,	254, 305,
		14, 15,	356, 381,
		16	406

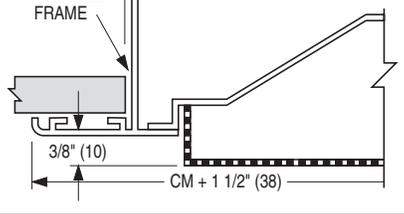
MODULAR CORE ADJUSTMENTS

(THE DIFFUSER IS SHIPPED WITH THE CORE SET FOR 4-WAY DISCHARGE).



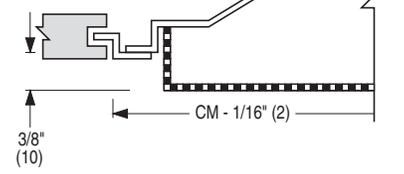
TYPE S Surface Mount

INCLUDES DFA DRYWALL FRAME
 CEILING OPENING = MODULE SIZE + 1/4" (6)

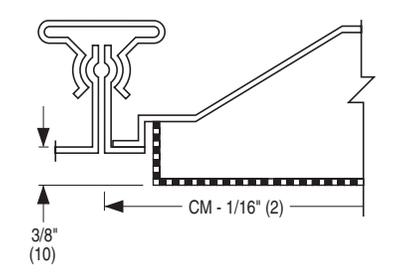


TYPE SP Spline

SEPARATE SUB-FRAME. SPLINED ON TWO SIDES. STEEL LIFTS BRACKETS ON OPPOSITE TWO SIDES.



TYPE M Metal Pan (Snap-in)



DESCRIPTION:

1. Material: Corrosion-resistant steel.
2. Low profile back pan features an integral 'blow-thru' round neck which eliminates the need for adaptors. Four individual spring-loaded adjustable modular pattern controllers are mounted inside the backpan. This positions the leading edge of the pattern controllers near the perforated face and flush with ceiling for optimum performance. The engineered design maintains a tight, uniform horizontal throw pattern from maximum to minimum cataloged air volumes. Discharge pattern can adjust to 1, 2, 3 or 4-way horizontal, before or after installation. Discharge pattern is adjusted by dropping the perforated face and rotating the pattern deflectors. Diffusers are shipped from the factory with a 4-way discharge pattern.
3. Hinged, removable face for easy access to core.
4. Perforated face has 3/16" (5) diameter holes on 1/4" (6) staggered centers (51% free area).
5. Excellent performance in VAV systems.
6. Standard finish is AW Appliance White.

OPTIONS:

- Aluminum perforated face/steel backpan. (Model 4325MRA).
- EX External Foil-Back Insulation, installed - R-4.2 (24 x 24 max.)
- EXB External Foil-Back Insulation, ships loose - R-4.2 (24 x 24 max.)
- MIB Molded Insulation Blanket - R-6.0 (24 x 24 only)

Finish:

- BA Black back pan and deflectors with Appliance White face.
- SP Special _____.

Fineline® is a registered trademark of USG Interiors Inc.

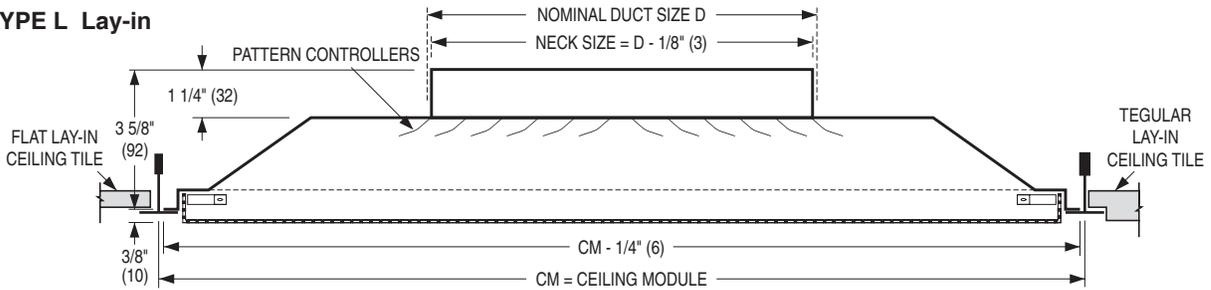
Dimensions are in inches (mm).

SCHEDULE TYPE:				
PROJECT:				
ENGINEER:	DATE	B SERIES	SUPERSEDES	DRAWING NO.
CONTRACTOR:	8 - 7 - 19	4300	3 - 28 - 16	4325MR



PERFORATED CEILING DIFFUSERS
SUPPLY • DROP FACE • ADJUSTABLE
STAR PATTERN CONTROLLER
MODELS: 4325S, 4325SA, 4325SAA

TYPE L Lay-in



Available Combinations of Ceiling Module vs. Neck Size

Ceiling Module CM		Nominal Duct Size D			
Imperial Modules	Metric Modules	Round Neck		Square Neck	
		Imperial Units (inches)	Metric Units (mm)	Imperial Units (inches)	Metric Units (mm)
12 x 12	300 x 300	6	152	6 x 6	152 x 152
24 x 24	600 x 600	6, 8, 10, 12, 14, 15, 16	152, 203, 254, 305, 356, 381, 406	6 x 6, 8 x 8, 10 x 10, 12 x 12	152 x 152, 203 x 203, 254 x 254, 305 x 305

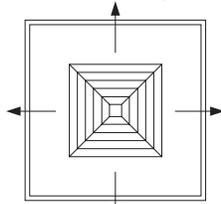
DESCRIPTION:

1. Material: Corrosion-resistant steel.
2. When Type L is used in a suspended T-Bar ceiling system with tegular ceiling tiles, the 3/8" (10) drop face on the diffuser is level with the bottom of the ceiling tile, which improves the architectural appearance and performance.
3. Designed to maximize throw, the diffuser features a stamped pattern controller mounted directly under the neck that produces a long throw 4-way 'Star Pattern'. The factory set pattern controller is easily rotated from side throw to corner throw in the field. Individual vanes can be field adjusted to produce a horizontal to vertical pattern or a 3-way horizontal pattern by turning one segment of blades in the opposite direction.
4. Hinged, removable face for easy access to optional damper.
5. Perforated face has 3/16" (5) diameter holes on 1/4" (6) staggered centers (51% free area).
6. Excellent performance in VAV systems.
7. Standard finish is AW Appliance White.

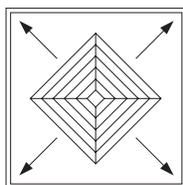
OPTIONS:

- Aluminum perforated face/steel backpan. (Model 4325SA).
 - Aluminum perforated face and backpan. (Model 4325SAA).
 - EX External Foil-Back Insulation, installed - R-4.2 (24 x 24 max.)
 - EXB External Foil-Back Insulation, ships loose - R-4.2 (24 x 24 max.)
 - MIB Molded Insulation Blanket - R-6.0 (24 x 24 only)
- Finish:
- BA Black back pan and deflectors with Appliance White face.
 - SP Special _____.

Factory Set Four-Way Discharge Pattern:

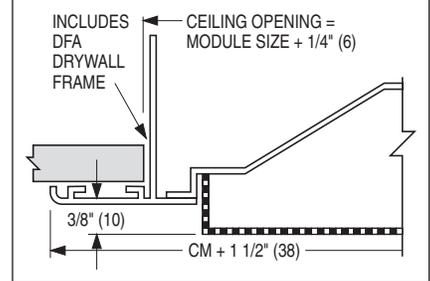


DPS, Side Throw

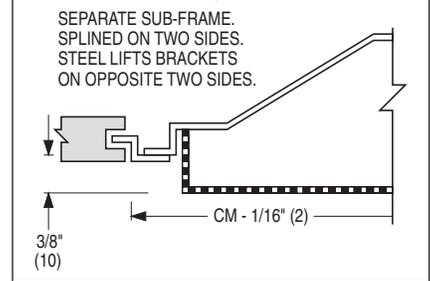


DPC, Corner Throw

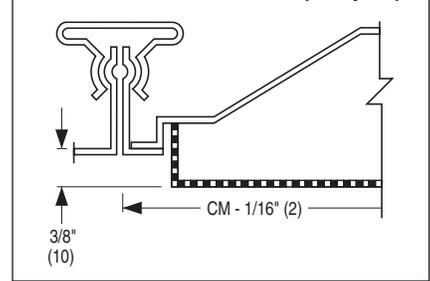
TYPE S Surface Mount



TYPE SP Spline



TYPE M Metal Pan (Snap-in)



Dimensions are in inches (mm).

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

DATE

B SERIES

SUPERSEDES

DRAWING NO.

8 - 7 - 19

4300

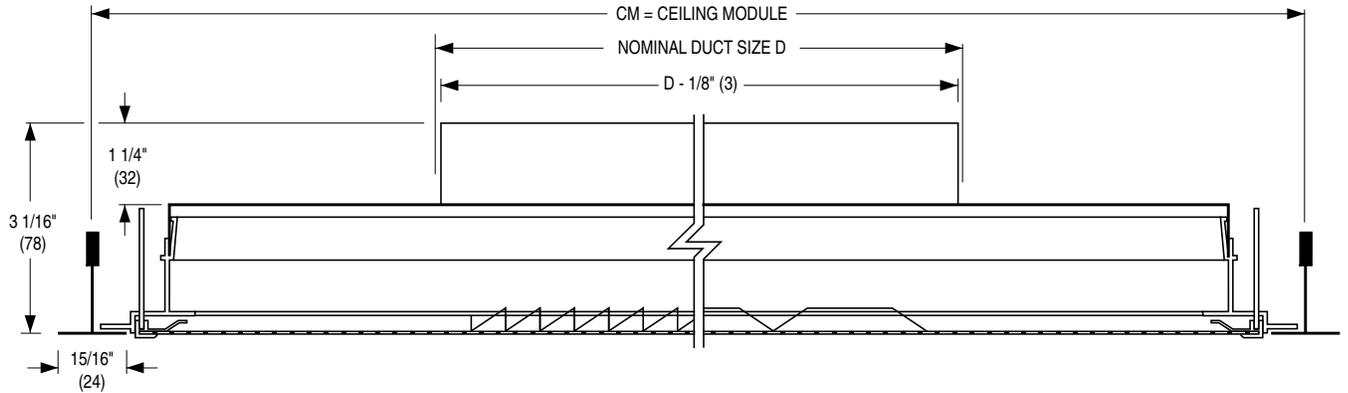
3 - 29 - 16

4325S



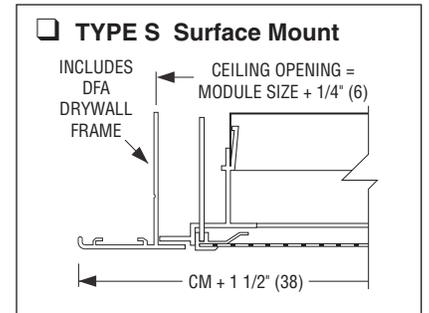
PERFORATED CEILING DIFFUSER
 SUPPLY • PREMIUM ARCHITECTURAL QUALITY
 ADJUSTABLE DISCHARGE PATTERN
MODELS: 4330, 4330A, 4330AA

TYPE L Lay-in T-Bar



Available Combinations of Ceiling Module vs. Neck Size

Ceiling Module CM		Nominal Duct Size D			
Imperial Modules	Metric Modules	Round Neck		Square Neck	
		Imperial Units (in.)	Metric Units (mm)	Imperial Units (in.)	Metric Units (mm)
12 x 12	300 x 300	5, 6, 7, 8	127, 152, 178, 203	6 x 6, 8 x 8	152 x 152, 203 x 203
24 x 12	600 x 300	5, 6, 7, 8	127, 152, 178, 203	6 x 6, 8 x 8, 18 x 6	152 x 152, 203 x 203, 457 x 152
16 x 16	400 x 400	5, 6, 7, 8, 10, 12	127, 152, 178, 203, 254, 305	6 x 6, 8 x 8, 10 x 10, 12 x 12	152 x 152, 203 x 203, 254 x 254, 305 x 305
20 x 20	500 x 500	5, 6, 7, 8, 10, 12, 14	127, 152, 178, 203, 254, 305, 356	6 x 6, 8 x 8, 10 x 10, 12 x 12	152 x 152, 203 x 203, 254 x 254, 305 x 305
24 x 24	600 x 600	5, 6, 7, 8, 10, 12, 14, 15, 16	127, 152, 178, 203, 254, 305, 356, 381, 406	6 x 6, 8 x 8, 10 x 10, 12 x 12, 14 x 14, 15 x 15, 16 x 16	152 x 152, 203 x 203, 254 x 254, 305 x 305, 356 x 356, 381 x 381, 406 x 406



DESCRIPTION:

1. Material: Extruded aluminum border frame. Corrosion-resistant steel perforated face and back pan.
2. Designed for architectural appeal, the diffuser features a mitered corner aluminum frame that encapsulates the perforated face providing a narrow, visible border within the T-bar module. Discharge pattern can be adjusted to a 1, 2, 3 or 4-way pattern setting. Discharge pattern is adjusted by dropping the perforated face and rotating the pattern deflectors. Factory supplied in a 4-way setting.
3. Removable face has quick release spring latches for easy access to optional damper.
4. Perforated face has 3/16" (5) diameter holes on 1/4" (6) staggered centers.

5. Excellent performance in VAV systems.
6. Standard finish is AW Appliance White.

OPTIONS:

- Aluminum perforated face/steel backpan. (Model 4330A).
 - Aluminum perforated face and backpan. (Model 4330AA).
- Finish:**
- BA Black back pan and deflectors with Appliance White face.
 - SP Special _____.

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

Dimensions are in inches (mm).

DATE

B SERIES

SUPERSEDES

DRAWING NO.

8 - 6 - 13

4300

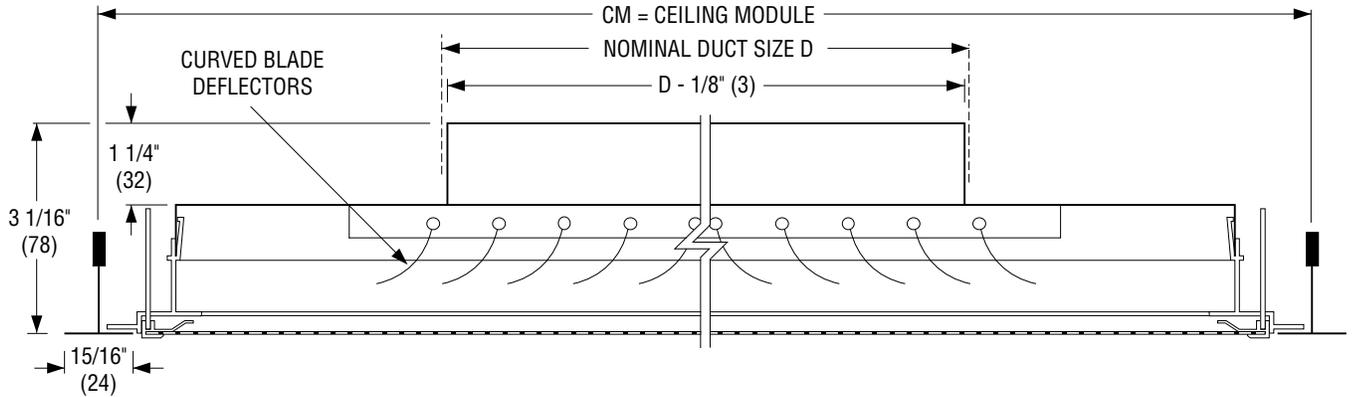
10 - 5 - 99RR

4330-1



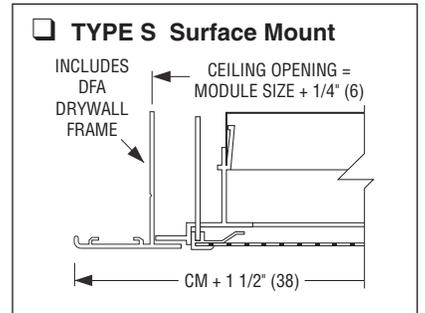
PERFORATED CEILING DIFFUSER
 SUPPLY • PREMIUM ARCHITECTURAL QUALITY
 CURVED BLADE • ADJ. DISCHARGE PATTERN
MODELS: 4330CB, 4330CBA, 4330CBAA

TYPE L Lay-in T-Bar



Available Combinations of Ceiling Module vs. Neck Size

Ceiling Module CM		Nominal Duct Size D			
Imperial Modules	Metric Modules	Round Neck		Square Neck	
		Imperial Units (in.)	Metric Units (mm)	Imperial Units (in.)	Metric Units (mm)
12 x 12	300 x 300	6, 8	152, 203	6 x 6, 8 x 8	152 x 152, 203 x 203
24 x 12	600 x 300	6, 8	152, 203	6 x 6, 8 x 8, 18 x 6	152 x 152, 203 x 203, 457 x 152
16 x 16	400 x 400	6, 8, 10, 12	152, 203, 254, 305	6 x 6, 8 x 8, 10 x 10, 12 x 12	152 x 152, 203 x 203, 254 x 254, 305 x 305
20 x 20	500 x 500	6, 8, 10, 12, 14	152, 203, 254, 305, 356	6 x 6, 8 x 8, 10 x 10, 12 x 12, 14 x 14	152 x 152, 203 x 203, 254 x 254, 305 x 305, 381 x 381
24 x 24	600 x 600	6, 8, 10, 12, 14, 15, 16, 18	152, 203, 254, 305, 356, 381, 406, 457	6 x 6, 8 x 8, 10 x 10, 12 x 12, 14 x 14, 15 x 15, 16 x 16, 18 x 18	152 x 152, 203 x 203, 254 x 254, 305 x 305, 356 x 356, 381 x 381, 406 x 406, 457 x 457



DESCRIPTION:

1. Material: Extruded aluminum border frame. Corrosion-resistant steel perforated face and back pan.
2. Designed for architectural appeal, the diffuser features a mitered corner aluminum frame that encapsulates the perforated face providing a narrow, visible border within the T-bar module. Discharge pattern can be adjusted from horizontal to vertical. Curved blades are friction pivoted and individually adjustable. Curved blades are designed to maximize throw and provide a superior horizontal throw tight to the ceiling. Standard diffuser has a 4-way (B4) discharge pattern.
3. Removable face has quick release spring latches for easy access to curved blade deflectors and optional damper.
4. Perforated face has 3/16" (5) diameter holes on 1/4" (6) staggered centers.

5. Excellent performance in VAV systems.
6. Standard finish is AW Appliance White.

OPTIONS:

- Aluminum perforated face/steel backpan. (Model 4330CBA).
- Aluminum perforated face/aluminum backpan. (Model 4330CBAA).

Finish:

- BA Black back pan and deflectors with Appliance White face.
- SP Special _____.

Blow Pattern:

- B3 3-way
- B2 2-way opposite
- C2 2-way corner
- B1 1-way

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

Dimensions are in inches (mm).

DATE

B SERIES

SUPERSEDES

DRAWING NO.

8 - 30 - 13

4300

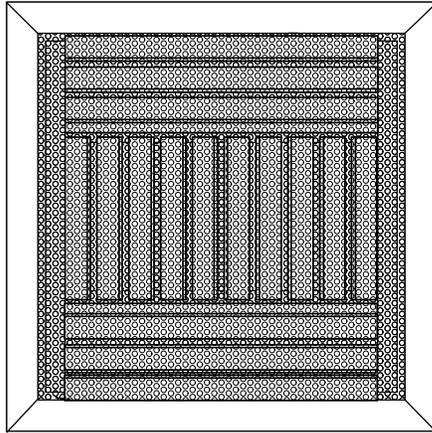
2 - 20 - 06

4330CB-1

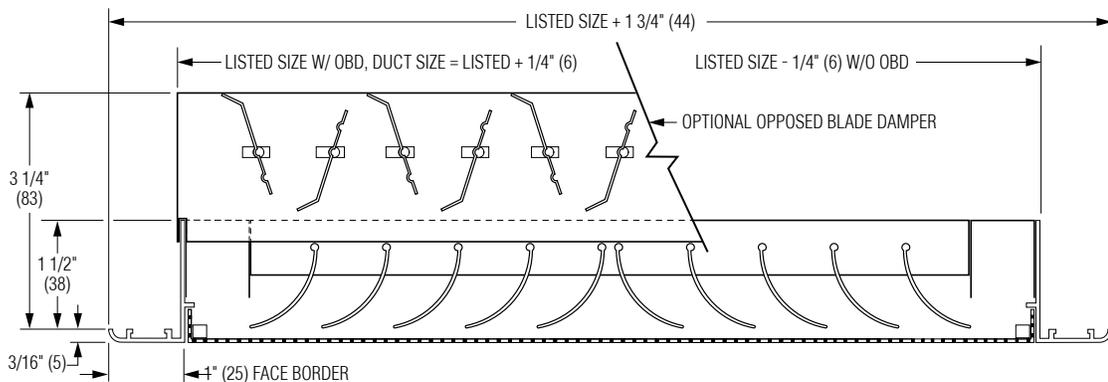
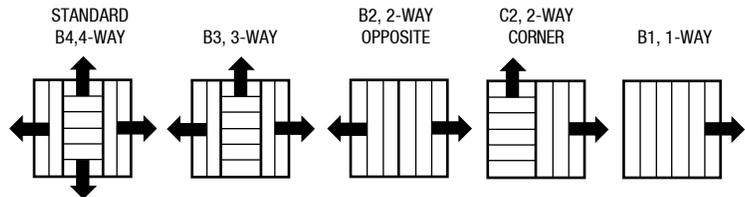


PERFORATED CEILING DIFFUSERS
 CURVED BLADE • 4-WAY ADJUSTABLE DISCHARGE PATTERN
 SQUARE NECK • SURFACE MOUNT
MODELS: 4340CB(-O) AND 4340CBA(-O)

TYPE S Surface Mount



PATTERN CONTROLLER OPTIONS



DESCRIPTION:

1. Material: Extruded aluminum blades and frame. Corrosion resistant steel perforated face.
2. Curved blades on 1" (25) centers are individually adjustable and regulate angle of discharge. Excellent performance in VAV systems. Frame is mechanically interlocked for strength with hairline mitered corners. Standard diffuser has a 4-way (B4) discharge pattern.
3. Minimum size 6" x 6" (152 x 152). Maximum size 24" x 24" (610 x 610). Available in 2" (51) increments.
4. Removable face has concealed latches for easy access to core.
5. Perforated face has 3/16" (5) diameter holes on 1/4" (6) staggered centers. (51% free area).
6. Type N standard fastening is with sheet metal screws (by others), through the neck of the diffuser outer frame.
7. Standard finish is AW Appliance White.

OPTIONS:

- Aluminum perforated face (Model 4340CBA).
- Finish:
- SP Special _____.
- Fastening:
- Type A Countersunk screwholes on face of outer frame.
- Blow Pattern:
- B3 3-way
- B2 2-way opposite
- C2 2-way corner
- B1 1-way
- Special Features _____.

ACCESSORIES:

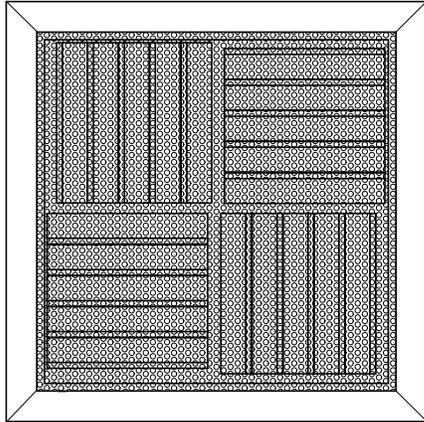
- Steel opposed blade damper (Model 4340CB-O or 4340CBA-O).

SCHEDULE TYPE:		Dimensions are in inches (mm).			
PROJECT:					
ENGINEER:	DATE	B SERIES	SUPERSEDES	DRAWING NO.	
CONTRACTOR:	8 - 30 - 19	4300	4 - 22 - 03	4340CB	



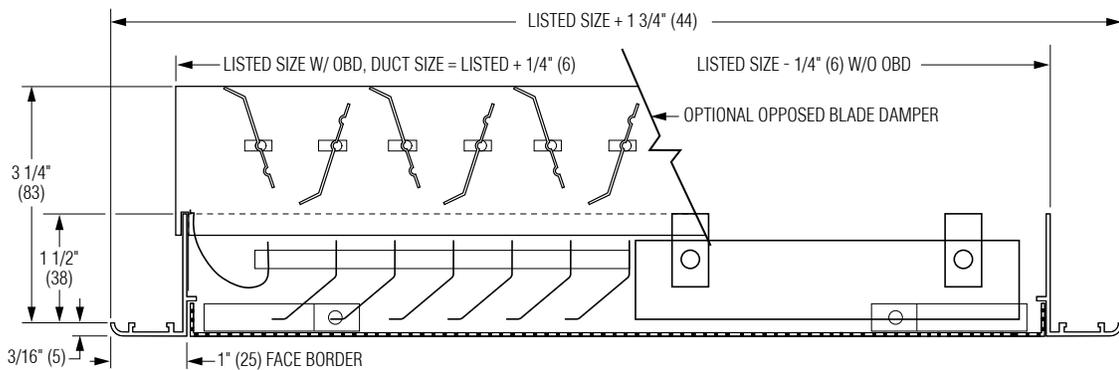
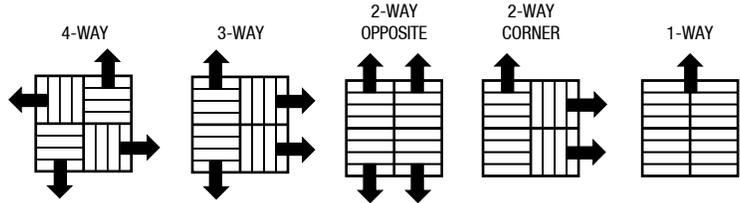
PERFORATED CEILING DIFFUSER
 MODULAR CORE • ADJUSTABLE DISCHARGE PATTERN
 SURFACE MOUNT • SQUARE NECK
MODELS: 4340M(-O) AND 4340MA(-O)

TYPE S Surface Mount



MODULAR CORE ADJUSTMENTS

(The diffuser is shipped with the core set for 4-way discharge).



DESCRIPTION:

1. Material: Extruded aluminum frame. Corrosion-resistant steel modular core. Corrosion-resistant steel or aluminum perforated face depending on model choice.
2. Diffuser frame is mechanically interlocked for strength with hairline mitered corners. Four individual spring-loaded adjustable modular pattern controllers are mounted in the diffuser frame. This positions the leading edge of the pattern controllers near the perforated face and flush with the ceiling for optimum performance. The engineered design maintains a tight, uniform horizontal throw pattern from maximum to minimum cataloged air volumes. Excellent performance in VAV systems. Discharge pattern can be adjusted to a 1, 2, 3 or 4-way horizontal, before or after installation. Discharge pattern is adjusted by dropping the perforated face and rotating the pattern deflectors. Diffusers are shipped from the factory with a 4-way discharge pattern.
3. Minimum size 6" x 6" (152 x 152). Maximum size 24" x 24" (610 x 610). Available in 2" (51) increments.

4. Removable face has concealed latches for easy access to core.
5. Perforated face has 3/16" (5) diameter holes on 1/4" (6) staggered centers (51% free area).
6. Type N standard fastening is with sheet metal screws (by others), through the neck of the diffuser outer frame.
7. Standard finish is AW Appliance White.

OPTIONS:

- Aluminum perforated face (Model 4340MA).

Finish:

- SP Special _____.

Fastening:

- Type A Countersunk screwholes on face of outer frame.

ACCESSORIES:

- Steel opposed blade damper (Model 4340M-O or 4340MA-O).

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

Dimensions are in inches (mm).

DATE

B SERIES

SUPERSEDES

DRAWING NO.

2 - 22 - 21

4300

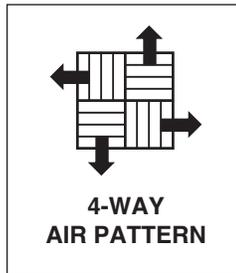
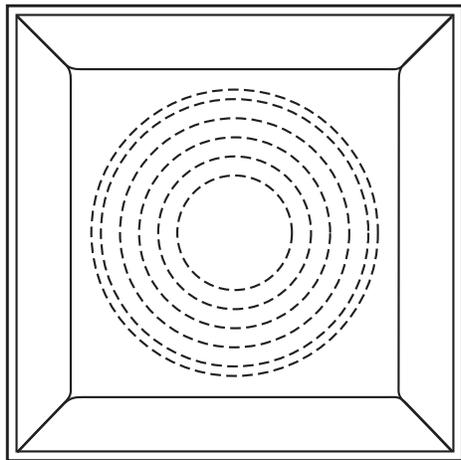
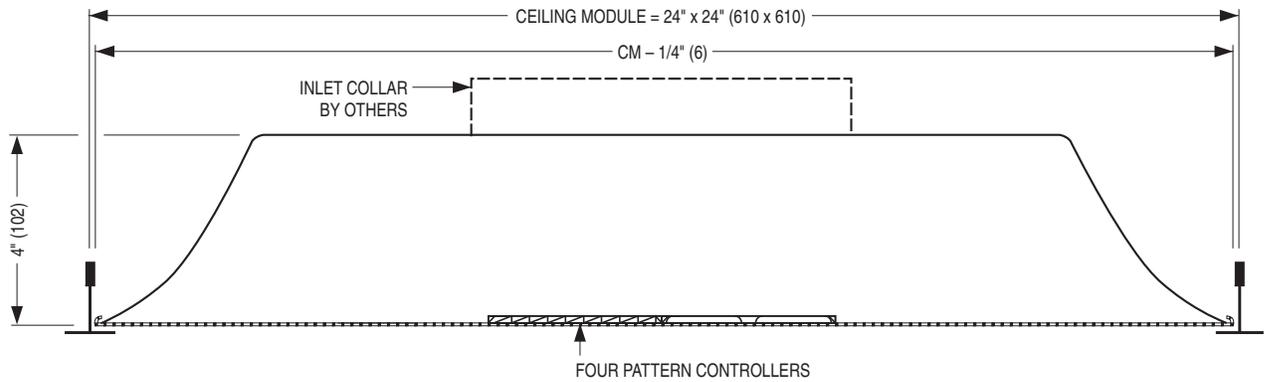
8 - 30 - 19

4340M

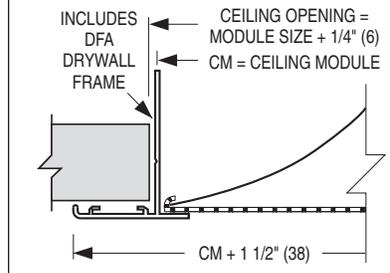


PERFORATED CEILING DIFFUSERS
 FIBERGLASS PLENUM • 4-WAY DISCHARGE PATTERN
 SUPPLY • 24" x 24" MODULE FOR T-BAR CEILINGS
MODEL: 4350

TYPE L Lay-in T-Bar



TYPE S Surface Mount



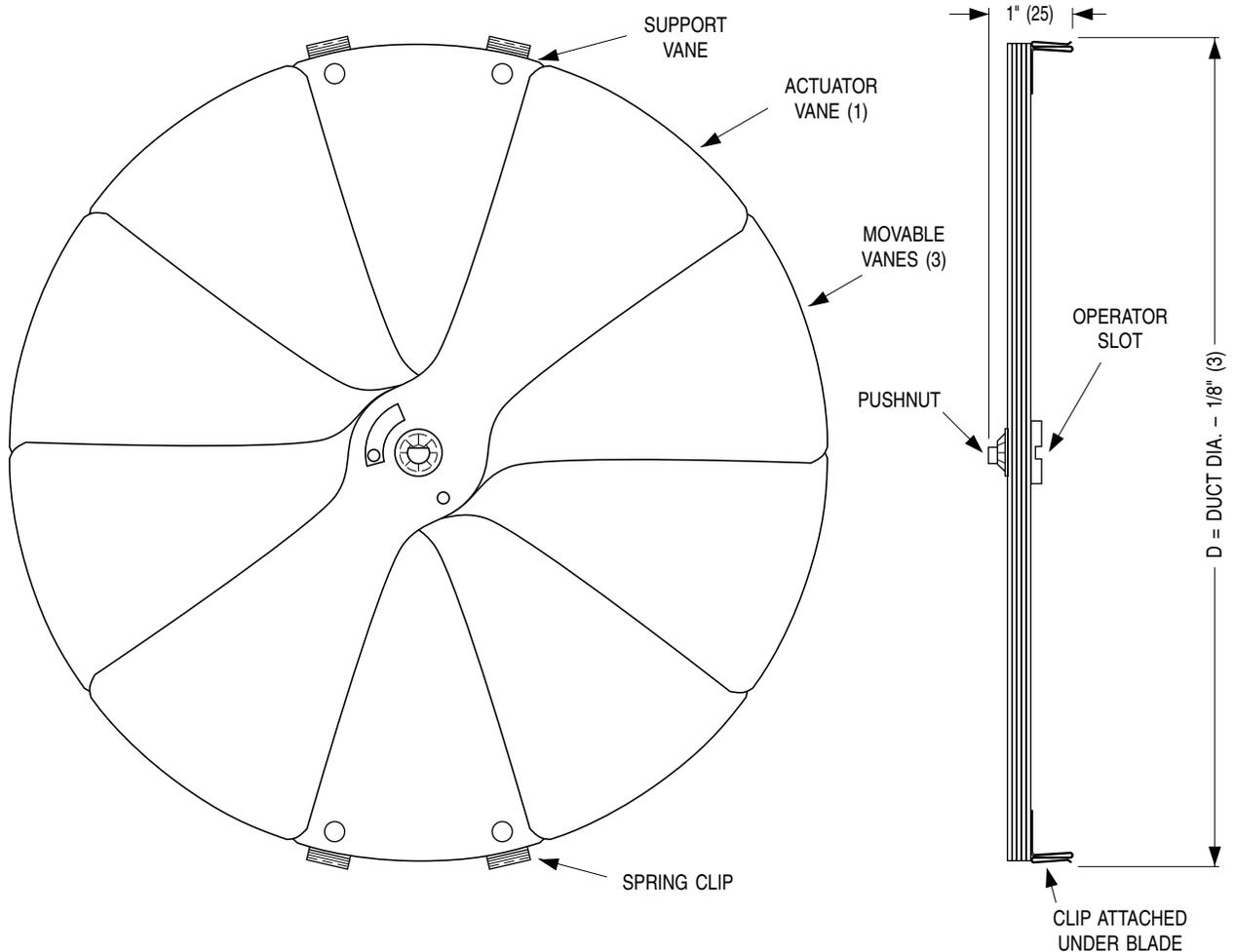
DESCRIPTION:

1. Corrosion-resistant steel diffuser face. One piece molded fiberglass back pan with foil back vapour barrier. 6.0 R-value.
2. Diffuser features a smoothly contoured back pan and wrap-around fixed perforated face. Four stamped pattern controllers are mounted on the back of the perforated face, to provide a 4-way discharge pattern, providing excellent performance in VAV systems.
3. Perforated face has 3/16" (5) diameter holes on 1/4" (6) staggered centers. 51% free area.
Center access hole with plug for screwdriver adjustment of the optional damper.
4. Pre-scored plenum for 6", 8", 10", 12", 14" or 15" (152, 203, 254, 305, 356 or 381) spin-in or tab-lock inlet collar (by others).
5. Standard finish is AW Appliance White face and black interior.

OPTIONS:

Finish:
 SP Special _____.

SCHEDULE TYPE:		Dimensions are in inches (mm).			
PROJECT:					
ENGINEER:	DATE	B SERIES	SUPERSEDES	DRAWING NO.	
CONTRACTOR:	2 - 6 - 17	4300	1 - 7 - 11	4350	


DESCRIPTION:

1. Material: Heavy gauge corrosion-resistant steel.
2. The Nailor Model 4250 is a neck mounted, radial sliding blade damper used in round neck diffuser applications to provide fine volume control.
3. Dampers have gang operated radial blades. Blades slide at right angles to the duct with protrusion above the diffuser neck, allowing the damper to work effectively in flexible duct applications.
4. The 4250 is neck mounted with steel barb clips providing secure attachment.
5. Adjustments are made at the screwdriver operator slot.
6. Available Sizes: 6", 8", 10", 12" and 14" (152, 203, 254, 305 and 356) dia..

SCHEDULE TYPE:
PROJECT:
ENGINEER:
CONTRACTOR:

Dimensions are in inches (mm).

DATE
B SERIES
SUPERSEDES
DRAWING NO.

10 - 24 - 01

ACC.DIF.

25 - 8 - 99R

ABD-4250



AIR BALANCING DEVICE RADIAL OPPOSED BLADE DAMPER STEEL • FOR ROUND NECK DIFFUSERS MODEL: 4275 (5" - 16" DIA.)

DESCRIPTION:

A unique method of controlling volume through a diffuser providing premium design quality and performance. The multi-blade perimeter design offers true radial flow at any setting.

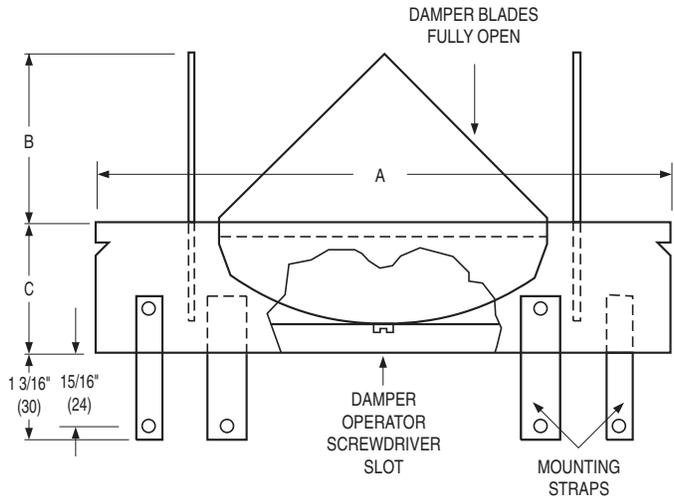
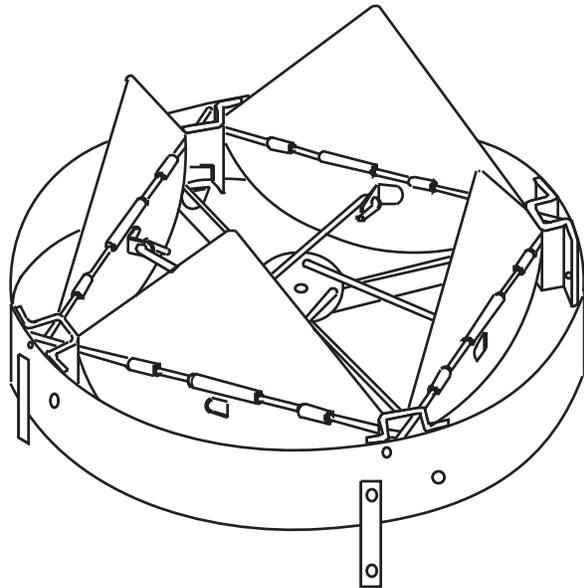
A screwdriver slot, accessible through the diffuser, requires only a half turn to adjust from fully closed to fully open. The damper is designed to fit directly on the neck of the diffuser. Simple convenient and accurate installation and operation.

OPERATION:

Size 5 through 8 are friction type. Use screwdriver and turn operator to adjust damper setting.

Size 10 through 16 use a detent mechanism to positively hold damper setting. Using screwdriver, lift up and turn operator to desired damper setting.

1. Material: Corrosion-resistant steel construction.
2. Damper mounts directly to diffuser collar.
3. Standard Finish: Mill.



	Nominal Size (inches)								Nominal Size (mm)							
	5	6	8	10	12	14	15	16	127	152	203	254	305	356	381	406
A	4 7/8	5 7/8	7 7/8	9 7/8	11 7/8	13 7/8	14 7/8	15 7/8	124	149	200	251	302	352	378	403
B	1 1/8	1 5/8	2 1/2	2 1/4	2 7/8	3 3/8	3 3/4	4 3/8	29	41	64	57	73	86	95	111
C	1 5/8				2 1/2				41				64			

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

Dimensions are in inches (mm).

DATE

B SERIES

SUPERSEDES

DRAWING NO.

8 - 29 - 05

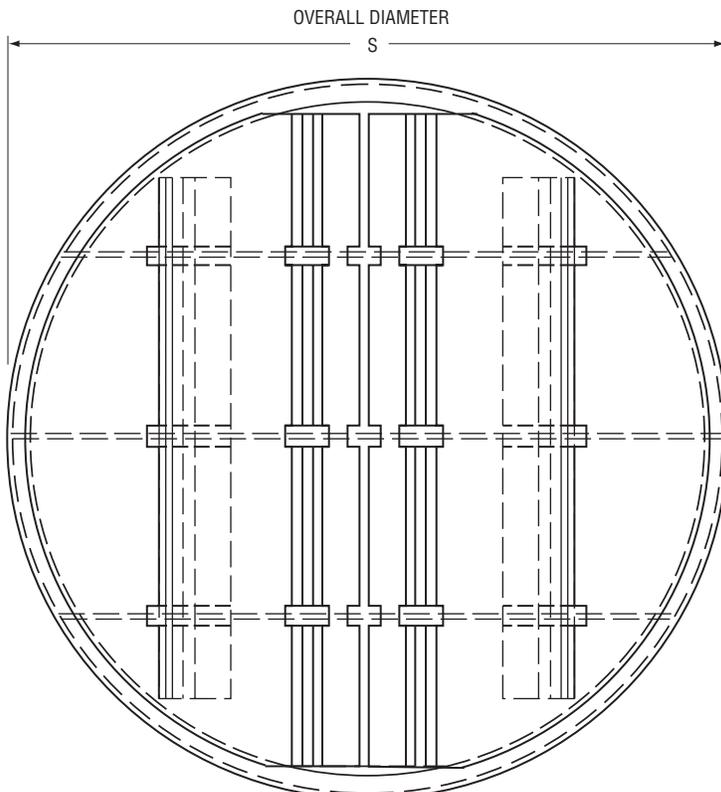
ABD

3 - 1 - 02

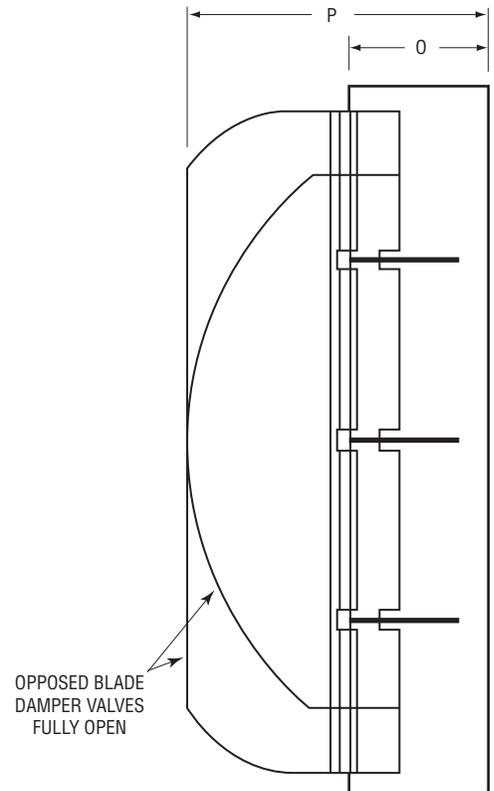
ABD-4275-1



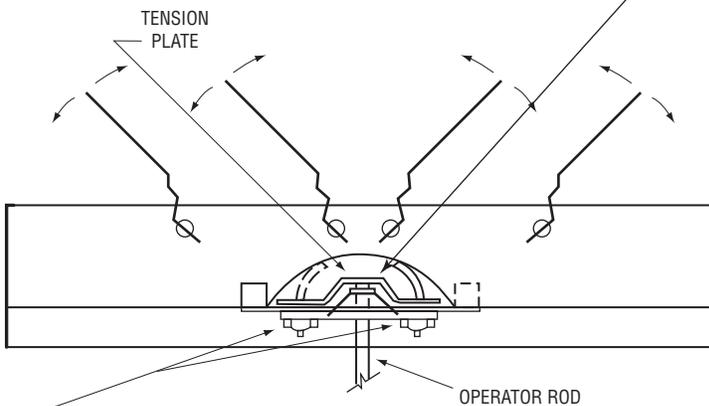
**AIR BALANCING DEVICE
RADIAL OPPOSED BLADE DAMPER
STEEL • FOR ROUND NECK DIFFUSERS
MODEL: 4275 (18" DIA.)**



**TOP VIEW
VALVES CLOSED**



OPPOSED BLADE
DAMPER VALVES
FULLY OPEN



**CROSS SECTION WITH VALVES PARTLY OPEN
SHOWING OPPOSED BLADE OPERATION.**

IF OPERATOR IS TO BE REMOVED AFTER SETTING DAMPER, DO NOT DRIVE INTO TENSION PLATE AS THIS LOCKS ROD IN PLACE FOR PERMANENT INSTALLATION.

LOCK NUTS:
LOOSEN BEFORE ADJUSTING DAMPER.
TIGHTEN AFTER ADJUSTING DAMPER TO PROVIDE POSITIVE LOCK.

DESCRIPTION:

1. Material: Steel construction.
2. Screw or rivet to duct.
3. Opposed blade operation.
4. Finish: Black.

List Dia.	Imperial Modules			Metric Modules		
	Imperial Units (inches)			SI Units (mm)		
18"	S	O	P	S	O	P
	17 7/8	1 3/4	4 3/4	454	44	121

SCHEDULE TYPE:

PROJECT:

ENGINEER:

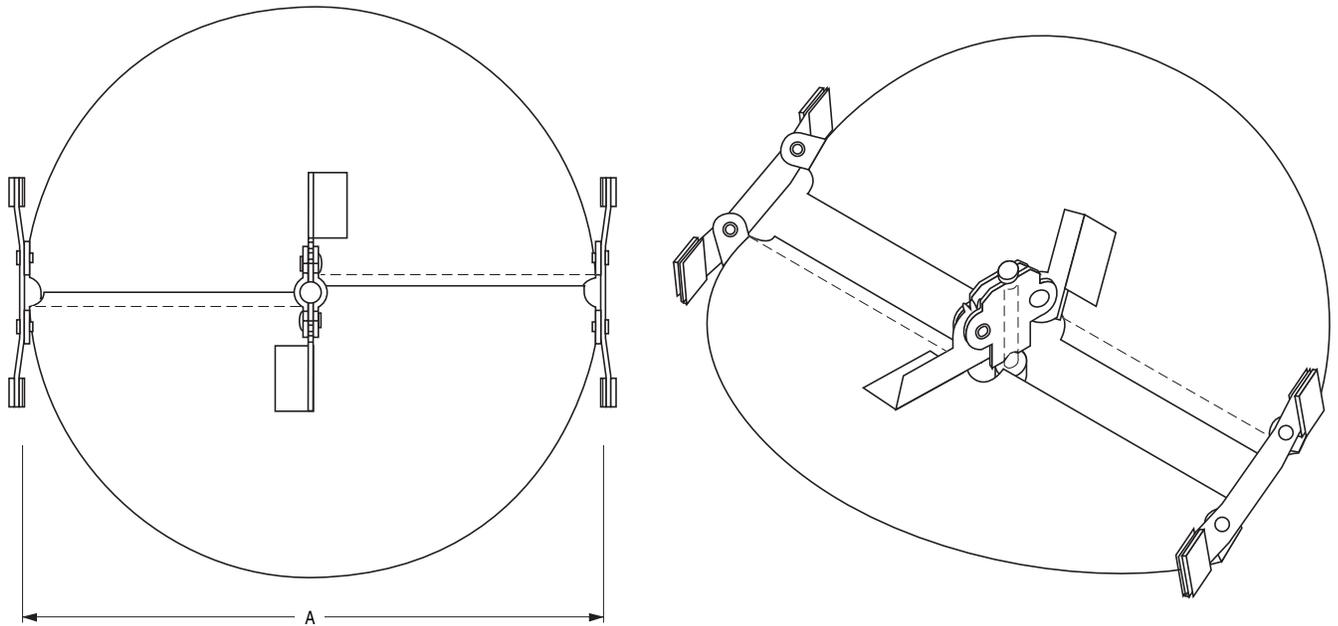
CONTRACTOR:

Dimensions are in inches (mm).

DATE	B SERIES	SUPERSEDES	DRAWING NO.
11 - 26 - 07	4200	8 - 30 - 05	ABD-4275-3



**AIR BALANCING DEVICE
BUTTERFLY DAMPER
STEEL • FOR ROUND NECK DIFFUSERS
MODEL: 4675**

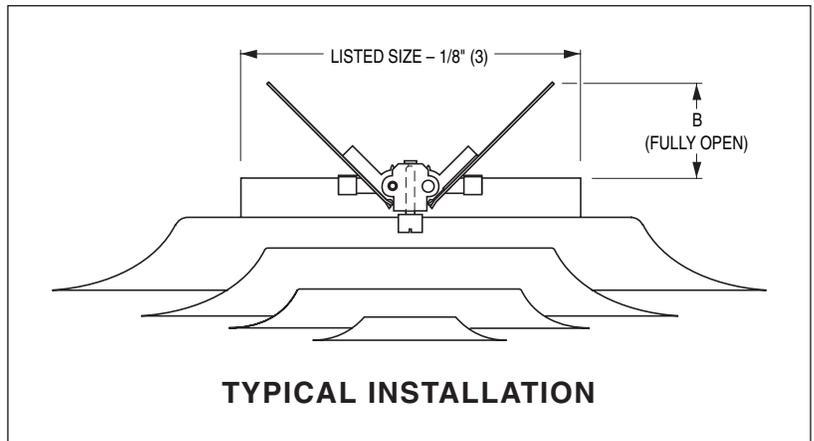


DESCRIPTION:

The Model 4675 Butterfly Damper is an economical damper for volume balancing in round neck diffusers. Adjustable friction pivots hold the blades at the required setting.

1. Material: Corrosion-resistant steel. Mill finish.
2. The 4675 damper mounts directly to diffuser collar. Not compatible with Model Series RNSA, RNR, RNRA1, 6300 or 6300R diffusers.
3. Screwdriver slot operator is adjustable from the face of the diffuser.

	Nominal Size (inches)					Nominal Size (mm)				
	6	8	10	12	14	152	203	254	305	356
A	5 7/8	7 7/8	9 7/8	11 7/8	13 7/8	149	200	251	302	352
B	2 1/2	3 1/2	4 1/2	5 1/2	6 1/2	64	89	114	140	165



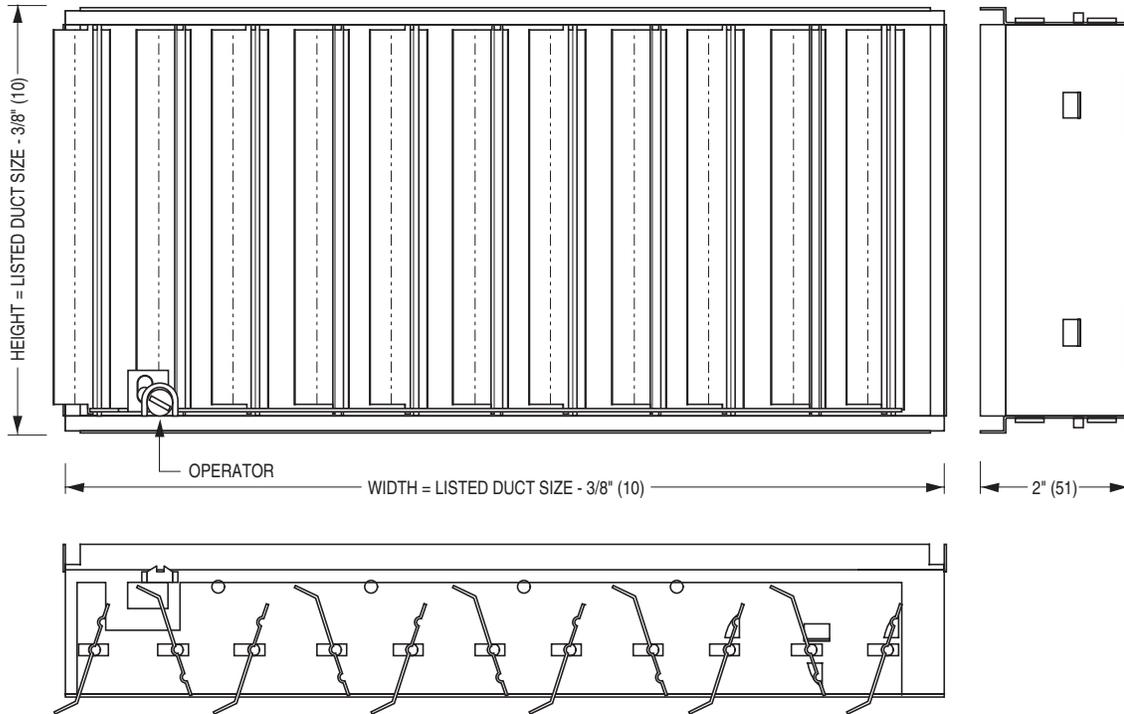
TYPICAL INSTALLATION

SCHEDULE TYPE:					Dimensions are in inches (mm).				
PROJECT:									
ENGINEER:					DATE	B SERIES	SUPERSEDES	DRAWING NO.	
CONTRACTOR:					11 - 14 - 08	ACC.DIF.	5 - 28 - 08	ABD-4675	



AIR BALANCING DEVICES
OPPOSED BLADE DAMPER • NECK MOUNTED FOR
SQUARE AND RECTANGULAR NECKS
MODEL: OBD TYPE SL & PL

TYPE SL Screwdriver Slot Face Operator (Standard)



OBD-L Long Blades (parallel to long dimension)

OBD-S Short Blades (parallel to short dimension)

Minimum Size = 4" x 2 1/2" (102 x 64)

Maximum Size = 24" x 24" (610 x 610)

DESCRIPTION:

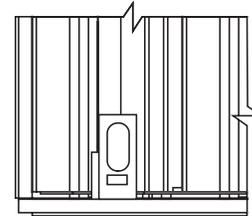
1. Material: Roll-formed, corrosion-resistant steel. Mill finish.
2. Designed to mount directly on the neck of a grille or diffuser in square and rectangular neck applications. Supplied with steel barbed S-clips for easy field mounting. Supplied as standard with a screwdriver slot operator.
3. Gang operated blades on 1" (25) centers move simultaneously in opposite directions and close at 45° to permit precise metering of the air with a minimal disturbance to the air pattern.

SPECIAL FEATURES:

_____.

OPTIONS:

Type PL Pivot Lever Operator.



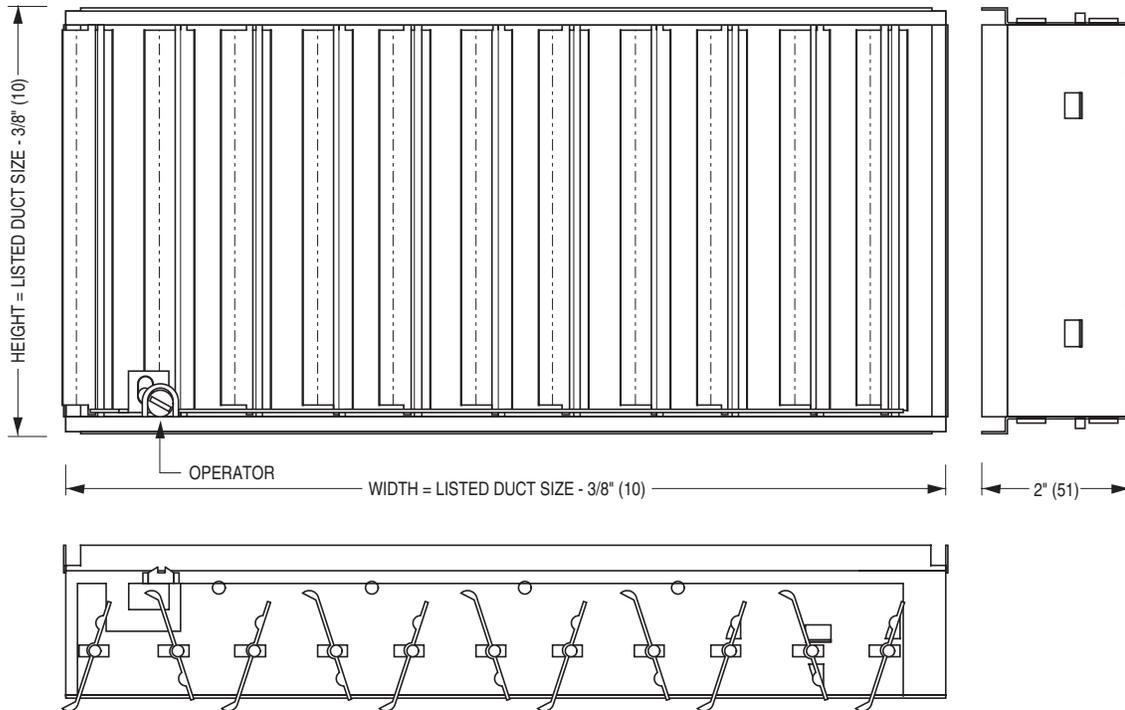
For fixed, angled deflection return grilles. Blade orientation of damper must be opposite of grille. Adjusted with a screwdriver.

SCHEDULE TYPE:		Dimensions are in inches (mm).			
PROJECT:					
ENGINEER:	DATE	B SERIES	SUPERSEDES	DRAWING NO.	
CONTRACTOR:	8 - 11 - 20	ACC.DIF/GR	26 - 8 - 99R	ACC.ABD-1	



**AIR BALANCING DEVICES
OPPOSED BLADE DAMPER • DUCT MOUNTED
FOR SQUARE AND RECTANGULAR NECKS
MODEL: OBD-A TYPE SL & PL**

TYPE SL Screwdriver Slot Face Operator (Standard)



OBD-A-L Long Blades (parallel to long dimension)

OBD-A-S Short Blades (parallel to short dimension)

Minimum Size = 4" x 2 1/2" (102 x 64)

Maximum Size = 24" x 24" (610 x 610)

DESCRIPTION:

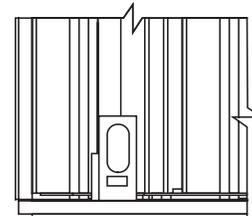
1. Material: Heavy gauge, extruded aluminum with miscellaneous steel components. Mill finish.
2. Designed to mount directly on the neck of a grille or diffuser in square and rectangular neck applications. Supplied with steel barbed S-clips for easy field mounting. Supplied as standard with a screwdriver slot operator.
3. Gang operated blades on 1" (25) centers move simultaneously in opposite directions and close at 45° to permit precise metering of the air with a minimal disturbance to the air pattern.

SPECIAL FEATURES:

_____.

OPTIONS:

Type PL Pivot Lever Operator.

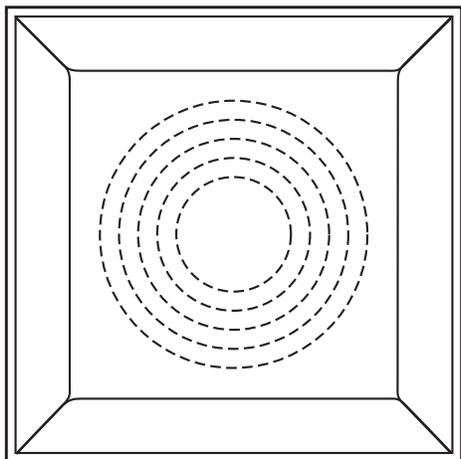
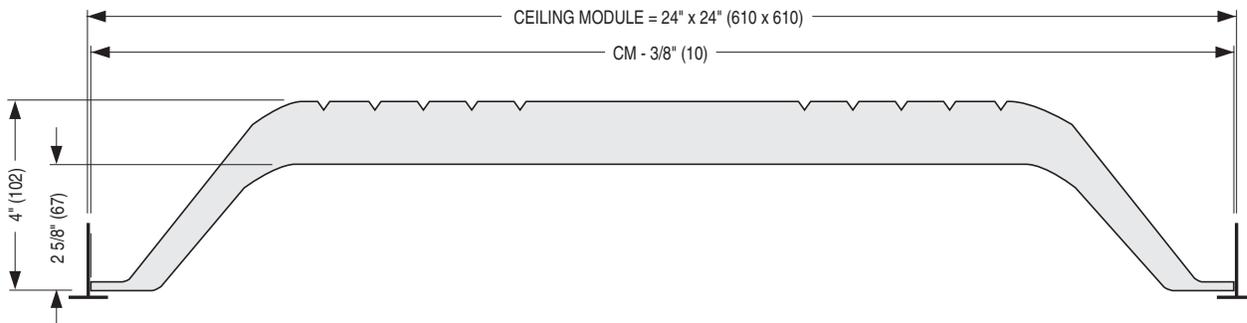


For fixed, angled deflection return grilles. Blade orientation of damper must be opposite of grille. Adjusted with a screwdriver.

SCHEDULE TYPE:		Dimensions are in inches (mm).			
PROJECT:					
ENGINEER:	DATE	B SERIES	SUPERSEDES	DRAWING NO.	
CONTRACTOR:	8 - 11 - 20	ACC.DIF/GR	26 - 8 - 99R	ACC.ABD-2	



MOLDED INSULATION BLANKET
CEILING DIFFUSER ACCESSORY
24" x 24" MODULE FOR CEILING DIFFUSERS
MODEL/ACCESSORY: MIB



DESCRIPTION:

1. One piece molded fiberglass insulation blanket with foil back vapour barrier. 6.0 R-value.
2. Pre-scored plenum 6", 8", 10", 12" or 14" (152, 203, 254, 305 or 356) dia. for field cutting.
3. The Nailor Model MIB fits over the backpan of most full face 24" x 24" diffusers and provides thermal protection to reduce the risk of condensation forming on the diffuser face.
Compatible models include RNS, RNS2, RNS3, UNI, 6200, 6400, 6500 and 4320 series.
4. The Nailor Model MIB: resists ageing, thermal shock, is incombustible, immune to rot, corrosion, oxidation and insects.
5. Tested in compliance with surface burning characteristics (ASTM E-84) and erosion test (UL 181).
6. Standard finish has a black interior.

SCHEDULE TYPE:		Dimensions are in inches (mm).			
PROJECT:					
ENGINEER:	DATE	B SERIES	SUPERSEDES	DRAWING NO.	
CONTRACTOR:	1 - 16 - 17	MIB	2 - 1 - 11	MIB-1	

Nailor offers a selection of standard colors and finishes available on our grilles, registers and diffusers. For painted finishes, our state-of-the-art paint systems provide environmentally friendly finishing solutions with uniform coverage and coating thickness. The result is an exceptionally durable finish that resists scratching, corrosion and general wear. Additional facilities for special requirements, as well as a selection of anodized or brushed finishes, complete our ability to provide unmatched beauty and durability for any application.

NAILOR POWDER COAT PROPERTIES

FILM THICKNESS	2.0 to 3.0 mils
HARDNESS	2 H
IMPACT RESISTANCE	Direct: 160 inch - lbs. Reverse 160 inch - lbs.
SALT SPRAY	1000 hours

ELECTROCOATING PROPERTIES

FILM THICKNESS	.8 to 1.2 mils
HARDNESS	HB TO H
IMPACT RESISTANCE	80 inch - lbs
SALT SPRAY	100 hours


POWDER COAT

Nailor's powder coat is a high-tech thermosetting polyester powder coating with superior physical properties that provide excellent color and gloss retention. The finish offers extreme durability and hardness that resists scratching, chipping and general wear. Surface preparation includes degreasing and a chemical cleaning followed by a clean rinse before a final powder coat finish is applied and baked. The environmentally friendly Nailor powder coat system assures uniform coverage and color consistency resulting in a long lasting superior finish. Colors, including simulated anodizing, which is far more economical than color anodizing, can be selected from Nailor's standard color chart or non-standard colors and can be matched from sample chips provided to Nailor.

ELECTROCOATING

E-Coat is an environmentally friendly coating that provides complete coverage and a wide range of performance properties, formulated to meet corrosion, durability and other performance specifications. Electrocoating is a highly automated process in which paint is electrically deposited onto a metal foundation. Film build thickness is uniform and overall application efficiencies are in excess of 90%. Paint is consistent on all part-to-part surfaces, preventing sags, runs or drips. E-Coat offers flexibility, better first yield pass and quicker production times compared to other forms of paint applications. Electrocoating is an excellent solution that offers superior properties and uniform finish.

CLEAR ANODIZING (Aluminum products only)

Clear anodizing is a clear oxide coating that exemplifies an aluminum surface's natural oxide coating producing a hard, scratch resistant surface that is resistant to general wear and mild chemicals. The process provides a natural looking, virtually maintenance free finish that will endure for many years.

COLOR ANODIZING (Aluminum products only)

Color anodizing is an electrolytic process where, after standard anodizing procedures, colored metallic pigments penetrate the oxide surface pores producing a corrosion resistant, colorfast finish. The process results in a natural metallic appearance that requires little maintenance.

BRUSHED AND CLEAR COAT

Available on specific aluminum products (consult applicable product page for availability). Surface is brushed to achieve a scratch finish texture before being degreased and chemically cleaned. A clear lacquer coating is then applied to provide a durable protective finish.

#4 BRUSHED SATIN POLISHED (Stainless Steel products only)

Surface is polished to ASTM A480 #4 standard to achieve a bright durable finish that is resistant to mild chemicals and corrosion. A final coating is not required due to the inherent anti-corrosion properties of the stainless steel.

PRIME COAT

Prime coat provides a stable base for painting in the field. Surface pretreatment includes degreasing and a chemical cleaning before an alkyd prime coat is applied. After a thorough cleaning for dust, etc. that can contaminate the final finish and cause premature flaking or peeling, finish coat should be field applied as soon as possible.

PAINT PREPARED ALUMINUM (Aluminum products only)

Allows for field applied paint. Surface preparation includes degreasing and a chemical cleaning followed by a clean rinse. Finish coat should be field applied as soon as possible.

MILL FINISH

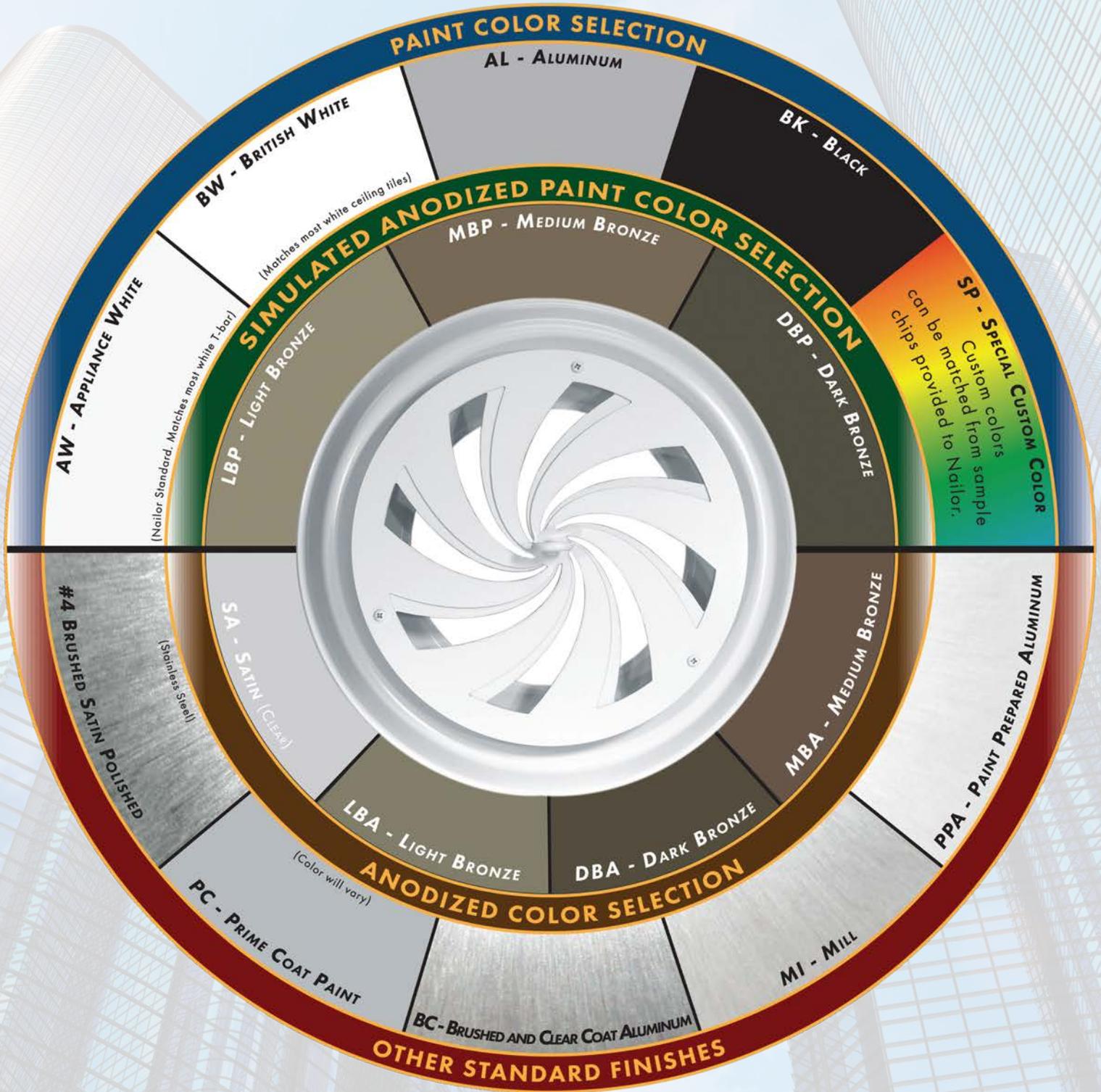
Surface is left untreated and requires cleaning, degreasing, etc. in the field before final finish can be applied if required.



Nailor[®]
Industries Inc.

STANDARD AND OPTIONAL FINISHES FOR GRILLES AND DIFFUSERS

The following standard colors and finishes are available on applicable Nailor air distribution products. Consult individual product pages for availability



The pictured finishes have been represented as best as possible within printing limitations. However, actual finish may vary. Contact your Nailor representative for a color chip sample on the material specified for a more accurate representation.

DBK - Black (for registers ordered with factory mounted dampers) - **BA** - Perforated Diffusers (4300 series only) Appliance White (AW) face with black back pan and pattern controllers.

"Complete Air Control and Distribution Solutions."

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PERFORMANCE DATA:

Model 4310A • 24 x 24 (600 x 600) Module Size

Nominal Neck Size	Neck Velocity, FPM	300	400	500	600	700	800	900	1000	1200	1400
	Velocity Pressure	.006	.010	.016	.023	.031	.040	.051	.063	.090	.122
6" Dia.	Total Pressure	.005	.008	.013	.016	.025	.032	.041	.050	.072	.098
	Airflow, CFM	60	80	100	120	140	160	180	195	235	275
	Throw	1-1-2	1-1-2	1-1-3	1-2-3	1-2-4	1-2-4	2-3-5	2-3-6	2-3-7	3-4-8
	Noise Criteria	—	—	16	18	20	22	24	26	31	37
8" Dia.	Total Pressure	.009	.015	.024	.034	.046	.061	.077	.095	.136	.185
	Airflow, CFM	105	140	175	210	245	280	315	350	420	490
	Throw	1-1-3	1-2-3	1-2-4	2-3-5	2-3-6	2-3-7	3-4-8	3-4-9	3-5-10	4-6-12
	Noise Criteria	—	—	18	21	24	27	31	34	39	46
10" Dia.	Total Pressure	.013	.023	.037	.053	.072	.094	.119	.147	.211	.288
	Airflow, CFM	165	220	270	325	380	435	490	585	655	765
	Throw	1-2-4	2-2-5	2-3-6	2-4-7	3-4-8	3-5-10	4-5-11	4-6-12	5-7-14	6-8-17
	Noise Criteria	—	—	19	22	25	28	33	36	41	48
12" Dia.	Total Pressure	.016	.031	.049	.070	.095	.125	.158	.195	.260	.382
	Airflow, CFM	235	315	390	470	550	630	705	785	940	1100
	Throw	2-2-5	2-3-6	3-4-8	3-5-9	4-5-11	4-6-12	5-7-14	6-8-15	6-9-18	7-11-21
	Noise Criteria	—	16	21	25	29	32	35	38	44	50
14" Dia.	Total Pressure	.021	.038	.059	.085	.115	.151	.191	.235	.339	.461
	Airflow, CFM	320	430	535	640	750	855	960	1070	1285	1495
	Throw	2-3-5	2-4-7	3-5-9	4-5-11	4-6-13	5-7-14	5-8-16	6-9-18	7-11-22	8-13-25
	Noise Criteria	—	16	22	27	32	35	39	43	49	53
15" Dia.	Total Pressure	.022	.040	.062	.090	.122	.160	.202	.250	.359	.489
	Airflow, CFM	370	490	615	735	860	980	1105	1230	1475	1720
	Throw	2-3-5	3-4-7	3-5-10	4-6-11	5-7-13	5-8-15	6-9-17	7-10-19	8-12-23	9-14-27
	Noise Criteria	—	17	23	29	34	37	41	45	51	55

Performance Notes:

1. All pressures are in inches w.g.. To obtain static pressure, subtract the velocity pressure from the total pressure.
2. Throws are given at 150, 100 and 50 fpm terminal velocities, under isothermal conditions.

3. Noise Criteria (NC) values are based upon 10 dB room absorption, re 10⁻¹² watts. Dash (—) in space indicates an Noise Criteria of less than 15.
4. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2025.

Balancing:

It is recommended that a commercially available 'Flow Hood' is used for field balancing. The airflow meter directly reads average flow rate with great accuracy at all volumes. It is a much faster and more accurate alternative to time consuming multiple velocity readings, eliminating the use of Ak factors and the calculations required to convert the average velocity into airflow.

PERFORMANCE DATA:

Models 4320, 4320A, 4320AA • Flush Face • 12 x 12 (300 x 300) Module Size

Nominal Neck Size	Neck Velocity, FPM	300	400	500	600	700	800	1000	1200	
	Velocity Pressure	.006	.010	.016	.023	.031	.040	.063	.090	
6" Dia.	Total Pressure	.012	.020	.032	.046	.063	.082	.128	.185	
	Flow Rate, CFM	58	78	98	117	137	156	196	235	
	Throw	4-Way	1-1-1	1-1-1	1-1-3	1-1-4	1-1-4	1-1-5	1-3-6	1-4-8
		3-Way	1-1-2	1-1-4	1-1-5	1-2-6	1-3-7	1-4-8	2-5-11	4-6-13
		2-Way	1-1-3	1-1-6	1-2-7	1-3-9	2-4-10	2-6-12	4-7-15	6-9-16
		1-Way	1-1-4	1-2-7	1-3-9	2-4-11	2-6-13	3-7-14	6-9-17	7-11-19
Noise Criteria	—	—	—	19	24	28	35	41		
8" Dia.	Total Pressure	.014	.022	.035	.049	.065	.086	.132	.194	
	Flow Rate, CFM	105	140	175	210	245	280	350	420	
	Throw	4-Way	1-1-1	1-1-1	1-1-3	1-1-4	1-1-4	1-1-5	1-3-6	1-4-8
		3-Way	1-1-2	1-1-4	1-1-5	1-2-6	1-3-7	1-4-8	2-5-11	4-6-13
		2-Way	1-1-3	1-1-6	1-2-7	1-3-9	2-4-10	2-6-12	4-7-15	6-9-16
		1-Way	1-1-4	1-2-7	1-3-9	2-4-11	2-6-13	3-7-14	6-9-17	7-11-19
Noise Criteria	—	—	16	22	27	31	38	44		
6 x 6	Total Pressure	.013	.022	.036	.052	.074	.092	.143	.206	
	Flow Rate, CFM	75	100	125	150	175	200	250	300	
	Throw	4-Way	1-1-1	1-1-2	1-1-3	1-1-4	1-1-5	1-2-6	1-3-8	2-4-9
		3-Way	1-1-3	1-1-5	1-2-6	1-3-8	1-4-9	2-5-10	3-6-13	5-8-16
		2-Way	1-1-4	1-2-7	1-3-9	2-4-10	2-6-12	3-7-14	5-9-18	7-10-19
		1-Way	1-1-6	1-2-8	2-4-11	2-6-13	3-7-15	5-8-17	7-11-20	8-13-22
Noise Criteria	—	—	16	22	27	31	38	44		
8 x 8	Total Pressure	.015	.026	.041	.059	.080	.104	.162	.234	
	Flow Rate, CFM	135	175	220	265	310	355	440	530	
	Throw	4-Way	1-1-1	1-1-2	1-1-3	1-1-4	1-1-5	1-2-6	1-3-8	2-4-9
		3-Way	1-1-3	1-1-5	1-2-6	1-3-8	1-4-9	2-5-10	3-6-13	5-8-16
		2-Way	1-1-4	1-2-7	1-3-9	2-4-10	2-6-12	3-7-14	5-9-18	7-10-19
		1-Way	1-1-6	1-2-8	2-4-11	2-6-13	3-7-15	5-8-17	7-11-20	8-13-22
Noise Criteria	—	12	19	25	30	34	41	47		

Models 4320, 4320A, 4320AA • Flush Face • 24 x 12 (600 x 300) Module Size

Nominal Neck Size	Neck Velocity, FPM	300	400	500	600	700	800	1000	1200	
	Velocity Pressure	.006	.010	.016	.023	.031	.040	.063	.090	
6" Dia.	Total Pressure	.012	.020	.032	.046	.063	.082	.128	.185	
	Flow Rate, CFM	58	78	98	117	137	156	196	235	
	Throw	4-Way	1-1-1	1-1-1	1-1-3	1-1-4	1-1-4	1-1-5	1-3-6	1-4-8
		3-Way	1-1-2	1-1-4	1-1-5	1-2-6	1-3-7	1-4-8	2-5-11	4-6-13
		2-Way	1-1-3	1-1-6	1-2-7	1-3-9	2-4-10	2-6-12	4-7-15	6-9-16
		1-Way	1-1-4	1-2-7	1-3-9	2-4-11	2-6-13	3-7-14	6-9-17	7-11-19
Noise Criteria	—	—	—	19	24	28	35	41		
8" Dia.	Total Pressure	.014	.022	.035	.049	.065	.086	.132	.194	
	Flow Rate, CFM	105	140	175	210	245	280	350	420	
	Throw	4-Way	1-1-1	1-1-1	1-1-3	1-1-4	1-1-4	1-1-5	1-3-6	1-4-8
		3-Way	1-1-2	1-1-4	1-1-5	1-2-6	1-3-7	1-4-8	2-5-11	4-6-13
		2-Way	1-1-3	1-1-6	1-2-7	1-3-9	2-4-10	2-6-12	4-7-15	6-9-16
		1-Way	1-1-4	1-2-7	1-3-9	2-4-11	2-6-13	3-7-14	6-9-17	7-11-19
Noise Criteria	—	—	16	22	27	31	38	44		
6 x 6	Total Pressure	.013	.022	.036	.052	.074	.092	.143	.206	
	Flow Rate, CFM	75	100	125	150	175	200	250	300	
	Throw	4-Way	1-1-1	1-1-2	1-1-3	1-1-4	1-1-5	1-2-6	1-3-8	2-4-9
		3-Way	1-1-3	1-1-5	1-2-6	1-3-8	1-4-9	2-5-10	3-6-13	5-8-16
		2-Way	1-1-4	1-2-7	1-3-9	2-4-10	2-6-12	3-7-14	5-9-18	7-10-19
		1-Way	1-1-6	1-2-8	2-4-11	2-6-13	3-7-15	5-8-17	7-11-20	8-13-22
Noise Criteria	—	—	16	22	27	31	38	44		
8 x 8	Total Pressure	.015	.026	.041	.059	.080	.104	.162	.234	
	Flow Rate, CFM	135	175	220	265	310	355	440	530	
	Throw	4-Way	1-1-1	1-1-2	1-1-3	1-1-4	1-1-5	1-2-6	1-3-8	2-4-9
		3-Way	1-1-3	1-1-5	1-2-6	1-3-8	1-4-9	2-5-10	3-6-13	5-8-16
		2-Way	1-1-4	1-2-7	1-3-9	2-4-10	2-6-12	3-7-14	5-9-18	7-10-19
		1-Way	1-1-6	1-2-8	2-4-11	2-6-13	3-7-15	5-8-17	7-11-20	8-13-22
Noise Criteria	—	12	19	25	30	34	41	47		

For performance notes, see page D160.

PERFORMANCE DATA:

Models 4320, 4320A, 4320AA • Flush Face • 24 x 24 (600 x 600) and 48 x 24 (1200 x 600)
Module Size • Round Neck

Nominal Neck Size	Neck Velocity, FPM	300	400	500	600	700	800	1000	1200	
	Velocity Pressure	.006	.010	.016	.023	.031	.040	.063	.090	
6" Dia.	Total Pressure	.012	.020	.032	.046	.062	.082	.128	.185	
	Flow Rate, CFM	58	78	98	117	137	156	196	235	
	Throw	4-Way	1-1-1	1-1-1	1-1-3	1-1-4	1-1-4	1-1-5	1-3-6	1-4-8
		3-Way	1-1-2	1-1-4	1-1-5	1-2-6	1-3-7	1-4-8	2-5-11	4-6-13
		2-Way	1-1-3	1-1-6	1-2-7	1-3-9	2-4-10	2-6-12	4-7-15	6-9-16
1-Way		1-1-4	1-2-7	1-3-9	2-4-11	2-6-13	3-7-14	6-9-17	7-11-19	
Noise Criteria	—	—	10	18	21	25	32	38		
8" Dia.	Total Pressure	.015	.026	.042	.060	.082	.107	.167	.241	
	Flow Rate, CFM	104	139	174	209	244	279	349	418	
	Throw	4-Way	1-1-2	1-1-3	1-1-5	1-2-6	1-2-7	1-3-8	2-5-10	3-6-12
		3-Way	1-1-4	1-2-6	1-3-8	2-4-10	2-5-11	3-6-13	5-8-17	6-10-20
		2-Way	1-1-6	1-3-9	2-4-11	3-6-13	4-8-16	5-9-18	7-11-22	9-13-24
1-Way		1-2-8	1-4-11	2-6-14	4-8-16	5-9-19	7-11-22	9-14-26	11-16-29	
Noise Criteria	—	11	16	22	27	31	38	44		
10" Dia.	Total Pressure	.019	.033	.053	.075	.102	.135	.210	.302	
	Flow Rate, CFM	163	218	272	327	381	436	545	654	
	Throw	4-Way	1-1-3	1-1-5	1-2-7	1-3-8	2-4-10	2-5-11	4-7-14	5-8-17
		3-Way	1-1-7	1-3-9	2-5-11	3-7-14	4-8-16	5-9-18	7-11-23	9-14-27
		2-Way	1-2-9	2-5-12	3-7-15	5-9-19	7-11-22	8-12-26	10-15-32	12-19-34
1-Way		1-3-11	3-7-15	4-9-19	7-11-23	9-13-28	10-15-31	12-19-36	15-23-39	
Noise Criteria	—	16	21	27	32	36	43	49		
12" Dia.	Total Pressure	.022	.040	.063	.091	.124	.162	.253	.364	
	Flow Rate, CFM	235	314	392	471	549	628	785	942	
	Throw	4-Way	1-1-5	1-2-7	1-3-9	2-5-11	3-6-13	4-7-14	6-9-18	7-11-22
		3-Way	1-2-9	2-5-12	3-7-15	5-9-18	6-10-21	8-12-24	10-15-31	12-18-36
		2-Way	1-4-12	3-7-16	5-10-20	7-12-24	9-14-29	10-16-33	13-20-41	16-24-44
1-Way		2-6-14	4-9-19	7-12-24	9-14-30	11-17-35	13-19-40	16-24-46	19-30-50	
Noise Criteria	—	19	25	31	36	40	47	53		
14" Dia.	Total Pressure	.026	.047	.073	.105	.143	.187	.292	.420	
	Flow Rate, CFM	318	424	530	636	742	848	1060	1272	
	Throw	4-Way	1-1-6	1-3-9	2-5-11	3-6-13	4-8-16	5-9-18	7-11-23	9-13-28
		3-Way	1-4-11	3-7-14	4-9-18	7-11-22	8-13-27	9-14-30	12-18-38	14-22-44
		2-Way	2-6-15	4-10-20	7-12-26	10-15-31	11-17-36	13-20-41	16-26-50	20-31-54
1-Way		3-8-18	6-12-24	10-15-31	12-18-38	14-21-44	16-24-50	20-30-57	24-38-62	
Noise Criteria	13	23	29	35	40	44	51	57		
15" Dia.	Total Pressure	.029	.052	.081	.117	.159	.208	.324	.467	
	Flow Rate, CFM	370	490	615	740	860	985	1225	1475	
	Throw	4-Way	1-1-6	1-3-9	2-5-11	3-6-13	4-8-16	5-9-18	7-11-23	9-13-28
		3-Way	1-4-11	3-7-14	4-9-18	7-11-22	8-13-27	9-14-30	12-18-38	14-22-44
		2-Way	2-6-15	4-10-20	7-12-26	10-15-31	11-17-36	13-20-41	16-26-50	20-31-54
1-Way		3-8-18	6-12-24	10-15-31	12-18-38	14-21-44	16-24-50	20-30-57	24-38-62	
Noise Criteria	15	25	31	37	42	46	53	59		
16" Dia.	Total Pressure	.032	.058	.090	.129	.175	.229	.359	.517	
	Flow Rate, CFM	418	558	698	837	977	1116	1396	1675	
	Throw	4-Way	1-3-10	2-5-13	3-8-15	5-10-16	7-12-22	9-13-19	12-15-21	13-16-23
		3-Way	3-5-9	5-7-10	6-8-11	7-9-12	8-9-13	8-10-14	9-11-16	10-12-18
		2-Way	2-5-11	4-8-13	6-10-14	8-11-16	9-12-17	10-13-18	12-14-20	13-16-22
1-Way		7-12-21	11-17-24	14-29-28	17-21-31	18-23-33	20-24-36	22-28-40	24-31-43	
Noise Criteria	16	26	32	38	43	47	54	60		

For performance notes, see page D160.

PERFORMANCE DATA:

Models 4320, 4320A, 4320AA • Flush Face • 24 x 24 (600 x 600) and 48 x 24 (1200 x 600)
Module Size • Square Neck

Nominal Neck Size	Neck Velocity, FPM	300	400	500	600	700	800	1000	1200	
	Velocity Pressure	.006	.010	.016	.023	.031	.040	.063	.090	
6 x 6	Total Pressure	.013	.022	.036	.052	.070	.092	.143	.206	
	Flow Rate, CFM	75	100	125	150	175	200	250	300	
	Throw	4-Way	1-1-1	1-1-2	1-1-3	1-1-4	1-1-5	1-2-6	1-3-8	2-4-9
		3-Way	1-1-3	1-1-5	1-2-6	1-3-8	1-4-9	2-5-10	3-6-13	5-8-16
		2-Way	1-1-4	1-2-7	1-3-9	2-4-10	2-6-12	3-7-14	5-9-18	7-10-19
1-Way		1-1-6	1-2-8	2-4-11	2-6-13	3-7-15	5-8-17	7-11-20	8-13-22	
Noise Criteria	—	—	12	20	23	27	34	40		
8 x 8	Total Pressure	.018	.030	.048	.069	.094	.123	.191	.276	
	Flow Rate, CFM	133	177	222	266	310	355	444	532	
	Throw	4-Way	1-1-2	1-1-4	1-1-6	1-2-7	1-3-8	2-4-9	3-6-12	4-7-14
		3-Way	1-1-5	1-2-8	1-4-10	2-5-12	3-7-14	4-8-16	6-10-20	8-12-24
		2-Way	1-2-8	1-4-10	2-6-13	4-8-16	5-9-19	7-10-21	9-13-27	10-16-30
1-Way		1-3-9	2-5-13	3-8-16	5-9-19	7-11-23	8-13-27	11-16-31	13-19-34	
Noise Criteria	—	14	19	25	30	34	41	47		
10 x 10	Total Pressure	.021	.038	.059	.086	.116	.152	.237	.341	
	Flow Rate, CFM	208	277	347	416	485	555	694	832	
	Throw	4-Way	1-1-4	1-2-6	1-3-8	2-4-10	2-5-11	3-6-13	5-8-16	6-10-20
		3-Way	1-2-8	1-4-11	3-6-13	4-8-16	5-9-19	7-11-22	9-13-28	11-16-33
		2-Way	1-3-11	3-6-14	4-9-18	6-11-22	8-13-27	9-14-30	12-18-37	14-22-40
1-Way		2-5-13	4-9-18	6-11-22	9-13-28	10-16-33	12-18-37	15-22-42	18-28-46	
Noise Criteria	—	17	24	30	35	39	45	52		
12 x 12	Total Pressure	.025	.046	.071	.103	.140	.183	.286	.411	
	Flow Rate, CFM	300	400	500	600	700	800	1000	1200	
	Throw	4-Way	1-1-6	1-3-8	2-4-11	3-6-13	4-7-15	5-8-17	7-11-22	8-13-27
		3-Way	1-3-10	2-6-14	4-9-18	6-10-21	8-12-26	9-14-29	11-18-37	14-21-42
		2-Way	2-5-14	4-9-19	7-12-24	9-14-30	11-17-35	13-19-40	16-24-47	19-30-52
1-Way		3-8-17	6-11-23	9-14-30	11-17-36	13-20-42	15-23-48	19-30-54	23-36-59	
Noise Criteria	12	21	28	34	39	43	49	56		
14 x 14	Total Pressure	.031	.055	.086	.124	.169	.221	.345	.497	
	Flow Rate, CFM	410	545	680	815	955	1090	1360	1635	
	Throw	4-Way	1-1-6	1-3-8	2-4-11	3-6-13	4-7-15	5-8-17	7-11-22	8-13-27
		3-Way	1-3-10	2-6-14	4-9-18	6-10-21	8-12-26	9-14-29	11-18-37	14-21-42
		2-Way	2-5-14	4-9-19	7-12-24	9-14-30	11-17-35	13-19-40	16-24-47	19-30-52
1-Way		3-8-17	6-11-23	9-14-30	11-17-36	13-20-42	15-23-48	19-30-54	23-36-59	
Noise Criteria	15	24	31	37	42	46	52	59		

Performance Notes:

- All pressures are in inches w.g..
- Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
- Noise Criteria (NC) values are based on 10 dB room absorption, re 10⁻¹² watts. Dash (—) in spaces indicates an Noise Criteria level of less than 10.
- Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2023.

Neck Size Square in Inches	Nominal Overall Face Size	Ak Factor
6 x 6	12 x 12	.2345
8 x 8	12 x 12	.3461
6 x 6	24 x 24	.6932
8 x 8	24 x 24	.7620
10 x 10	24 x 24	.7995
12 x 12	24 x 24	.8465
14 x 14	24 x 24	.8993

Neck Size Diameter in Inches	Nominal Overall Face Size	Ak Factor
6	12 x 12	.2289
8	12 x 12	.3461
6	24 x 24	.6010
8	24 x 24	.6854
10	24 x 24	.7283
12	24 x 24	.7651
14	24 x 24	.8102
15	24 x 24	.8389

PERFORMANCE DATA:

Models 4320CB, 4325CB, 4320CBA, 4325CBA, 4320CBAA, 4325CBAA • 12 x 12 Module Size

Nominal Neck Size	Neck Velocity, FPM	300	400	500	600	700	800	900	1100	
	Velocity Pressure	.006	.010	.016	.023	.031	.040	.051	.075	
6" Dia.	Total Pressure	.023	.042	.037	.039	.052	.159	.204	.307	
	Flow Rate, CFM	60	80	95	115	135	155	175	215	
	Throw	4-Way	1-2-4	2-3-6	2-4-7	3-5-7	3-5-8	4-6-9	5-6-9	6-6-11
		3-Way	2-3-6	2-4-8	3-5-11	4-6-12	5-7-13	5-8-14	6-10-15	7-11-16
		2-Way	2-4-8	3-5-11	4-6-13	5-8-15	6-9-16	7-11-18	8-12-20	9-13-22
1-Way		3-4-9	4-6-12	5-8-16	6-9-18	7-11-20	8-12-22	9-14-23	10-16-26	
Noise Criteria	—	—	—	18	23	28	32	40		
8" Dia.	Total Pressure	.025	.045	.069	.102	.137	.180	.227	.340	
	Flow Rate, CFM	105	140	175	210	245	280	315	385	
	Throw	4-Way	2-3-6	2-4-8	3-5-9	4-6-10	4-7-11	4-8-12	5-9-12	6-9-15
		3-Way	2-3-7	3-4-9	3-5-11	4-7-12	5-8-13	6-9-14	7-10-14	8-11-16
		2-Way	3-4-9	4-6-13	5-8-15	6-9-17	7-11-18	8-13-20	9-14-21	10-16-24
1-Way		3-5-11	5-7-15	6-9-18	7-11-21	8-13-22	10-15-24	11-17-25	12-19-29	
Noise Criteria	—	—	15	21	26	31	34	41		
6 x 6	Total Pressure	.025	.045	.066	.096	.132	.175	.224	.338	
	Flow Rate, CFM	75	100	125	150	175	200	225	275	
	Throw	4-Way	1-2-5	2-3-7	3-4-8	3-5-8	4-6-9	5-7-10	5-7-11	6-8-12
		3-Way	2-3-6	2-4-8	3-5-11	4-6-12	5-7-13	5-8-14	6-10-15	7-11-17
		2-Way	3-4-9	4-6-12	5-7-15	6-9-17	7-10-20	8-12-21	9-14-22	10-16-25
1-Way		3-5-10	4-7-14	6-9-18	7-10-21	8-12-23	9-14-24	10-16-26	11-18-29	
Noise Criteria	—	—	—	19	24	29	33	41		
8 x 8	Total Pressure	.027	.049	.076	.112	.151	.197	.249	.374	
	Flow Rate, CFM	135	175	220	265	310	355	400	490	
	Throw	4-Way	2-3-6	3-4-9	3-5-10	4-6-11	5-8-12	6-9-13	6-10-14	7-11-16
		3-Way	2-3-7	3-5-10	4-6-12	5-7-13	6-9-14	7-10-15	7-11-16	8-12-18
		2-Way	3-5-11	4-7-14	6-9-17	7-11-20	8-13-21	9-14-23	11-16-24	12-18-27
1-Way		4-6-12	5-8-17	7-10-21	8-12-23	9-14-25	11-17-27	12-20-28	14-23-32	
Noise Criteria	—	—	16	22	27	32	35	42		

Models 4320CB, 4325CB, 4320CBA, 4325CBA, 4320CBAA, 4325CBAA • 24 x 12 Module Size

Nominal Neck Size	Neck Velocity, FPM	300	400	500	600	700	800	900	1100	
	VP	.006	.010	.016	.023	.031	.040	.051	.075	
6" Dia.	Total Pressure	.023	.042	.037	.039	.052	.159	.204	.307	
	Flow Rate, CFM	60	80	95	115	135	155	175	215	
	Throw	4-Way	1-2-4	2-3-6	2-4-7	3-5-7	3-5-8	4-6-9	5-6-9	6-6-11
		3-Way	2-3-6	2-4-8	3-5-11	4-6-12	5-7-13	5-8-14	6-10-15	7-11-16
		2-Way	2-4-8	3-5-11	4-6-13	5-8-15	6-9-16	7-11-18	8-12-20	9-13-22
1-Way		3-4-9	4-6-12	5-8-16	6-9-18	7-11-20	8-12-22	9-14-23	10-16-26	
Noise Criteria	—	—	—	18	23	28	32	40		
8" Dia.	Total Pressure	.025	.045	.069	.102	.137	.180	.227	.340	
	Flow Rate, CFM	105	140	175	210	245	280	315	385	
	Throw	4-Way	2-3-6	2-4-8	3-5-9	4-6-10	4-7-11	4-8-12	5-9-12	6-9-15
		3-Way	2-3-7	3-4-9	3-5-11	4-7-12	5-8-13	6-9-14	7-10-14	8-11-16
		2-Way	3-4-9	4-6-13	5-8-15	6-9-17	7-11-18	8-13-20	9-14-21	10-16-24
1-Way		3-5-11	5-7-15	6-9-18	7-11-21	8-13-22	10-15-24	11-17-25	12-19-29	
Noise Criteria	—	—	15	21	26	31	34	41		
6 x 6	Total Pressure	.025	.045	.066	.096	.132	.175	.224	.338	
	Flow Rate, CFM	75	100	125	150	175	200	225	275	
	Throw	4-Way	1-2-5	2-3-7	3-4-8	3-5-8	4-6-9	5-7-10	5-7-11	6-8-12
		3-Way	2-3-6	2-4-8	3-5-11	4-6-12	5-7-13	5-8-14	6-10-15	7-11-17
		2-Way	3-4-9	4-6-12	5-7-15	6-9-17	7-10-20	8-12-21	9-14-22	10-16-25
1-Way		3-5-10	4-7-14	6-9-18	7-10-21	8-12-23	9-14-24	10-16-26	11-18-29	
Noise Criteria	—	—	—	19	24	29	33	41		
8 x 8	Total Pressure	.027	.049	.076	.112	.151	.197	.249	.374	
	Flow Rate, CFM	135	175	220	265	310	355	400	490	
	Throw	4-Way	2-3-6	3-4-9	3-5-10	4-6-11	5-8-12	6-9-13	6-10-14	7-11-16
		3-Way	2-3-7	3-5-10	4-6-12	5-7-13	6-9-14	7-10-15	7-11-16	8-12-18
		2-Way	3-5-11	4-7-14	6-9-17	7-11-20	8-13-21	9-14-23	11-16-24	12-18-27
1-Way		4-6-12	5-8-17	7-10-21	8-12-23	9-14-25	11-17-27	12-20-28	14-23-32	
Noise Criteria	—	—	16	22	27	32	35	42		

For performance notes, see page D171.

PERFORMANCE DATA:

Models 4320CB, 4325CB, 4320CBA, 4325CBA, 4320CBAA, 4325CBAA • 24 x 24 (600 x 600)

Module Size • Round Neck

Nominal Neck Size	Neck Velocity, FPM	300	400	500	600	700	800	900	1100	
	Velocity Pressure	.006	.010	.016	.023	.031	.040	.051	.075	
6" Dia.	Total Pressure	.014	.025	.036	.052	.071	.094	.120	.181	
	Flow Rate, CFM	60	80	95	115	135	155	175	215	
	Throw	4-Way	1-2-4	2-3-6	2-3-7	3-4-7	3-5-8	4-6-9	4-6-9	5-6-11
		3-Way	1-2-5	2-3-7	2-4-8	3-5-9	4-6-9	4-7-10	5-7-11	6-8-12
		2-Way	2-3-7	3-4-9	4-6-11	4-7-12	5-8-13	6-9-14	7-11-15	8-12-17
1-Way		2-4-8	3-5-11	4-7-13	5-8-15	6-9-16	7-11-17	8-12-18	9-14-21	
Noise Criteria	—	—	—	17	22	26	28	35		
8" Dia.	Total Pressure	.015	.027	.041	.060	.081	.106	.134	.200	
	Flow Rate, CFM	105	140	175	210	245	280	315	385	
	Throw	4-Way	2-3-6	2-4-8	3-5-9	4-6-10	4-7-11	4-8-12	5-9-12	6-9-15
		3-Way	2-3-7	3-4-9	3-5-11	4-7-12	5-8-13	6-9-14	7-10-14	8-11-16
		2-Way	3-4-9	4-6-13	5-8-15	6-9-17	7-11-18	8-13-20	9-14-21	10-16-24
1-Way		3-5-11	5-7-15	6-9-18	7-11-21	8-13-22	10-15-24	11-17-25	12-19-29	
Noise Criteria	—	—	17	21	26	30	32	37		
10" Dia.	Total Pressure	.017	.029	.045	.066	.090	.118	.149	.224	
	Flow Rate, CFM	165	215	270	325	380	435	490	600	
	Throw	4-Way	2-3-7	3-5-10	4-6-12	5-7-13	5-8-14	6-10-15	7-11-16	8-12-19
		3-Way	2-4-8	3-5-11	4-7-13	5-8-15	6-10-16	7-11-17	8-13-18	9-15-21
		2-Way	4-6-12	5-8-16	6-10-20	8-12-22	9-14-23	10-16-25	12-18-27	14-21-31
1-Way		4-7-14	6-9-18	7-11-23	9-14-26	11-16-28	12-18-29	14-22-31	16-25-35	
Noise Criteria	—	—	19	23	28	31	34	40		
12" Dia.	Total Pressure	.018	.032	.050	.072	.099	.127	.162	.394	
	Flow Rate, CFM	235	315	390	470	550	625	705	865	
	Throw	4-Way	3-4-9	4-6-12	5-7-14	6-9-15	7-10-17	8-12-18	9-13-20	10-15-22
		3-Way	3-5-10	4-7-14	5-8-16	7-10-18	8-12-20	9-14-22	10-15-23	11-17-26
		2-Way	4-7-14	6-9-20	8-12-24	9-14-26	11-17-28	13-20-30	14-23-32	16-26-36
1-Way		5-8-17	7-11-23	9-14-28	11-17-31	13-20-33	15-23-35	17-26-37	19-29-42	
Noise Criteria	—	16	21	25	29	33	36	42		
14" Dia.	Total Pressure	.019	.034	.054	.078	.107	.139	.175	.230	
	Flow Rate, CFM	320	425	535	640	750	855	960	1175	
	Throw	4-Way	3-5-10	4-7-14	5-8-16	7-10-18	8-12-21	9-14-22	10-16-23	14-19-26
		3-Way	4-6-12	5-8-16	6-10-20	8-12-22	9-14-24	10-16-25	12-18-27	14-21-31
		2-Way	5-8-17	7-11-24	9-14-28	11-17-30	13-21-33	15-24-35	17-26-37	19-29-42
1-Way		6-9-20	8-13-27	11-16-33	13-20-36	15-24-38	17-27-41	20-30-43	23-34-49	
Noise Criteria	—	17	22	26	30	34	38	45		
15" Dia.	Total Pressure	.011	.036	.056	.081	.110	.144	.180	.271	
	Flow Rate, CFM	370	490	615	740	860	985	1100	1350	
	Throw	4-Way	3-6-10	4-2-14	5-8-17	8-10-19	8-13-21	10-14-23	10-16-24	14-19-26
		3-Way	4-6-12	6-8-17	6-11-21	8-13-22	10-14-25	11-16-26	13-18-28	15-21-32
		2-Way	4-8-17	7-12-25	9-15-30	11-18-31	13-22-34	16-25-35	17-27-38	19-31-43
1-Way		6-9-20	8-14-28	12-17-34	14-21-37	16-24-39	18-27-42	17-31-43	19-35-49	
Noise Criteria	—	18	23	27	31	35	39	46		
16" Dia.	Total Pressure	.021	.038	.059	.084	.114	.149	.189	.283	
	Flow Rate, CFM	420	560	700	835	975	1115	1255	1535	
	Throw	4-Way	4-6-12	5-8-16	6-10-20	8-12-22	9-14-23	10-16-25	12-18-26	16-22-31
		3-Way	4-7-14	6-9-18	7-11-23	9-14-25	10-16-27	12-18-29	14-22-30	16-25-34
		2-Way	6-9-20	8-13-27	10-16-32	13-20-35	15-24-37	17-27-40	20-30-42	23-34-48
1-Way		7-11-23	10-15-31	12-18-37	15-23-41	17-27-44	21-31-47	23-35-50	26-40-57	
Noise Criteria	—	19	24	28	32	36	40	47		
18" Dia.	Total Pressure	.022	.039	.061	.087	.118	.155	.196	.293	
	Flow Rate, CFM	530	705	885	1060	1235	1415	1590	1945	
	Throw	4-Way	4-7-14	5-9-18	7-10-20	9-13-24	10-16-26	10-19-28	13-21-29	17-25-33
		3-Way	4-7-17	6-10-21	8-12-24	10-15-28	11-20-30	13-22-32	17-24-34	19-27-39
		2-Way	7-10-23	10-14-29	11-17-34	15-22-36	18-28-43	20-30-44	24-34-50	27-39-57
1-Way		8-12-26	11-17-33	14-21-40	18-25-45	21-32-50	23-38-53	29-40-56	33-46-64	
Noise Criteria	—	21	26	30	34	38	42	49		

For performance notes, see page D171.

PERFORMANCE DATA:

Models 4320CB, 4325CB, 4320CBA, 4325CBA, 4320CBAA, 4325CBAA • 24 x 24 (600 x 600)
Module Size • Square Neck

Nominal Neck Size	Neck Velocity, FPM	300	400	500	600	700	800	900	1100	
	Velocity Pressure	.006	.010	.016	.023	.031	.040	.051	.075	
6 x 6	Total Pressure	.015	.027	.039	.057	.078	.103	.132	.199	
	Flow Rate, CFM	75	100	125	150	175	200	225	275	
	Throw	4-Way	1-2-5	2-3-7	3-4-8	3-5-8	4-6-9	5-7-10	5-7-11	6-8-12
		3-Way	2-3-6	2-4-8	3-5-11	4-6-12	5-7-13	5-8-14	6-10-15	7-11-16
		2-Way	3-4-9	4-6-12	5-7-15	6-9-17	7-10-20	8-12-21	9-14-22	10-16-25
1-Way		3-5-10	4-7-14	6-9-18	7-10-21	8-12-23	9-14-24	10-16-26	11-18-29	
Noise Criteria	—	—	—	18	23	27	29	35		
8 x 8	Total Pressure	.016	.029	.045	.066	.089	.116	.147	.220	
	Flow Rate, CFM	135	175	220	265	310	355	400	490	
	Throw	4-Way	2-3-6	3-4-9	3-5-10	4-6-11	5-8-12	6-9-13	6-10-14	7-11-16
		3-Way	2-3-7	3-5-10	4-6-12	5-7-13	6-9-14	7-10-15	7-11-16	8-12-18
		2-Way	3-5-11	4-7-14	6-9-17	7-11-20	8-13-21	9-14-23	11-16-24	12-18-27
1-Way		4-6-12	5-8-17	7-10-21	8-12-23	9-14-25	11-17-27	12-20-28	15-22-32	
Noise Criteria	—	—	18	22	27	31	33	38		
10 x 10	Total Pressure	.018	.031	.049	.072	.099	.129	.163	.246	
	Flow Rate, CFM	210	275	345	415	485	555	625	765	
	Throw	4-Way	2-4-8	3-5-11	4-7-13	5-8-14	6-10-16	7-11-17	8-12-18	9-13-21
		3-Way	3-4-9	4-6-13	5-8-15	6-9-17	7-11-18	8-13-20	9-14-22	10-16-25
		2-Way	4-6-13	6-9-18	7-11-22	9-13-25	10-16-26	12-18-28	13-21-30	15-24-34
1-Way		5-8-16	7-10-22	8-13-26	10-16-29	12-18-31	14-22-33	16-25-35	18-29-40	
Noise Criteria	—	—	20	24	29	32	35	41		
12 x 12	Total Pressure	.019	.035	.055	.079	.108	.139	.178	.433	
	Flow Rate, CFM	300	400	500	600	700	800	900	1100	
	Throw	4-Way	3-5-10	4-6-13	5-8-16	6-10-17	8-12-20	9-13-21	10-15-22	11-17-25
		3-Way	3-5-11	5-7-15	6-9-18	7-11-21	9-13-23	10-15-24	11-17-26	12-19-29
		2-Way	5-8-16	7-11-23	9-13-27	11-16-29	13-20-32	14-23-34	16-25-36	18-29-41
1-Way		6-9-20	8-12-26	10-16-31	12-20-34	14-23-37	17-26-40	22-31-44	25-35-50	
Noise Criteria	—	17	22	26	30	34	37	43		
14 x 14	Total Pressure	.020	.037	.059	.085	.117	.152	.192	.253	
	Flow Rate, CFM	410	545	680	815	955	1090	1225	1500	
	Throw	4-Way	1-1-6	1-3-8	2-4-11	3-6-13	4-7-15	5-8-17	7-11-22	8-12-25
		3-Way	1-3-10	2-6-14	4-9-18	6-10-21	8-12-26	9-14-29	11-18-37	12-21-42
		2-Way	2-5-14	4-9-19	7-12-24	9-14-30	11-17-35	13-19-40	16-24-47	18-27-54
1-Way		3-8-17	6-11-23	9-14-30	11-17-36	13-20-42	15-23-48	19-30-54	22-35-64	
Noise Criteria	—	18	23	27	31	35	39	46		
15 x 15	Total Pressure	.012	.039	.061	.089	.121	.158	.198	.298	
	Flow Rate, CFM	470	625	780	935	1095	1250	1405	1720	
	Throw	4-Way	4-6-12	5-8-17	7-10-21	8-12-23	10-15-25	11-17-26	12-20-28	13-22-32
		3-Way	4-7-14	6-9-20	8-12-24	9-14-26	11-17-28	13-20-30	14-23-32	16-26-36
		2-Way	6-10-21	9-13-28	11-17-33	13-21-37	16-25-40	18-28-42	21-32-45	24-36-51
1-Way		8-12-25	10-16-33	13-21-39	16-25-43	18-29-46	22-33-49	25-37-53	29-42-60	
Noise Criteria	—	19	24	28	32	36	40	47		
16 x 16	Total Pressure	.023	.041	.064	.092	.125	.163	.207	.311	
	Flow Rate, CFM	530	710	890	1065	1245	1420	1600	1955	
	Throw	4-Way	4-7-14	5-9-18	7-10-20	9-13-24	10-16-26	10-19-28	13-21-29	15-24-33
		3-Way	4-7-17	6-10-21	8-12-24	10-15-28	11-20-30	13-22-32	17-24-34	19-27-39
		2-Way	7-10-23	10-14-29	11-17-34	15-22-36	18-28-43	20-30-44	24-34-50	27-39-57
1-Way		8-12-26	11-17-33	14-21-40	18-25-45	21-32-50	23-38-53	29-40-56	33-46-64	
Noise Criteria	—	20	25	29	33	37	41	49		
18 x 18	Total Pressure	.024	.042	.067	.095	.129	.170	.215	.322	
	Flow Rate, CFM	675	900	1125	1350	1575	1800	2025	2475	
	Throw	4-Way	5-7-15	6-10-21	8-12-25	10-15-27	12-18-30	13-21-32	15-24-33	17-27-38
		3-Way	5-8-17	7-11-24	9-14-29	11-17-32	13-22-34	15-24-36	17-27-39	19-31-44
		2-Way	8-12-26	11-16-34	13-21-40	16-26-44	20-30-47	23-34-50	26-38-54	29-43-62
1-Way		9-14-29	12-20-39	16-25-47	20-29-52	23-34-56	26-39-60	29-44-64	33-50-73	
Noise Criteria	15	22	27	31	35	39	43	51		

Performance Notes:

- All pressures are in inches w.g..
- Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
- Noise Criteria (NC) values are based upon 10 dB room absorption, re 10⁻¹² watts.

Dash (—) in space indicates an Noise Criteria of less than 15.

4. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2023.

Balancing:

It is recommended that a commercially

available 'Flow Hood' is used for field balancing. The airflow meter directly reads average flow rate with great accuracy at all volumes. It is a much faster and more accurate alternative to time consuming multiple velocity readings, eliminating the use of Ak factors and the calculations required to convert the average velocity into airflow.

PERFORMANCE DATA:

Models 4320F, 4320FA, 4320FAA, 4325F, 4325FA, 4325FAA • 24 x 24 (600 x 600) Module Size • Round Neck

Nominal Neck Size	Neck Velocity, FPM	300	400	500	600	700	800	900	
	Velocity Pressure	.006	.010	.016	.023	.031	.040	.051	
	Total Pressure	.026	.047	.073	.105	.143	.186	.236	
6" Dia.	Flow Rate, CFM	60	80	95	115	135	155	175	
	Throw	4-Way	1-2-4	2-3-6	2-3-7	3-4-7	3-5-8	4-6-9	4-6-9
		3-Way	1-2-5	2-3-7	2-4-8	3-5-9	4-6-9	4-7-10	5-7-11
		2-Way	2-3-7	3-4-9	4-6-11	4-7-12	5-8-13	6-9-14	7-11-15
		1-Way	2-4-8	3-5-11	4-7-13	5-8-15	6-9-16	7-11-17	8-12-18
Noise Criteria	—	—	17	23	28	33	36		
8" Dia.	Flow Rate, CFM	105	140	175	210	245	280	315	
	Throw	4-Way	2-3-6	2-4-8	3-5-9	4-6-10	4-7-11	4-8-12	5-9-12
		3-Way	2-3-7	3-4-9	3-5-11	4-7-12	5-8-13	6-9-14	7-10-14
		2-Way	3-4-9	4-6-13	5-8-15	6-9-17	7-11-18	8-13-20	9-14-21
		1-Way	3-5-11	5-7-15	6-9-18	7-11-21	8-13-22	10-15-24	11-17-25
Noise Criteria	—	—	20	26	31	36	39		
10" Dia.	Flow Rate, CFM	165	215	270	325	380	435	490	
	Throw	4-Way	2-3-7	3-5-10	4-6-12	5-7-13	5-8-14	6-10-15	7-11-16
		3-Way	2-4-8	3-5-11	4-7-13	5-8-15	6-10-16	7-11-17	8-13-18
		2-Way	4-6-12	5-8-16	6-10-20	8-12-22	9-14-23	10-16-25	12-18-27
		1-Way	4-7-14	6-9-18	7-11-23	9-14-26	11-16-28	12-18-29	14-22-31
Noise Criteria	—	15	23	29	34	38	40		
12" Dia.	Flow Rate, CFM	235	315	390	470	550	625	705	
	Throw	4-Way	3-4-9	4-6-12	5-7-14	6-9-15	7-10-17	8-12-18	9-13-20
		3-Way	3-5-10	4-7-14	5-8-16	7-10-18	8-12-20	9-14-22	10-15-23
		2-Way	4-7-14	6-9-20	8-12-24	9-14-26	11-17-28	13-20-30	14-23-32
		1-Way	5-8-17	7-11-23	9-14-28	11-17-31	13-20-33	15-23-35	17-26-37
Noise Criteria	—	16	24	30	35	39	41		
14" Dia.	Flow Rate, CFM	320	425	535	640	750	855	960	
	Throw	4-Way	3-5-10	4-7-14	5-8-16	7-10-18	8-12-21	9-14-22	10-16-23
		3-Way	4-6-12	5-8-16	6-10-20	8-12-22	9-14-24	10-16-25	12-18-27
		2-Way	5-8-17	7-11-24	9-14-28	11-17-30	13-21-33	15-24-35	17-26-37
		1-Way	6-9-20	8-13-27	11-16-33	13-20-36	15-24-38	17-27-41	20-30-43
Noise Criteria	—	18	26	32	37	41	43		
15" Dia.	Flow Rate, CFM	370	490	615	740	860	985	1100	
	Throw	4-Way	3-6-10	4-2-14	5-8-17	8-10-19	8-13-21	10-14-23	10-16-24
		3-Way	4-6-12	6-8-17	6-11-21	8-13-22	10-14-25	11-16-26	13-18-28
		2-Way	4-8-17	7-12-25	9-15-30	11-18-31	13-22-34	16-25-35	17-27-38
		1-Way	6-9-20	8-14-28	12-17-34	14-21-37	16-24-39	18-27-42	17-31-43
Noise Criteria	—	19	27	33	38	42	44		
16" Dia.	Flow Rate, CFM	420	560	700	835	975	1115	1255	
	Throw	4-Way	4-6-12	5-8-16	6-10-20	8-12-22	9-14-23	10-16-25	12-18-26
		3-Way	4-7-14	6-9-18	7-11-23	9-14-25	10-16-27	12-18-29	14-22-30
		2-Way	6-9-20	8-13-27	10-16-32	13-20-35	15-24-37	17-27-40	20-30-42
		1-Way	7-11-23	10-15-31	12-18-37	15-23-41	17-27-44	21-31-47	23-35-50
Noise Criteria	—	21	28	34	39	43	45		

For performance notes, see page D185.

PERFORMANCE DATA:

Models 4320F, 4320FA, 4320FAA, 4325F, 4325FA, 4325FAA • 24 x 24 (600 x 600) Module Size • Square Neck

Nominal Neck Size	Neck Velocity, FPM	300	400	500	600	700	800	900	
	Velocity Pressure	.006	.010	.016	.023	.031	.040	.051	
	Total Pressure	.025	.045	.070	.100	.137	.179	.226	
6 x 6	Flow Rate, CFM	75	100	125	150	175	200	225	
	Throw	4-Way	1-2-5	2-3-7	3-4-8	3-5-8	4-6-9	5-7-10	5-7-11
		3-Way	2-3-6	2-4-8	3-5-11	4-6-12	5-7-13	5-8-14	6-10-15
		2-Way	3-4-9	4-6-12	5-7-15	6-9-17	7-10-20	8-12-21	9-14-22
		1-Way	3-5-10	4-7-14	6-9-18	7-10-21	8-12-23	9-14-24	10-16-26
Noise Criteria	—	—	18	24	29	34	37		
8 x 8	Flow Rate, CFM	135	175	220	265	310	355	400	
	Throw	4-Way	2-3-6	3-4-9	3-5-10	4-6-11	5-8-12	6-9-13	6-10-14
		3-Way	2-3-7	3-5-10	4-6-12	5-7-13	6-9-14	7-10-15	7-11-16
		2-Way	3-5-11	4-7-14	6-9-17	7-11-20	8-13-21	9-14-23	11-16-24
		1-Way	4-6-12	5-8-17	7-10-21	8-12-23	9-14-25	11-17-27	12-20-28
Noise Criteria	—	—	21	27	32	37	40		
10 x 10	Flow Rate, CFM	210	275	345	415	485	555	625	
	Throw	4-Way	2-4-8	3-5-11	4-7-13	5-8-14	6-10-16	7-11-17	8-12-18
		3-Way	3-4-9	4-6-13	5-8-15	6-9-17	7-11-18	8-13-20	9-14-22
		2-Way	4-6-13	6-9-18	7-11-22	9-13-25	10-16-26	12-18-28	13-21-30
		1-Way	5-8-16	7-10-22	8-13-26	10-16-29	12-18-31	14-22-33	16-25-35
Noise Criteria	—	16	24	30	35	39	41		
12 x 12	Flow Rate, CFM	300	400	500	600	700	800	900	
	Throw	4-Way	3-5-10	4-6-13	5-8-16	6-10-17	8-12-20	9-13-21	10-15-22
		3-Way	3-5-11	5-7-15	6-9-18	7-11-21	9-13-23	10-15-24	11-17-26
		2-Way	5-8-16	7-11-23	9-13-27	11-16-29	13-20-32	14-23-34	16-25-36
		1-Way	6-9-20	8-12-26	10-16-31	12-20-34	14-23-37	17-26-40	22-31-44
Noise Criteria	—	17	25	31	36	40	42		
14 x 14	Flow Rate, CFM	410	545	680	815	955	1090	1360	
	Throw	4-Way	1-1-6	1-3-8	2-4-11	3-6-13	4-7-15	5-8-17	7-11-22
		3-Way	1-3-10	2-6-14	4-9-18	6-10-21	8-12-26	9-14-29	11-18-37
		2-Way	2-5-14	4-9-19	7-12-24	9-14-30	11-17-35	13-19-40	16-24-47
		1-Way	3-8-17	6-11-23	9-14-30	11-17-1936	13-20-42	15-23-48	19-30-54
Noise Criteria	—	19	27	33	38	42	44		
15 x 15	Flow Rate, CFM	470	625	780	935	1095	1250	1405	
	Throw	4-Way	4-6-12	5-8-17	7-10-21	8-12-23	10-15-25	11-17-26	12-20-28
		3-Way	4-7-14	6-9-20	8-12-24	9-14-26	11-17-28	13-20-30	14-23-32
		2-Way	6-10-21	9-13-28	11-17-33	13-21-37	16-25-40	18-28-42	21-32-45
		1-Way	8-12-25	10-16-33	13-21-39	16-25-43	18-29-46	22-33-49	25-37-53
Noise Criteria	—	20	28	33	39	43	45		
16 x 16	Flow Rate, CFM	530	710	890	1065	1245	1420	1600	
	Throw	4-Way	4-7-14	5-9-18	7-10-20	9-13-24	10-16-26	10-19-28	13-21-29
		3-Way	4-7-17	6-10-21	8-12-24	10-15-28	11-20-30	13-22-32	17-24-34
		2-Way	7-10-23	10-14-29	11-17-34	15-22-36	18-28-43	20-30-44	24-34-50
		1-Way	8-12-26	11-17-33	14-21-40	18-25-45	21-32-50	23-38-53	29-40-56
Noise Criteria	—	22	29	35	40	44	45		

D
CEILING DIFFUSERS

Performance Notes:

1. All pressures are in inches w.g..
2. Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
3. Noise Criteria (NC) values are based upon 10 dB room absorption, re 10⁻¹² watts. Dash (—) in space indicates an Noise Criteria of less than 15.

4. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2023.

Balancing:

It is recommended that a commercially available 'Flow Hood' is used for field balancing. The airflow meter directly reads average flow rate with great accuracy at all volumes. It is a much faster and more accurate alternative to time consuming multiple velocity readings, eliminating the use of Ak factors and the calculations required to convert the average velocity into airflow.

PERFORMANCE DATA:

Models 4320M, 4320MA, 4325M, 4325MA • 12 x 12 (300 x 300) Module Size • Square Neck

Nominal Neck Size	Neck Velocity, FPM	300	400	500	600	700	800	900	
	Velocity Pressure	.006	.010	.016	.023	.031	.040	.051	
6 x 6	Total Pressure	.030	.048	.071	.119	.155	.196	.244	
	Flow Rate, CFM	75	100	125	150	175	200	225	
	Throw	4-Way	1-1-2	1-1-3	1-2-4	1-2-5	2-3-6	2-3-6	2-4-7
		3-Way	1-2-4	2-3-6	2-4-8	3-4-9	3-5-10	4-6-11	4-7-11
		2-Way	2-3-6	2-4-8	3-5-10	4-6-12	4-7-13	5-8-14	6-9-15
1-Way		3-4-9	4-6-12	5-8-16	6-9-19	7-11-20	8-12-22	9-14-22	
Noise Criteria	—	—	19	24	30	34	39		
8 x 8	Total Pressure	.028	.042	.064	.110	.141	.186	.240	
	Flow Rate, CFM	135	175	220	265	310	355	400	
	Throw	4-Way	1-1-3	1-2-5	2-3-6	2-3-7	2-4-8	3-5-8	3-5-9
		3-Way	2-3-6	2-4-8	3-5-10	4-6-13	5-7-14	5-8-15	6-9-15
		2-Way	2-4-8	3-5-11	4-6-13	5-8-16	6-9-18	7-11-19	8-12-20
1-Way		4-6-12	5-8-17	7-10-21	8-12-25	10-15-27	11-17-29	12-19-31	
Noise Criteria	—	16	23	28	34	38	43		

Performance Notes:

1. All pressures are in inches w.g..
2. Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
3. Noise Criteria (NC) values are based upon 10 dB room absorption, re 10⁻¹² watts. Dash (—) in space indicates an Noise Criteria of less than 15.

4. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2023.

Balancing:

It is recommended that a commercially available 'Flow Hood' is used for field balancing. The airflow meter directly reads average flow rate with great accuracy at all volumes. It is a much faster and more accurate alternative to time consuming multiple velocity readings, eliminating the use of Ak factors and the calculations required to convert the average velocity into airflow.

PERFORMANCE DATA:

Models 4320M, 4320MA, 4325M, 4325MA • 24 x 24 (600 x 600) Module Size • Square Neck

Nominal Neck Size	Neck Velocity, FPM		300	400	500	600	700	800	900
	VP		.006	.010	.016	.023	.031	.040	.051
6 x 6	Total Pressure		.024	.042	.065	.098	.130	.169	.202
	Flow Rate, CFM		75	100	125	150	175	200	225
	Throw	4-Way	1-1-2	1-1-3	1-2-4	1-2-5	2-3-6	2-3-6	2-4-7
		3-Way	1-2-4	2-3-6	2-4-8	3-4-9	3-5-10	4-6-11	4-7-11
		2-Way	2-3-6	2-4-8	3-5-10	4-6-12	4-7-13	5-8-14	6-9-15
1-Way		3-4-9	4-6-12	5-8-16	6-9-19	7-11-20	8-12-22	9-14-22	
Noise Criteria		—	—	15	19	23	29	31	
8 x 8	Total Pressure		.024	.042	.065	.098	.130	.169	.202
	Flow Rate, CFM		135	175	220	265	310	355	400
	Throw	4-Way	1-1-3	1-2-5	2-3-6	2-3-7	2-4-8	3-5-8	3-5-9
		3-Way	2-3-6	2-4-8	3-5-10	4-6-13	5-7-14	5-8-15	6-9-15
		2-Way	2-4-8	3-5-11	4-6-13	5-8-16	6-9-18	7-11-19	8-12-20
1-Way		4-6-12	5-8-17	7-10-21	8-12-25	10-15-27	11-17-29	12-19-31	
Noise Criteria		—	—	18	23	27	33	35	
10 x 10	Total Pressure		.034	.050	.073	.124	.160	.226	.263
	Flow Rate, CFM		210	275	345	415	485	555	625
	Throw	4-Way	1-2-4	2-3-6	2-3-7	3-4-9	3-5-10	4-6-11	4-7-11
		3-Way	2-4-8	3-5-10	4-6-13	5-8-16	6-9-17	7-10-18	8-12-19
		2-Way	3-5-10	4-6-13	5-8-17	6-10-20	8-12-22	9-13-24	10-15-25
1-Way		5-8-16	7-10-21	8-13-26	10-16-32	12-18-34	14-21-37	16-24-39	
Noise Criteria		—	—	21	26	30	36	38	
12 x 12	Total Pressure		.036	.052	.085	.127	.169	.230	.276
	Flow Rate, CFM		300	400	500	600	700	800	900
	Throw	4-Way	1-2-5	2-3-7	3-4-9	3-5-11	4-6-12	5-7-13	5-8-14
		3-Way	3-4-9	4-6-13	5-8-16	6-9-19	7-11-21	8-13-22	9-14-23
		2-Way	4-6-12	5-8-16	6-10-20	8-12-25	9-14-27	11-16-28	12-18-30
1-Way		6-9-19	8-12-25	10-16-32	12-19-38	15-22-41	17-25-44	19-29-47	
Noise Criteria		—	—	25	30	34	39	42	
15 x 15	Total Pressure		.039	.058	.096	.129	.177	.236	.291
	Flow Rate, CFM		470	625	780	935	1095	1250	1405
	Throw	4-Way	2-3-7	3-4-9	4-6-12	4-7-14	5-8-15	6-9-16	7-10-17
		3-Way	4-6-12	5-8-16	6-10-20	8-12-24	9-14-26	10-16-28	12-18-29
		2-Way	5-7-15	6-10-20	8-13-26	10-15-31	12-18-33	13-20-36	15-23-38
1-Way		8-12-24	10-16-32	13-20-40	16-24-48	18-28-52	21-32-56	24-36-59	
Noise Criteria		—	19	28	33	37	42	45	
18 x 18	Total Pressure		.041	.062	.110	.135	.186	.240	.301
	Flow Rate, CFM		675	900	1125	1350	1575	1800	2025
	Throw	4-Way	2-4-8	3-5-11	4-7-14	5-8-17	6-10-18	7-11-19	8-12-21
		3-Way	4-7-14	6-9-19	8-12-24	9-14-29	11-17-31	13-19-33	14-22-35
		2-Way	6-9-18	8-12-25	10-15-31	12-18-37	14-21-40	16-25-43	18-28-46
1-Way		9-14-29	12-19-38	16-24-48	19-29-58	24-34-62	25-38-67	29-43-71	
Noise Criteria		—	22	31	36	41	46	49	

Performance Notes:

1. All pressures are in inches w.g..
2. Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
3. Noise Criteria (NC) values are based upon 10 dB room absorption, re 10⁻¹² watts. Dash (—) in space indicates an Noise Criteria of less than 15.

4. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2006.

Balancing:

It is recommended that a commercially available 'Flow Hood' is used for field balancing. The airflow meter directly reads average flow rate with great accuracy at all volumes. It is a much faster and more accurate alternative to time consuming multiple velocity readings, eliminating the use of Ak factors and the calculations required to convert the average velocity into airflow.

PERFORMANCE DATA:

Models 4320MR, 4320MRA, 4325MR, 4325MRA • 12 x 12 (300 x 300) Module Size • Round Neck

Nominal Neck Size	Neck Velocity, FPM	300	400	500	600	700	800	1000	
	Velocity Pressure	.006	.010	.016	.023	.031	.040	.063	
6" Dia.	Total Pressure	.016	.031	.041	.065	.092	.124	.163	
	Flow Rate, CFM	60	80	100	115	135	155	195	
	Throw	4-Way	1-1-1	1-1-2	1-1-3	1-1-4	1-2-5	1-2-5	2-3-7
		3-Way	1-1-3	1-2-5	2-3-6	2-3-7	3-4-8	3-5-9	4-6-12
		2-Way	1-1-3	1-1-4	1-2-5	1-3-6	1-4-8	2-4-9	3-5-11
		1-Way	1-1-4	1-1-7	1-2-8	1-4-9	2-5-10	3-7-13	5-8-15
Noise Criteria	—	—	18	23	29	33	38		
8" Dia.	Total Pressure	.015	.027	.043	.062	.084	.110	.171	
	Flow Rate, CFM	105	140	175	210	245	280	350	
	Throw	4-Way	1-1-2	1-1-4	1-2-5	1-2-6	1-3-7	2-4-8	3-5-10
		3-Way	1-2-5	1-3-7	2-4-8	3-5-9	4-6-11	4-7-13	5-9-16
		2-Way	1-1-4	1-2-6	1-3-9	2-4-9	3-5-11	3-6-13	5-8-16
		1-Way	1-2-7	1-4-9	2-6-12	4-7-14	5-9-17	6-10-19	8-13-21
Noise Criteria	—	15	24	27	33	37	42		

Performance Notes:

- All pressures are in inches w.g..
- Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
- Noise Criteria (NC) values are based upon 10 dB room absorption, re 10⁻¹² watts. Dash (—) in space indicates an Noise Criteria of less than 10.

4. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2025.

Balancing:

It is recommended that a commercially available 'Flow Hood' is used for field balancing. The airflow meter directly reads average flow rate with great accuracy at all volumes. It is a much faster and more accurate alternative to time consuming multiple velocity readings, eliminating the use of Ak factors and the calculations required to convert the average velocity into airflow.

PERFORMANCE DATA:

Models 4320S, 4320SA, 4320SAA, 4325S, 4325SA, 4325SAA • 12 x 12 (300 x 300) Module Size

Nominal Neck Size	Neck Velocity, FPM	300	400	500	600	700	800	900	1000	1200	1400
	Velocity Pressure	.006	.010	.016	.022	.031	.040	.050	.062	.090	.122
6" Dia.	Total Pressure	.020	.036	.056	.080	.109	.142	.180	.222	.320	.436
	Airflow, CFM	60	80	100	120	135	155	175	195	235	275
	Throw	1-1-3	1-2-4	1-2-5	2-3-7	2-4-8	3-4-9	3-5-10	3-5-11	4-7-12	5-8-13
	Noise Criteria	—	—	15	21	26	31	34	38	44	49
6 x 6	Total Pressure	.022	.039	.060	.087	.118	.154	.195	.241	.347	.472
	Airflow, CFM	75	100	125	150	175	200	225	250	300	350
	Throw	1-1-3	1-2-5	2-3-6	2-3-7	3-4-9	3-5-10	4-6-11	4-6-12	5-7-14	6-9-15
	Noise Criteria	—	—	17	23	28	32	36	40	46	51

Models 4320S, 4320SA, 4320SAA, 4325S, 4325SA, 4325SAA • 24 x 24 (600 x 600) Module Size • Square Neck

Nominal Neck Size	Neck Velocity, FPM	300	400	500	600	700	800	900	1000	1200	1400
	Velocity Pressure	.006	.010	.016	.022	.031	.040	.050	.062	.090	.122
6 x 6	Total Pressure	.018	.032	.050	.072	.098	.128	.163	.201	.289	.393
	Airflow, CFM	75	100	125	150	175	200	225	250	300	350
	Throw	1-1-3	1-2-5	2-3-6	2-3-7	3-4-9	3-5-10	4-6-11	4-6-12	5-7-14	6-9-15
	Noise Criteria	—	—	17	23	28	32	36	40	46	51
8 x 8	Total Pressure	.020	.036	.056	.081	.110	.144	.182	.224	.323	.440
	Airflow, CFM	135	180	220	265	310	355	400	445	535	620
	Throw	1-2-5	2-3-7	3-4-9	3-5-11	4-6-13	5-7-15	6-8-16	6-8-17	7-11-19	9-13-20
	Noise Criteria	—	—	19	25	30	35	39	42	48	53
10 x 10	Total Pressure	.023	.040	.063	.091	.123	.161	.204	.251	.362	.493
	Airflow, CFM	210	280	345	415	485	555	625	695	835	970
	Throw	2-4-8	3-5-11	4-6-13	5-8-16	6-9-18	7-11-19	8-12-20	9-14-22	11-16-24	13-18-26
	Noise Criteria	—	—	21	27	32	36	40	44	50	55
12 x 12	Total Pressure	.024	.043	.067	.097	.132	.172	.218	.269	.388	.528
	Airflow, CFM	300	400	500	600	700	800	900	1000	1200	1400
	Throw	3-5-11	4-7-14	6-9-18	7-11-21	8-12-23	9-14-24	11-16-26	12-18-27	14-21-30	17-23-32
	Noise Criteria	—	15	22	28	34	38	42	45	51	57

Performance Notes:

1. All pressures are in inches w.g..
2. Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
3. Noise Criteria (NC) values are based upon 10 dB room absorption, re 10⁻¹² watts. Dash (—) in space indicates an Noise Criteria of less than 15.

4. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2023.

Balancing:

It is recommended that a commercially available 'Flow Hood' is used for field balancing. The airflow meter directly reads average flow rate with great accuracy at all volumes. It is a much faster and more accurate alternative to time consuming multiple velocity readings, eliminating the use of Ak factors and the calculations required to convert the average velocity into airflow.

PERFORMANCE DATA:

Models 4320S, 4320SA, 4320SAA, 4325S, 4325SA, 4325SAA • 24 x 24 (600 x 600) Module Size • Round Neck

Nominal Neck Size	Neck Velocity, FPM	300	400	500	600	700	800	900	1000	1200	1400
	Velocity Pressure	.006	.010	.016	.022	.031	.040	.050	.062	.090	.122
6" Dia.	Total Pressure	.017	.031	.048	.069	.094	.123	.155	.192	.276	.376
	Airflow, CFM	60	80	100	120	135	155	175	195	235	275
	Throw	1-1-3	1-2-4	1-2-5	2-3-7	2-4-8	3-4-9	3-5-10	3-5-11	4-7-12	5-8-13
	Noise Criteria	—	—	15	21	26	31	35	38	44	49
8" Dia.	Total Pressure	.018	.032	.051	.073	.099	.129	.164	.202	.291	.396
	Airflow, CFM	105	140	175	210	245	280	315	350	420	490
	Throw	1-2-4	2-3-6	2-4-8	3-5-9	3-5-11	4-6-13	5-7-14	5-8-15	6-9-16	7-11-18
	Noise Criteria	—	—	18	24	29	34	38	41	47	52
10" Dia.	Total Pressure	.021	.038	.059	.085	.115	.151	.191	.235	.339	.461
	Airflow, CFM	165	220	275	325	380	435	490	545	655	765
	Throw	2-3-6	2-4-9	3-5-11	4-6-13	5-7-15	6-8-17	7-9-18	7-11-19	8-13-21	10-15-23
	Noise Criteria	—	—	21	26	31	35	40	43	49	54
12" Dia.	Total Pressure	.023	.042	.065	.094	.128	.167	.211	.260	.375	.510
	Airflow, CFM	235	315	395	470	550	630	705	785	940	1100
	Throw	3-4-9	4-6-12	5-7-14	6-9-18	7-10-20	8-12-21	9-14-22	10-15-23	12-18-26	14-20-28
	Noise Criteria	—	15	23	29	34	38	43	46	52	57
14" Dia.	Total Pressure	.024	.043	.068	.098	.133	.174	.220	.272	.391	.532
	Airflow, CFM	320	430	535	640	750	855	960	1070	1285	1495
	Throw	3-5-11	5-7-15	6-9-19	7-11-22	8-13-23	10-15-25	11-17-26	12-19-28	15-22-31	18-23-33
	Noise Criteria	—	17	25	31	36	40	45	48	54	59
15" Dia.	Total Pressure	.025	.045	.070	.101	.137	.179	.227	.280	.403	.549
	Airflow, CFM	370	490	615	735	860	980	1105	1225	1475	1720
	Throw	4-6-13	6-8-17	7-10-21	8-13-24	9-15-26	12-17-28	13-19-29	15-21-30	17-23-33	20-25-36
	Noise Criteria	—	18	26	32	37	41	46	49	55	61
16" Dia.	Total Pressure	.026	.046	.072	.104	.141	.184	.233	.288	.415	.565
	Airflow, CFM	420	560	700	840	975	1115	1255	1395	1675	1955
	Throw	4-7-14	6-9-19	8-12-23	9-14-25	11-17-28	13-19-29	15-21-31	16-23-33	19-25-36	22-28-39
	Noise Criteria	—	19	27	33	38	42	47	50	56	62

D

CEILING DIFFUSERS

Performance Notes:

- All pressures are in inches w.g..
- Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
- Noise Criteria (NC) values are based upon 10 dB room absorption, re 10⁻¹² watts. Dash (—) in space indicates an Noise Criteria of less than 15.

- Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2023

Balancing:

It is recommended that a commercially available 'Flow Hood' is used for field balancing. The airflow meter directly reads average flow rate with great accuracy at all volumes. It is a much faster and more accurate alternative to time consuming multiple velocity readings, eliminating the use of Ak factors and the calculations required to convert the average velocity into airflow.

PERFORMANCE DATA:

Models 4325, 4325A, 4325AA • Drop Face • 12 x 12 (300 x 300) Module Size

Nominal Neck Size	Neck Velocity, FPM	300	400	500	600	700	800	1000	1200	
	Velocity Pressure	.006	.010	.016	.023	.031	.040	.063	.090	
6" Dia.	Total Pressure	.009	.016	.025	.036	.049	.063	.099	.143	
	Flow Rate, CFM	58	78	98	117	137	156	196	235	
	Throw	4-Way	1-1-1	1-1-2	1-1-3	1-1-3	1-2-4	1-2-4	2-3-6	2-3-6
		3-Way	1-1-2	1-1-3	1-2-4	1-2-5	1-3-6	2-3-7	3-4-9	3-5-9
		2-Way	1-1-3	1-1-4	1-2-5	1-3-6	2-3-7	2-4-8	3-5-11	4-6-12
1-Way		1-1-4	1-2-6	1-3-7	2-4-9	3-5-10	4-6-12	5-7-15	6-9-16	
Noise Criteria	—	—	—	16	21	25	32	38		
8" Dia.	Total Pressure	.010	.017	.026	.037	.051	.067	.104	.150	
	Flow Rate, CFM	105	140	175	210	245	280	350	420	
	Throw	4-Way	1-1-1	1-1-1	1-1-3	1-1-4	1-1-4	1-1-5	1-3-6	1-4-8
		3-Way	1-1-2	1-1-4	1-1-5	1-2-6	1-3-7	1-4-8	2-5-11	4-6-13
		2-Way	1-1-3	1-1-6	1-2-7	1-3-9	2-4-10	2-6-12	4-7-15	6-9-16
1-Way		1-1-4	1-2-7	1-3-9	2-4-11	2-6-13	3-7-14	6-9-17	7-11-19	
Noise Criteria	—	—	14	20	25	29	36	42		
6 x 6	Total Pressure	.010	.019	.028	.041	.056	.072	.113	.163	
	Flow Rate, CFM	75	100	125	150	175	200	250	300	
	Throw	4-Way	1-1-2	1-1-3	1-1-3	1-2-4	1-2-5	2-3-6	2-3-7	3-4-7
		3-Way	1-1-3	1-1-4	1-2-5	1-3-6	2-4-8	3-4-9	3-5-10	4-6-11
		2-Way	1-1-4	1-2-5	1-3-7	2-4-8	3-4-9	3-5-11	4-7-13	5-8-14
1-Way		1-1-5	1-3-7	2-4-9	3-5-11	4-6-13	5-7-15	6-9-17	7-11-19	
Noise Criteria	—	—	13	19	24	28	35	41		
8 x 8	Total Pressure	.012	.021	.032	.046	.063	.082	.128	.185	
	Flow Rate, CFM	135	175	220	265	310	355	440	530	
	Throw	4-Way	1-1-1	1-1-2	1-1-3	1-1-4	1-1-5	1-2-6	1-3-8	2-4-9
		3-Way	1-1-3	1-1-5	1-2-6	1-3-8	1-4-9	2-5-10	3-6-13	5-8-16
		2-Way	1-1-4	1-2-7	1-3-9	2-4-10	2-6-12	3-7-14	5-9-18	7-10-19
1-Way		1-1-6	1-2-8	2-4-11	2-6-13	3-7-15	5-8-17	7-11-20	8-13-22	
Noise Criteria	—	10	17	23	28	32	39	45		

D
CEILING DIFFUSERS

Models 4325, 4325A, 4325AA • Drop Face • 24 x 12 (600 x 300) Module Size

Nominal Neck Size	Neck Velocity, FPM	300	400	500	600	700	800	1000	1200	
	Velocity Pressure	.006	.010	.016	.023	.031	.040	.063	.090	
6" Dia.	Total Pressure	.009	.016	.025	.036	.049	.063	.099	.143	
	Flow Rate, CFM	58	78	98	117	137	156	196	235	
	Throw	4-Way	1-1-1	1-1-2	1-1-3	1-1-3	1-2-4	1-2-4	2-3-6	2-3-6
		3-Way	1-1-2	1-1-3	1-2-4	1-2-5	1-3-6	2-3-7	3-4-9	3-5-9
		2-Way	1-1-3	1-1-4	1-2-5	1-3-6	2-3-7	2-4-8	3-5-11	4-6-12
1-Way		1-1-4	1-2-6	1-3-7	2-4-9	3-5-10	4-6-12	5-7-15	6-9-16	
Noise Criteria	—	—	—	16	21	25	32	38		
8" Dia.	Total Pressure	.010	.017	.026	.037	.051	.067	.104	.150	
	Flow Rate, CFM	105	140	175	210	245	280	350	420	
	Throw	4-Way	1-1-1	1-1-1	1-1-3	1-1-4	1-1-4	1-1-5	1-3-6	1-4-8
		3-Way	1-1-2	1-1-4	1-1-5	1-2-6	1-3-7	1-4-8	2-5-11	4-6-13
		2-Way	1-1-3	1-1-6	1-2-7	1-3-9	2-4-10	2-6-12	4-7-15	6-9-16
1-Way		1-1-4	1-2-7	1-3-9	2-4-11	2-6-13	3-7-14	6-9-17	7-11-19	
Noise Criteria	—	—	14	20	25	29	36	42		
6 x 6	Total Pressure	.013	.022	.036	.052	.074	.092	.143	.206	
	Flow Rate, CFM	75	100	125	150	175	200	250	300	
	Throw	4-Way	1-1-1	1-1-2	1-1-3	1-1-4	1-1-5	1-2-6	1-3-8	2-4-9
		3-Way	1-1-3	1-1-5	1-2-6	1-3-8	1-4-9	2-5-10	3-6-13	5-8-16
		2-Way	1-1-4	1-2-7	1-3-9	2-4-10	2-6-12	3-7-14	5-9-18	7-10-19
1-Way		1-1-6	1-2-8	2-4-11	2-6-13	3-7-15	5-8-17	7-11-20	8-13-22	
Noise Criteria	—	—	13	19	24	28	35	41		
8 x 8	Total Pressure	.012	.021	.032	.046	.063	.082	.128	.185	
	Flow Rate, CFM	135	175	220	265	310	355	440	530	
	Throw	4-Way	1-1-1	1-1-2	1-1-3	1-1-4	1-1-5	1-2-6	1-3-8	2-4-9
		3-Way	1-1-3	1-1-5	1-2-6	1-3-8	1-4-9	2-5-10	3-6-13	5-8-16
		2-Way	1-1-4	1-2-7	1-3-9	2-4-10	2-6-12	3-7-14	5-9-18	7-10-19
1-Way		1-1-6	1-2-8	2-4-11	2-6-13	3-7-15	5-8-17	7-11-20	8-13-22	
Noise Criteria	—	10	17	23	28	32	39	45		

For performance notes, see page D163.

PERFORMANCE DATA:

Models 4325, 4325A, 4325AA • Drop Face • 24 x 24 (600 x 600) Module Size • Round Neck

Nominal Neck Size	Neck Velocity, FPM	300	400	500	600	700	800	1000	1200	
	Velocity Pressure	.006	.010	.016	.023	.031	.040	.063	.090	
6" Dia.	Total Pressure	.009	.016	.025	.036	.049	.063	.099	.143	
	Flow Rate, CFM	58	78	98	117	137	156	196	235	
	Throw	4-Way	1-1-1	1-1-2	1-1-3	1-1-3	1-2-4	1-2-4	2-3-6	2-3-6
		3-Way	1-1-2	1-1-3	1-2-4	1-2-5	1-3-6	2-3-7	3-4-9	3-5-9
		2-Way	1-1-3	1-1-4	1-2-5	1-3-6	2-3-7	2-4-8	3-5-11	4-6-12
1-Way		1-1-4	1-2-6	1-3-7	2-4-9	3-5-10	4-6-12	5-7-15	6-9-16	
Noise Criteria	—	—	—	15	18	22	29	35		
8" Dia.	Total Pressure	.013	.021	.034	.049	.066	.087	.136	.195	
	Flow Rate, CFM	104	139	174	209	244	279	349	418	
	Throw	4-Way	1-1-3	1-1-4	1-2-5	1-3-6	2-3-7	2-4-8	3-5-8	4-6-9
		3-Way	1-1-4	1-2-6	2-3-7	2-4-9	3-5-11	4-6-12	5-7-13	6-9-14
		2-Way	1-2-5	1-3-7	2-4-9	3-5-11	4-6-13	5-7-15	6-9-16	7-11-18
1-Way		1-2-7	2-4-10	3-6-12	4-7-15	6-9-18	6-10-19	8-12-21	10-15-23	
Noise Criteria	—	—	13	18	24	28	35	41		
10" Dia.	Total Pressure	.016	.027	.043	.061	.084	.109	.171	.245	
	Flow Rate, CFM	163	218	272	327	381	436	545	654	
	Throw	4-Way	1-1-4	1-3-6	2-3-7	3-4-9	3-5-10	4-6-10	5-7-12	6-9-13
		3-Way	1-2-7	2-4-9	3-6-12	4-7-14	5-8-15	6-9-16	8-12-18	9-14-20
		2-Way	1-3-8	2-5-11	4-7-14	5-8-17	6-10-19	7-11-20	9-14-22	11-17-26
1-Way		2-4-11	3-7-15	6-9-19	7-11-23	9-13-26	10-15-28	13-19-31	15-23-34	
Noise Criteria	—	13	18	24	29	33	40	46		
12" Dia.	Total Pressure	.019	.033	.052	.074	.101	.132	.207	.297	
	Flow Rate, CFM	235	314	392	471	549	628	785	942	
	Throw	4-Way	1-3-6	2-4-9	3-5-11	4-6-12	5-7-13	6-9-14	7-11-15	9-12-17
		3-Way	2-4-10	3-6-13	5-8-16	6-10-18	7-11-19	9-13-20	11-16-23	13-18-26
		2-Way	2-5-12	4-8-16	6-10-20	8-12-22	9-14-24	11-16-22	13-20-30	16-22-33
1-Way		3-7-16	6-11-22	9-14-28	11-16-30	13-19-33	14-22-35	18-28-39	22-30-43	
Noise Criteria	—	17	23	29	34	38	45	51		
14" Dia.	Total Pressure	.021	.038	.059	.086	.117	.153	.239	.344	
	Flow Rate, CFM	318	424	530	636	742	848	1060	1272	
	Throw	4-Way	2-4-8	3-5-11	4-7-13	5-8-14	6-10-16	7-11-17	9-13-19	11-14-21
		3-Way	3-6-13	5-9-18	7-11-20	9-13-22	10-15-24	12-18-26	15-20-29	18-23-32
		2-Way	3-8-16	6-11-22	9-13-26	11-16-28	12-19-31	14-22-33	18-27-36	22-28-40
1-Way		5-11-22	9-14-30	12-18-35	14-22-38	17-27-41	19-30-44	24-35-49	30-38-51	
Noise Criteria	10	20	28	32	37	41	48	54		
15" Dia.	Total Pressure	.022	.040	.062	.091	.127	.171	.265	.366	
	Flow Rate, CFM	370	490	615	740	860	985	1225	1475	
	Throw	4-Way	2-4-7	3-5-10	4-7-12	5-8-14	6-9-15	7-10-17	9-12-19	10-13-21
		3-Way	3-6-13	5-9-19	7-10-19	9-12-22	10-15-23	12-18-26	14-19-29	18-22-32
		2-Way	3-8-15	6-11-21	8-12-26	11-15-28	11-19-30	13-21-32	18-27-35	21-27-40
1-Way		5-10-21	8-14-29	11-17-34	13-21-36	17-26-40	18-29-42	24-34-47	28-36-50	
Noise Criteria	12	22	28	34	39	43	50	56		
16" Dia.	Total Pressure	.025	.045	.070	.100	.137	.179	.280	.403	
	Flow Rate, CFM	418	558	698	837	977	1116	1396	1675	
	Throw	4-Way	3-5-11	5-7-15	6-9-17	7-11-18	8-13-20	10-15-21	12-17-24	15-18-27
		3-Way	2-6-13	4-9-17	7-11-19	9-13-21	10-16-22	12-17-24	15-19-28	17-21-30
		2-Way	2-6-13	4-9-17	7-11-19	9-13-21	10-16-22	12-17-24	15-19-28	17-21-30
1-Way		7-12-23	12-17-27	15-21-31	18-23-34	20-26-36	22-27-39	24-31-43	26-34-47	
Noise Criteria	13	23	29	35	40	44	51	57		

For performance notes, see page D163.

PERFORMANCE DATA:

Models 4325, 4325A, 4325AA • Drop Face • 24 x 24 (600 x 600) Module Size • Square Neck

Nominal Neck Size	Neck Velocity, FPM	300	400	500	600	700	800	1000	1200	
	Velocity Pressure	.006	.010	.016	.023	.031	.040	.063	.090	
6 x 6	Total Pressure	.010	.019	.028	.041	.056	.072	.113	.163	
	Flow Rate, CFM	75	100	125	150	175	200	250	300	
	Throw	4-Way	1-1-2	1-1-3	1-1-3	1-2-4	1-2-5	2-3-6	2-3-7	3-4-7
		3-Way	1-1-3	1-1-4	1-2-5	1-3-6	2-4-8	3-4-9	3-5-10	4-6-11
		2-Way	1-1-4	1-2-5	1-3-7	2-4-8	3-4-9	3-5-11	4-7-13	5-8-14
1-Way		1-1-5	1-3-7	2-4-9	3-5-11	4-6-13	5-7-15	6-9-17	7-11-19	
Noise Criteria	—	—	—	17	20	24	31	37		
8 x 8	Total Pressure	.014	.024	.038	.056	.075	.098	.153	.220	
	Flow Rate, CFM	133	177	222	266	310	355	444	532	
	Throw	4-Way	1-1-3	1-2-5	1-3-6	2-3-7	3-4-8	3-5-9	4-6-10	5-7-11
		3-Way	1-2-5	1-3-7	2-4-9	3-5-11	4-6-13	5-7-14	6-9-15	7-11-17
		2-Way	1-2-7	2-4-9	3-6-12	4-7-14	5-8-16	6-9-17	8-12-19	9-14-21
1-Way		1-3-9	3-6-13	4-8-16	6-9-19	7-11-21	8-13-23	10-16-27	13-19-29	
Noise Criteria	—	11	16	22	27	31	38	44		
10 x 10	Total Pressure	.018	.031	.049	.069	.095	.124	.193	.278	
	Flow Rate, CFM	208	277	347	416	485	555	694	832	
	Throw	4-Way	1-2-5	2-3-7	3-4-9	3-5-11	4-6-12	5-7-12	6-9-14	7-11-15
		3-Way	1-4-8	3-5-11	4-7-14	5-8-16	6-10-18	7-11-19	9-14-21	11-16-23
		2-Way	2-5-11	4-7-14	6-9-18	7-11-20	8-13-22	9-14-24	12-18-28	14-20-30
1-Way		3-6-14	5-9-19	8-12-24	9-14-28	11-17-30	13-19-32	16-24-36	19-28-39	
Noise Criteria	—	14	21	27	32	36	42	49		
12 x 12	Total Pressure	.02	.037	.058	.084	.114	.149	.233	.335	
	Flow Rate, CFM	300	400	500	600	700	800	1000	1200	
	Throw	4-Way	1-4-8	3-5-11	4-7-13	5-8-14	6-9-15	7-11-16	9-13-18	11-14-20
		3-Way	2-6-12	5-8-17	7-10-19	8-12-21	10-15-23	11-17-24	14-19-28	17-21-31
		2-Way	3-7-15	6-10-21	8-13-24	10-15-27	12-18-29	14-21-32	17-24-35	21-27-38
1-Way		4-10-21	8-14-29	11-17-33	14-21-36	16-24-39	18-29-42	23-33-46	28-36-51	
Noise Criteria	—	18	25	31	36	40	46	53		
14 x 14	Total Pressure	.025	.046	.071	.103	.140	.183	.286	.411	
	Flow Rate, CFM	408	544	681	817	953	1089	1361	1633	
	Throw	4-Way	1-1-6	1-3-8	2-4-11	3-6-13	4-7-15	5-8-17	7-11-22	8-13-27
		3-Way	1-3-10	2-6-14	4-9-18	6-10-21	8-12-26	9-14-29	11-18-37	14-21-42
		2-Way	2-5-14	4-9-19	7-12-24	9-14-30	11-17-35	13-19-40	16-24-47	19-30-52
1-Way		3-8-17	6-11-23	9-14-30	11-17-36	13-20-42	15-23-48	19-30-54	23-36-59	
Noise Criteria	12	21	28	34	39	43	49	56		

Performance Notes:

1. All pressures are in inches w.g..
2. Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
3. Noise Criteria (NC) values are based upon 10 dB room absorption, re 10⁻¹² watts. Dash (—) in space indicates an Noise Criteria of less than 10.

4. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2023.

Balancing:

It is recommended that a commercially available 'Flow Hood' is used for field balancing. The airflow meter directly reads average flow rate with great accuracy at all volumes. It is a much faster and more accurate alternative to time consuming multiple velocity readings, eliminating the use of Ak factors and the calculations required to convert the average velocity into airflow.

PERFORMANCE DATA:

Models 4330, 4330A, 4330AA • Flush Face • 12 x 12 (300 x 300) Module Size

Nominal Neck Size	Neck Velocity, FPM	300	400	500	600	700	800	1000	1200	1400	
	Velocity Pressure	.006	.010	.016	.023	.031	.040	.063	.090	.123	
	Total Pressure	.011	.019	.030	.044	.059	.076	.120	.171	.234	
	Flow Rate, CFM	40	55	70	80	95	110	135	165	190	
5" Dia.	Throw	4-Way	1-2-4	2-2-5	2-3-6	2-4-7	3-5-7	3-6-8	5-6-9	6-7-10	6-7-10
		3-Way	1-2-4	2-3-6	2-3-7	2-4-8	3-5-9	4-6-10	5-7-10	6-8-12	6-9-13
		2-Way	1-2-5	2-3-6	2-4-8	3-5-10	4-6-10	4-7-12	6-8-13	7-10-14	7-10-15
		1-Way	2-3-6	2-4-8	3-5-9	4-6-10	5-7-11	6-8-13	6-9-13	8-10-14	9-10-15
	Noise Criteria	—	—	15	20	24	28	34	39	43	
	Total Pressure	.015	.025	.040	.058	.078	.100	.158	.225	.308	
	Flow Rate, CFM	60	80	100	120	140	160	195	235	275	
6" Dia.	Throw	4-Way	1-2-4	2-3-5	3-3-7	3-4-8	3-5-8	3-6-9	5-7-10	6-8-10	7-8-11
		3-Way	1-2-4	2-3-6	3-3-8	3-4-9	3-5-10	4-6-10	5-8-11	6-9-13	7-10-14
		2-Way	1-2-5	2-3-7	3-4-9	3-5-10	4-6-11	4-7-12	6-9-14	7-10-15	8-11-17
		1-Way	2-3-6	3-4-9	3-5-11	4-6-11	5-8-12	6-9-13	7-10-15	9-10-16	10-12-17
	Noise Criteria	—	—	17	22	26	30	36	41	45	
	Total Pressure	.016	.028	.040	.066	.092	.118	.187	.262	.36	
	Flow Rate, CFM	80	105	135	160	190	215	270	320	375	
7" Dia.	Throw	4-Way	1-2-5	2-3-6	3-4-9	3-5-10	4-6-10	4-8-11	6-9-12	8-10-13	9-10-14
		3-Way	1-2-5	2-4-7	3-4-10	3-5-11	4-6-12	5-8-13	6-10-14	7-11-16	9-12-17
		2-Way	1-2-6	2-4-9	3-5-11	4-6-12	5-8-14	5-9-15	7-11-17	9-13-18	10-14-20
		1-Way	2-4-8	3-5-11	4-6-12	5-8-13	6-10-14	8-11-15	9-12-17	11-13-18	12-14-20
	Noise Criteria	—	15	21	26	30	34	40	45	49	
	Total Pressure	.019	.034	.053	.077	.104	.136	.213	.306	.417	
	Flow Rate, CFM	105	140	175	210	245	280	350	420	490	
8" Dia.	Throw	4-Way	1-3-6	2-4-8	4-4-10	4-6-11	4-7-12	5-8-12	6-10-13	8-11-14	9-12-16
		3-Way	1-3-6	2-4-8	4-5-11	4-6-13	5-7-13	5-9-14	7-11-16	9-13-18	10-13-19
		2-Way	1-3-7	2-5-10	4-6-12	4-7-14	5-8-15	6-10-17	8-12-19	10-14-21	12-16-22
		1-Way	3-4-9	4-6-12	5-7-13	6-9-14	7-10-15	8-12-17	10-13-19	13-14-21	13-16-22
	Noise Criteria	—	17	23	28	32	36	42	47	51	
	Total Pressure	.018	.032	.051	.073	.099	.130	.200	.292	.395	
	Flow Rate, CFM	75	100	125	150	175	200	250	300	350	
6" x 6"	Throw	4-Way	1-2-5	2-3-6	3-4-8	3-5-9	4-6-9	4-7-10	6-8-11	7-9-12	8-9-13
		3-Way	1-2-5	2-4-7	3-4-9	3-5-10	4-6-11	5-7-12	6-9-13	7-10-15	8-11-16
		2-Way	1-2-6	2-4-8	3-5-10	4-6-12	5-7-13	5-8-14	7-10-16	8-12-17	9-13-19
		1-Way	2-4-7	3-5-10	4-6-11	5-7-12	6-9-13	7-10-14	8-11-16	10-12-17	11-13-19
	Noise Criteria	—	13	19	24	28	32	38	43	47	

For performance notes, see page D211.

PERFORMANCE DATA:

Models 4330, 4330A, 4330AA • Flush Face • 24 x 12 (600 x 300) Module Size

Nominal Neck Size	Neck Velocity, FPM		300	400	500	600	700	800	1000	1200	1400
	Velocity Pressure		.006	.010	.016	.023	.031	.040	.063	.090	.123
5" Dia.	Total Pressure		.010	.018	.028	.040	.054	.070	.110	.157	.215
	Flow Rate, CFM		40	55	70	80	95	110	135	165	190
	Throw	4-Way	1-2-4	2-2-5	2-3-6	2-4-7	3-5-7	3-6-8	5-6-9	6-7-10	6-7-10
		3-Way	1-2-4	2-3-6	2-3-7	2-4-8	3-5-9	4-6-10	5-7-10	6-8-12	6-9-13
		2-Way	1-2-5	2-3-6	2-4-8	3-5-10	4-6-10	4-7-12	6-8-13	7-10-14	7-10-15
1-Way		2-3-6	2-4-8	3-5-9	4-6-10	5-7-11	6-8-13	6-9-13	8-10-14	9-10-15	
Noise Criteria		—	—	14	19	23	27	33	38	42	
6" Dia.	Total Pressure		.013	.021	.034	.048	.065	.084	.132	.189	.258
	Flow Rate, CFM		60	80	100	120	140	160	195	235	275
	Throw	4-Way	1-2-4	2-3-5	3-3-7	3-4-8	3-5-8	3-6-9	5-7-10	6-8-10	7-8-11
		3-Way	1-2-4	2-3-6	3-3-8	3-4-9	3-5-10	4-6-10	5-8-11	6-9-13	7-10-14
		2-Way	1-2-5	2-3-7	3-4-9	3-5-10	4-6-11	4-7-12	6-9-14	7-10-15	8-11-17
1-Way		2-3-6	3-4-9	3-5-11	4-6-11	5-8-12	6-9-13	7-10-15	9-10-16	10-12-17	
Noise Criteria		—	—	17	22	26	30	36	41	45	
7" Dia.	Total Pressure		.015	.025	.039	.057	.076	.098	.155	.221	.302
	Flow Rate, CFM		80	105	135	160	190	215	270	320	375
	Throw	4-Way	1-2-5	2-3-6	3-4-9	3-5-10	4-6-10	4-8-11	6-9-12	8-10-13	9-10-14
		3-Way	1-2-5	2-4-7	3-4-10	3-5-11	4-6-12	5-8-13	6-10-14	7-11-16	9-12-17
		2-Way	1-2-6	2-4-9	3-5-11	4-6-12	5-8-14	5-9-15	7-11-17	9-13-18	10-14-20
1-Way		2-4-8	3-5-11	4-6-12	5-8-13	6-10-14	8-11-15	9-12-17	11-13-18	12-14-20	
Noise Criteria		—	14	20	25	29	33	39	44	48	
8" Dia.	Total Pressure		.014	.026	.04	.058	.079	.103	.16	.231	.314
	Flow Rate, CFM		105	140	175	210	245	280	350	420	490
	Throw	4-Way	1-3-6	2-4-8	4-4-10	4-6-11	4-7-12	5-8-12	6-10-13	8-11-14	9-12-16
		3-Way	1-3-6	2-4-8	4-5-11	4-6-13	5-7-13	5-9-14	7-11-16	9-13-18	10-13-19
		2-Way	1-3-7	2-5-10	4-6-12	4-7-14	5-8-15	6-10-17	8-12-19	10-14-21	12-16-22
1-Way		3-4-9	4-6-12	5-7-13	6-9-14	7-10-15	8-12-17	10-13-19	13-14-21	13-16-22	
Noise Criteria		—	16	22	27	31	35	41	46	50	
6" x 6"	Total Pressure		.017	.030	.048	.069	.094	.122	.189	.274	.374
	Flow Rate, CFM		75	100	125	150	175	200	250	300	350
	Throw	4-Way	1-2-5	2-3-6	3-4-8	3-5-9	4-6-9	4-7-10	6-8-11	7-9-12	8-9-13
		3-Way	1-2-5	2-4-7	3-4-9	3-5-10	4-6-11	5-7-12	6-9-13	7-10-15	8-11-16
		2-Way	1-2-6	2-4-8	3-5-10	4-6-12	5-7-13	5-8-14	7-10-16	8-12-17	9-13-19
1-Way		2-4-7	3-5-10	4-6-11	5-7-12	6-9-13	7-10-14	8-11-16	10-12-17	11-13-19	
Noise Criteria		—	13	19	24	28	32	38	43	47	
18" x 6"	Total Pressure		.041	.068	.109	.157	.211	.273	.430	.613	.84
	Flow Rate, CFM		225	300	375	450	525	600	750	900	1050
	Throw	4-Way	5-7-15	6-10-17	8-12-19	10-15-21	11-16-22	13-17-24	16-19-27	17-21-30	19-23-32
		3-Way	5-7-15	7-10-17	8-13-19	10-15-21	12-16-22	13-17-24	16-19-27	17-21-30	19-23-32
		2-Way	5-8-15	7-11-17	9-13-19	11-15-21	13-16-22	14-17-24	16-19-27	17-21-30	19-23-32
1-Way		8-12-21	10-15-24	13-19-27	15-21-30	18-23-32	20-24-34	22-28-39	24-30-42	27-32-46	
Noise Criteria		17	25	31	36	40	44	50	55	59	

For performance notes, see page D211.

PERFORMANCE DATA:

Models 4330, 4330A, 4330AA • Flush Face • 16 x 16 (400 x 400) Module Size

Nominal Neck Size	Neck Velocity, FPM		300	400	500	600	700	800	1000	1200	1400
	Velocity Pressure		.006	.010	.016	.023	.031	.040	.063	.090	.123
	Total Pressure		.010	.018	.028	.040	.054	.070	.110	.157	.215
	Flow Rate, CFM		40	55	70	80	95	110	135	165	190
5" Dia.	Throw	4-Way	1-2-4	2-2-5	2-3-6	2-4-7	3-5-7	3-6-8	5-6-9	6-7-10	6-7-10
		3-Way	1-2-4	2-3-6	2-3-7	2-4-8	3-5-9	4-6-10	5-7-10	6-8-12	6-9-13
		2-Way	1-2-5	2-3-6	2-4-8	3-5-10	4-6-10	4-7-12	6-8-13	7-10-14	7-10-15
		1-Way	2-3-6	2-4-8	3-5-9	4-6-10	5-7-11	6-8-13	6-9-13	8-10-14	9-10-15
	Noise Criteria		—	—	14	19	23	27	33	38	42
	Total Pressure		.013	.021	.034	.048	.065	.084	.132	.189	.258
	Flow Rate, CFM		60	80	100	120	140	160	200	235	275
6" Dia.	Throw	4-Way	1-2-4	2-3-5	3-3-7	3-4-8	3-5-8	3-6-9	5-7-10	6-8-10	7-8-11
		3-Way	1-2-4	2-3-6	3-3-8	3-4-9	3-5-10	4-6-10	5-8-11	6-9-13	7-10-14
		2-Way	1-2-5	2-3-7	3-4-9	3-5-10	4-6-11	4-7-12	6-9-14	7-10-15	8-11-17
		1-Way	2-3-6	3-4-9	3-5-11	4-6-11	5-8-12	6-9-13	7-10-15	9-10-16	10-12-17
	Noise Criteria		—	—	17	22	26	30	36	41	45
	Total Pressure		.015	.025	.039	.057	.076	.098	.155	.221	.302
	Flow Rate, CFM		80	105	135	160	190	215	270	320	375
7" Dia.	Throw	4-Way	1-2-5	2-3-6	3-4-9	3-5-10	4-6-10	4-8-11	6-9-12	8-10-13	9-10-14
		3-Way	1-2-5	2-4-7	3-4-10	3-5-11	4-6-12	5-8-13	6-10-14	7-11-16	9-12-17
		2-Way	1-2-6	2-4-9	3-5-11	4-6-12	5-8-14	5-9-15	7-11-17	9-13-18	10-14-20
		1-Way	2-4-8	3-5-11	4-6-12	5-8-13	6-10-14	8-11-15	9-12-17	11-13-18	12-14-20
	Noise Criteria		—	14	20	25	29	33	39	44	48
	Total Pressure		.017	.028	.045	.065	.088	.113	.179	.255	.35
	Flow Rate, CFM		105	140	175	210	245	280	350	420	490
8" Dia.	Throw	4-Way	1-3-6	2-4-8	4-4-10	4-6-11	4-7-12	5-8-12	6-10-13	8-11-14	9-12-16
		3-Way	1-3-6	2-4-8	4-5-11	4-6-13	5-7-13	5-9-14	7-11-16	9-13-18	10-13-19
		2-Way	1-3-7	2-5-10	4-6-12	4-7-14	5-8-15	6-10-17	8-12-19	10-14-21	12-16-22
		1-Way	3-4-9	4-6-12	5-7-13	6-9-14	7-10-15	8-12-17	10-13-19	13-14-21	13-16-22
	Noise Criteria		—	16	22	27	31	35	41	46	50
	Total Pressure		.023	.039	.062	.089	.120	.154	.243	.348	.475
	Flow Rate, CFM		165	220	270	325	380	435	545	655	760
10" Dia.	Throw	4-Way	1-3-8	2-6-10	4-6-12	4-8-13	6-9-14	7-10-14	8-12-17	10-13-18	11-14-20
		3-Way	1-3-8	2-6-10	4-7-13	6-8-15	7-9-17	7-11-18	9-13-20	11-15-22	12-17-23
		2-Way	1-3-9	2-7-12	4-8-14	6-9-18	7-10-19	8-12-21	10-14-23	12-18-25	14-20-28
		1-Way	3-6-11	4-8-14	7-9-17	8-11-18	9-12-19	10-14-21	12-17-23	15-18-25	15-20-28
	Noise Criteria		11	19	25	30	34	38	44	49	53
	Total Pressure		.015	.025	.039	.057	.076	.098	.155	.221	.302
	Flow Rate, CFM		75	100	125	150	175	200	250	300	350
6" x 6"	Throw	4-Way	1-2-5	2-3-6	3-4-9	3-5-10	4-6-10	4-8-11	6-9-12	8-10-13	9-10-14
		3-Way	1-2-5	2-4-7	3-4-10	3-5-11	4-6-12	5-8-13	6-10-14	7-11-16	9-12-17
		2-Way	1-2-6	2-4-9	3-5-11	4-6-12	5-8-14	5-9-15	7-11-17	9-13-18	10-14-20
		1-Way	2-4-8	3-5-11	4-6-12	5-8-13	6-10-14	8-11-15	9-12-17	11-13-18	12-14-20
	Noise Criteria		—	14	20	25	29	33	39	44	48
	Total Pressure		.020	.034	.054	.078	.105	.135	.213	.304	.415
	Flow Rate, CFM		135	180	220	265	310	355	445	535	625
8" x 8"	Throw	4-Way	1-3-7	2-5-9	4-5-11	4-7-12	5-8-13	6-9-13	7-11-15	9-12-16	10-13-18
		3-Way	1-3-7	2-5-9	4-6-12	5-7-14	6-8-15	6-10-16	8-12-18	10-14-20	11-15-21
		2-Way	1-3-8	2-6-11	4-7-13	5-8-16	6-9-17	7-11-19	9-13-21	11-16-23	13-18-25
		1-Way	3-5-10	4-7-13	6-8-15	7-10-16	8-11-17	9-13-19	11-15-21	14-16-23	14-18-25
	Noise Criteria		9	17	23	28	32	36	42	47	51

For performance notes, see page D211.

PERFORMANCE DATA:

Models 4330, 4330A, 4330AA • Flush Face • 20 x 20 (500 x 500) Module Size

Nominal Neck Size	Neck Velocity, FPM		300	400	500	600	700	800	1000	1200	1400
	Velocity Pressure		.006	.010	.016	.023	.031	.040	.063	.090	.123
5" Dia.	Total Pressure		.010	.018	.028	.040	.054	.070	.110	.157	.215
	Flow Rate, CFM		40	55	70	80	95	110	135	165	190
	Throw	4-Way	1-2-4	2-2-5	2-3-6	2-4-7	3-5-7	3-6-8	5-6-9	6-7-10	6-7-10
		3-Way	1-2-4	2-3-6	2-3-7	2-4-8	3-5-9	4-6-10	5-7-10	6-8-12	6-9-13
		2-Way	1-2-5	2-3-6	2-4-8	3-5-10	4-6-10	4-7-12	6-8-13	7-10-14	7-10-15
1-Way		2-3-6	2-4-8	3-5-9	4-6-10	5-7-11	6-8-13	6-9-13	8-10-14	9-10-15	
Noise Criteria		—	—	14	19	23	27	33	38	42	
6" Dia.	Total Pressure		.013	.021	.034	.048	.065	.084	.132	.189	.258
	Flow Rate, CFM		60	80	100	120	140	160	200	235	275
	Throw	4-Way	1-2-4	2-3-5	3-3-7	3-4-8	3-5-8	3-6-9	5-7-10	6-8-10	7-8-11
		3-Way	1-2-4	2-3-6	3-3-8	3-4-9	3-5-10	4-6-10	5-8-11	6-9-13	7-10-14
		2-Way	1-2-5	2-3-7	3-4-9	3-5-10	4-6-11	4-7-12	6-9-14	7-10-15	8-11-17
1-Way		2-3-6	3-4-9	3-5-11	4-6-11	5-8-12	6-9-13	7-10-15	9-10-16	10-12-17	
Noise Criteria		—	—	17	22	26	30	36	41	45	
7" Dia.	Total Pressure		.014	.023	.037	.053	.071	.092	.145	.207	.283
	Flow Rate, CFM		80	105	135	160	190	215	270	320	375
	Throw	4-Way	1-2-5	2-3-6	3-4-9	3-5-10	4-6-10	4-8-11	6-9-12	8-10-13	9-10-14
		3-Way	1-2-5	2-4-7	3-4-10	3-5-11	4-6-12	5-8-13	6-10-14	7-11-16	9-12-17
		2-Way	1-2-6	2-4-9	3-5-11	4-6-12	5-8-14	5-9-15	7-11-17	9-13-18	10-14-20
1-Way		2-4-8	3-5-11	4-6-12	5-8-13	6-10-14	8-11-15	9-12-17	11-13-18	12-14-20	
Noise Criteria		—	13	19	24	28	32	38	43	47	
8" Dia.	Total Pressure		.014	.024	.038	.055	.075	.096	.151	.216	.295
	Flow Rate, CFM		105	140	175	210	245	280	350	420	490
	Throw	4-Way	1-3-6	2-4-8	4-4-10	4-6-11	4-7-12	5-8-12	6-10-13	8-11-14	9-12-16
		3-Way	1-3-6	2-4-8	4-5-11	4-6-13	5-7-13	5-9-14	7-11-16	9-13-18	10-13-19
		2-Way	1-3-7	2-5-10	4-6-12	4-7-14	5-8-15	6-10-17	8-12-19	10-14-21	12-16-22
1-Way		3-4-9	4-6-12	5-7-13	6-9-14	7-10-15	8-12-17	10-13-19	13-14-21	13-16-22	
Noise Criteria		—	16	22	27	31	35	41	46	50	
10" Dia.	Total Pressure		.019	.031	.050	.071	.096	.124	.195	.279	.381
	Flow Rate, CFM		165	220	270	325	380	435	545	655	760
	Throw	4-Way	1-3-8	2-6-10	4-6-12	4-8-13	6-9-14	7-10-14	8-12-17	10-13-18	11-14-20
		3-Way	1-3-8	2-6-10	4-7-13	6-8-15	7-9-17	7-11-18	9-13-20	11-15-22	12-17-23
		2-Way	1-3-9	2-7-12	4-8-14	6-9-18	7-10-19	8-12-21	10-14-23	12-18-25	14-20-28
1-Way		3-6-11	4-8-14	7-9-17	8-11-18	9-12-19	10-14-21	12-17-23	15-18-25	15-20-28	
Noise Criteria		11	19	25	30	34	38	44	49	53	
12" Dia.	Total Pressure		.023	.038	.060	.087	.117	.150	.237	.338	.462
	Flow Rate, CFM		235	315	390	470	550	630	785	945	1100
	Throw	4-Way	2-4-8	3-5-12	5-7-14	5-8-16	6-9-17	7-12-18	9-14-20	12-16-21	14-17-23
		3-Way	2-4-10	3-6-13	5-7-16	6-9-18	7-11-20	8-13-21	11-16-23	13-18-27	15-20-28
		2-Way	2-4-11	3-7-15	5-8-18	7-11-20	8-13-23	9-15-25	12-18-28	15-21-31	17-23-33
1-Way		3-6-14	5-8-18	7-11-20	8-13-21	11-16-23	12-18-25	15-20-28	18-21-31	19-23-33	
Noise Criteria		14	22	28	33	37	41	47	52	56	
14" Dia.	Total Pressure		.029	.049	.079	.113	.152	.196	.309	.440	.603
	Flow Rate, CFM		320	425	530	635	740	850	1060	1270	1480
	Throw	4-Way	2-5-10	4-6-13	6-8-16	6-10-18	7-11-19	8-13-20	11-16-23	13-18-24	16-19-26
		3-Way	2-3-11	4-7-14	6-8-18	7-11-20	8-12-23	10-14-24	12-18-26	14-20-30	17-23-31
		2-Way	3-5-12	4-8-17	6-10-20	8-12-23	10-14-26	11-17-29	13-20-31	17-24-35	19-26-37
1-Way		4-7-16	6-10-20	8-12-23	10-14-24	12-18-26	13-20-29	17-23-31	20-24-35	22-26-37	
Noise Criteria		19	27	33	38	42	46	52	57	61	
6" x 6"	Total Pressure		.014	.023	.037	.053	.071	.092	.145	.207	.283
	Flow Rate, CFM		75	100	125	150	175	200	250	300	350
	Throw	4-Way	1-2-5	2-3-6	3-4-9	3-5-10	4-6-10	4-8-11	6-9-12	8-10-13	9-10-14
		3-Way	1-2-5	2-4-7	3-4-10	3-5-11	4-6-12	5-8-13	6-10-14	7-11-16	9-12-17
		2-Way	1-2-6	2-4-9	3-5-11	4-6-12	5-8-14	5-9-15	7-11-17	9-13-18	10-14-20
1-Way		2-4-8	3-5-11	4-6-12	5-8-13	6-10-14	8-11-15	9-12-17	11-13-18	12-14-20	
Noise Criteria		—	13	19	24	28	32	38	43	47	
8" x 8"	Total Pressure		.019	.031	.050	.071	.096	.124	.195	.279	.381
	Flow Rate, CFM		135	180	220	265	310	355	445	535	625
	Throw	4-Way	1-3-8	2-6-10	4-6-12	4-8-13	6-9-14	7-10-14	8-12-17	10-13-18	11-14-20
		3-Way	1-3-8	2-6-10	4-7-13	6-8-15	7-9-17	7-11-18	9-13-20	11-15-22	12-17-23
		2-Way	1-3-9	2-7-12	4-8-14	6-9-18	7-10-19	8-12-21	10-14-23	12-18-25	14-20-28
1-Way		3-6-11	4-8-14	7-9-17	8-11-18	9-12-19	10-14-21	12-17-23	15-18-25	15-20-28	
Noise Criteria		11	19	25	30	34	38	44	49	53	
10" x 10"	Total Pressure		.021	.035	.057	.082	.110	.142	.223	.318	.435
	Flow Rate, CFM		210	280	350	415	485	555	695	835	975
	Throw	4-Way	2-4-8	3-5-11	5-7-13	5-8-15	6-9-16	7-11-17	9-13-19	11-15-20	13-16-22
		3-Way	2-4-9	3-6-12	5-7-15	6-9-17	7-10-19	8-12-20	10-15-22	12-17-22	14-19-26
		2-Way	2-4-10	3-7-14	5-8-17	7-10-19	8-12-22	9-14-24	11-17-26	14-20-29	16-22-31
1-Way		3-6-13	5-8-17	7-10-19	8-12-20	10-15-22	11-17-24	14-19-26	17-20-29	18-22-31	
Noise Criteria		13	21	27	32	36	40	46	51	55	

D

CEILING DIFFUSERS

PERFORMANCE DATA:

Models 4330, 4330A, 4330AA • Flush Face • 24 x 24 (600 x 600) Module Size • Round Neck

Nominal Neck Size	Neck Velocity, FPM		300	400	500	600	700	800	1000	1200	1400
	VP		.006	.010	.016	.023	.031	.040	.063	.090	.123
	Total Pressure		.013	.021	.034	.048	.065	.084	.132	.189	.258
	Flow Rate, CFM		60	80	100	120	140	160	195	235	275
6" Dia.	Throw	4-Way	1-2-4	2-3-5	3-3-7	3-4-8	3-5-8	3-6-9	5-7-10	6-8-10	7-8-11
		3-Way	1-2-4	2-3-6	3-3-8	3-4-9	3-5-10	4-6-10	5-8-11	6-9-13	7-10-14
		2-Way	1-2-5	2-3-7	3-4-9	3-5-10	4-6-11	4-7-12	6-9-14	7-10-15	8-11-17
		1-Way	2-3-6	3-4-9	3-5-11	4-6-11	5-8-12	6-9-13	7-10-15	9-10-16	10-12-17
	Noise Criteria		—	—	17	22	26	30	36	41	45
	Total Pressure		.014	.024	.038	.055	.075	.096	.151	.216	.295
	Flow Rate, CFM		105	140	175	210	245	280	350	420	490
8" Dia.	Throw	4-Way	1-3-6	2-4-8	4-4-10	4-6-11	4-7-12	5-8-12	6-10-13	8-11-14	9-12-16
		3-Way	1-3-6	2-4-8	4-5-11	4-6-13	5-7-13	5-9-14	7-11-16	9-13-18	10-13-19
		2-Way	1-3-7	2-5-10	4-6-12	4-7-14	5-8-15	6-10-17	8-12-19	10-14-21	12-16-22
		1-Way	3-4-9	4-6-12	5-7-13	6-9-14	7-10-15	8-12-17	10-13-19	13-14-21	13-16-22
	Noise Criteria		—	16	22	27	31	35	41	46	50
	Total Pressure		.016	.027	.043	.062	.084	.109	.171	.244	.333
	Flow Rate, CFM		165	220	270	325	380	435	545	655	760
10" Dia.	Throw	4-Way	1-3-8	2-6-10	4-6-12	4-8-13	6-9-14	7-10-14	8-12-17	10-13-18	11-14-20
		3-Way	1-3-8	2-6-10	4-7-13	6-8-15	7-9-17	7-11-18	9-13-20	11-15-22	12-17-23
		2-Way	1-3-9	2-7-12	4-8-14	6-9-18	7-10-19	8-12-21	10-14-23	12-18-25	14-20-28
		1-Way	3-6-11	4-8-14	7-9-17	8-11-18	9-12-19	10-14-21	12-17-23	15-18-25	15-20-28
	Noise Criteria		11	19	25	30	34	38	44	49	53
	Total Pressure		.020	.033	.053	.076	.103	.132	.208	.298	.407
	Flow Rate, CFM		235	315	390	470	550	630	785	945	1100
12" Dia.	Throw	4-Way	2-4-8	3-5-12	5-7-14	5-8-16	6-9-17	7-12-18	9-14-20	12-16-21	14-17-23
		3-Way	2-4-10	3-6-13	5-7-16	6-9-18	7-11-20	8-13-21	11-16-23	13-18-27	15-20-28
		2-Way	2-4-11	3-7-15	5-8-18	7-11-20	8-13-23	9-15-25	12-18-28	15-21-31	17-23-33
		1-Way	3-6-14	5-8-18	7-11-20	8-13-21	11-16-23	12-18-25	15-20-28	18-21-31	19-23-33
	Noise Criteria		14	22	28	33	37	41	47	52	56
	Total Pressure		.023	.038	.061	.088	.119	.153	.241	.345	.47
	Flow Rate, CFM		320	425	530	635	740	850	1060	1270	1480
14" Dia.	Throw	4-Way	2-5-10	4-6-13	6-8-16	6-10-18	7-11-19	8-13-20	11-16-23	13-18-24	16-19-26
		3-Way	2-5-11	4-7-14	6-8-18	7-11-20	8-12-23	10-14-24	12-18-26	14-20-30	17-23-31
		2-Way	3-5-12	4-8-17	6-10-20	8-12-23	10-14-26	11-17-29	13-20-31	17-24-35	19-26-37
		1-Way	4-8-16	6-10-20	8-12-23	10-14-24	12-18-26	13-20-29	17-23-31	20-24-35	22-26-37
	Noise Criteria		16	24	30	35	39	43	49	54	58
	Total Pressure		.029	.048	.076	.110	.148	.191	.300	.430	.587
	Flow Rate, CFM		420	560	700	840	980	1120	1400	1680	1960
16" Dia.	Throw	4-Way	2-5-12	5-8-15	6-9-19	8-12-20	9-13-21	11-15-24	13-19-26	15-20-28	18-22-31
		3-Way	3-5-12	5-8-17	6-11-20	8-12-25	9-14-26	11-17-28	14-20-32	17-25-34	19-26-38
		2-Way	4-5-14	5-9-19	6-12-24	9-14-28	11-17-31	13-19-33	15-24-37	19-28-40	21-31-44
		1-Way	5-8-18	8-12-24	9-14-26	12-18-28	13-20-31	15-24-33	19-26-37	24-28-40	25-31-44
	Noise Criteria		19	27	33	38	42	46	52	57	61

For performance notes, see page D211.

PERFORMANCE DATA:

Models 4330, 4330A, 4330AA • Flush Face • 24 x 24 (600 x 600) Module Size • Square Neck

Nominal Neck Size	Neck Velocity, FPM	300	400	500	600	700	800	1000	1200	1400	
	Velocity Pressure	.006	.010	.016	.023	.031	.040	.063	.090	.123	
	Total Pressure	.014	.023	.037	.053	.071	.092	.145	.207	.283	
	Flow Rate, CFM	75	100	125	150	175	200	250	300	350	
6" x 6"	Throw	4-Way	1-2-5	2-3-6	3-4-9	3-5-10	4-6-10	4-8-11	6-9-12	8-10-13	9-10-14
		3-Way	1-2-5	2-4-7	3-4-10	3-5-11	4-6-12	5-8-13	6-10-14	7-11-16	9-12-17
		2-Way	1-2-6	2-4-9	3-5-11	4-6-12	5-8-14	5-9-15	7-11-17	9-13-18	10-14-20
		1-Way	2-4-8	3-5-11	4-6-12	5-8-13	6-10-14	8-11-15	9-12-17	11-13-18	12-14-20
	Noise Criteria	—	13	19	24	28	32	38	43	47	
8" x 8"	Total Pressure	.016	.027	.043	.062	.084	.109	.171	.244	.333	
	Flow Rate, CFM	135	180	220	265	310	355	445	535	625	
	Throw	4-Way	1-3-8	2-6-10	4-6-12	4-8-13	6-9-14	7-10-14	8-12-17	10-13-18	11-14-20
		3-Way	1-3-8	2-6-10	4-7-13	6-8-15	7-9-17	7-11-18	9-13-20	11-15-22	12-17-23
		2-Way	1-3-9	2-7-12	4-8-14	6-9-18	7-10-19	8-12-21	10-14-23	12-18-25	14-20-28
1-Way		3-6-11	4-8-14	7-9-17	8-11-18	9-12-19	10-14-21	12-17-23	15-18-25	15-20-28	
Noise Criteria	11	19	25	30	34	38	44	49	53		
10" x 10"	Total Pressure	.020	.033	.053	.076	.103	.132	.208	.298	.407	
	Flow Rate, CFM	235	315	390	470	550	630	785	945	1100	
	Throw	4-Way	2-4-8	3-5-11	5-7-13	5-8-15	6-9-16	7-11-17	9-13-19	11-15-20	13-16-22
		3-Way	2-4-9	3-6-12	5-7-15	6-9-17	7-10-19	8-12-20	10-15-22	12-17-22	14-19-26
		2-Way	2-4-10	3-7-14	5-8-17	7-10-19	8-12-22	9-14-24	11-17-26	14-20-29	16-22-31
1-Way		3-6-13	5-8-17	7-10-19	8-12-20	10-15-22	11-17-24	14-19-26	17-20-29	18-22-31	
Noise Criteria	14	22	28	33	37	41	47	52	56		
12" x 12"	Total Pressure	.021	.037	.058	.083	.115	.148	.230	.333	.450	
	Flow Rate, CFM	300	400	500	600	700	800	1000	1200	1400	
	Throw	4-Way	2-4-10	4-7-13	5-8-16	7-10-17	8-11-18	9-13-20	11-16-22	13-17-24	15-19-26
		3-Way	2-4-10	4-7-14	5-9-17	7-10-21	8-12-22	9-14-24	12-17-27	14-21-29	16-22-32
		2-Way	2-4-12	4-8-16	5-10-20	8-12-24	9-14-26	11-16-28	13-20-31	16-24-34	18-26-37
1-Way		4-7-15	7-10-20	8-12-22	10-15-24	11-17-26	13-20-28	16-22-31	20-24-34	21-26-37	
Noise Criteria	16	24	30	35	39	43	49	54	58		

Performance Notes:

- All pressures are in inches w.g..
- Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
Listed throws for the 18" x 6" neck/24" x 12" module are for the long side of the diffuser. Throws for the narrow side are approximately x 0.6 listed values.

- Noise Criteria (NC) values are based upon 10 dB room absorption, re 10⁻¹² watts. Dash (—) in space indicates an Noise Criteria of less than 10.
- Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2023

Balancing:

It is recommended that a commercially available 'Flow Hood' is used for field balancing. The airflow meter directly reads average flow rate with great accuracy at all volumes. It is a much faster and more accurate alternative to time consuming multiple velocity readings, eliminating the use of Ak factors and the calculations required to convert the average velocity into airflow.

PERFORMANCE DATA:

Models 4330CB, 4330CBA, 4330CBAA • 12 x 12 (300 x 300) Module Size

Nominal Neck Size	Neck Velocity, FPM	300	400	500	600	700	800	900	
	Velocity Pressure	.006	.010	.016	.023	.031	.040	.051	
	Total Pressure	.030	.052	.082	.118	.162	.211	.267	
6" Dia.	Flow Rate, CFM	60	80	95	115	135	155	175	
	Throw	4-Way	1-2-4	2-3-6	2-4-7	3-5-7	3-5-8	4-6-9	5-6-9
		3-Way	2-3-6	2-4-8	3-5-11	4-6-12	5-7-13	5-8-14	6-10-15
		2-Way	2-4-8	3-5-11	4-6-13	5-8-15	6-9-16	7-11-18	8-12-20
		1-Way	3-4-9	4-6-12	5-8-16	6-9-18	7-11-20	8-12-22	9-14-23
Noise Criteria	16	22	27	32	37	41	44		
8" Dia.	Flow Rate, CFM	105	140	175	210	245	280	315	
	Throw	4-Way	2-3-6	2-4-8	3-5-9	4-6-10	4-7-11	4-8-12	5-9-12
		3-Way	2-3-7	3-4-9	3-5-11	4-7-12	5-8-13	6-9-14	7-10-14
		2-Way	3-4-9	4-6-13	5-8-15	6-9-17	7-11-18	8-13-20	9-14-21
		1-Way	3-5-11	5-7-15	6-9-18	7-11-21	8-13-22	10-15-24	11-17-25
Noise Criteria	17	23	29	35	39	43	46		
6 x 6	Flow Rate, CFM	75	100	125	150	175	200	225	
	Throw	4-Way	1-2-5	2-3-7	3-4-8	3-5-8	4-6-9	5-7-10	5-7-11
		3-Way	2-3-6	2-4-8	3-5-11	4-6-12	5-7-13	5-8-14	6-10-15
		2-Way	3-4-9	4-6-12	5-7-15	6-9-17	7-10-20	8-12-21	9-14-22
		1-Way	3-5-10	4-7-14	6-9-18	7-10-21	8-12-23	9-14-24	10-16-26
Noise Criteria	16	22	27	32	36	40	43		
8 x 8	Flow Rate, CFM	135	175	220	265	310	355	400	
	Throw	4-Way	2-3-6	3-4-9	3-5-10	4-6-11	5-8-12	6-9-13	6-10-14
		3-Way	2-3-7	3-5-10	4-6-12	5-7-13	6-9-14	7-10-15	7-11-16
		2-Way	3-5-11	4-7-14	6-9-17	7-11-20	8-13-21	9-14-23	11-16-24
		1-Way	4-6-12	5-8-17	7-10-21	8-12-23	9-14-25	11-17-27	12-20-28
Noise Criteria	17	23	30	36	40	44	47		

Models 4330CB, 4330CBA, 4330CBAA • 24 x 12 (600 x 300) Module Size

Nominal Neck Size	Neck Velocity, FPM	300	400	500	600	700	800	900	
	Velocity Pressure	.006	.010	.016	.023	.031	.040	.051	
	Total Pressure	.030	.052	.082	.118	.162	.211	.267	
6" Dia.	Flow Rate, CFM	60	80	95	115	135	155	175	
	Throw	4-Way	1-2-4	2-3-6	2-4-7	3-5-7	3-5-8	4-6-9	5-6-9
		3-Way	2-3-6	2-4-8	3-5-11	4-6-12	5-7-13	5-8-14	6-10-15
		2-Way	2-4-8	3-5-11	4-6-13	5-8-15	6-9-16	7-11-18	8-12-20
		1-Way	3-4-9	4-6-12	5-8-16	6-9-18	7-11-20	8-12-22	9-14-23
Noise Criteria	16	22	27	32	37	41	44		
8" Dia.	Flow Rate, CFM	105	140	175	210	245	280	315	
	Throw	4-Way	2-3-6	2-4-8	3-5-9	4-6-10	4-7-11	4-8-12	5-9-12
		3-Way	2-3-7	3-4-9	3-5-11	4-7-12	5-8-13	6-9-14	7-10-14
		2-Way	3-4-9	4-6-13	5-8-15	6-9-17	7-11-18	8-13-20	9-14-21
		1-Way	3-5-11	5-7-15	6-9-18	7-11-21	8-13-22	10-15-24	11-17-25
Noise Criteria	17	23	29	35	39	43	46		
6 x 6	Flow Rate, CFM	75	100	125	150	175	200	225	
	Throw	4-Way	1-2-5	2-3-7	3-4-8	3-5-8	4-6-9	5-7-10	5-7-11
		3-Way	2-3-6	2-4-8	3-5-11	4-6-12	5-7-13	5-8-14	6-10-15
		2-Way	3-4-9	4-6-12	5-7-15	6-9-17	7-10-20	8-12-21	9-14-22
		1-Way	3-5-10	4-7-14	6-9-18	7-10-21	8-12-23	9-14-24	10-16-26
Noise Criteria	16	22	27	32	36	40	43		
8 x 8	Flow Rate, CFM	135	175	220	265	310	355	400	
	Throw	4-Way	2-3-6	3-4-9	3-5-10	4-6-11	5-8-12	6-9-13	6-10-14
		3-Way	2-3-7	3-5-10	4-6-12	5-7-13	6-9-14	7-10-15	7-11-16
		2-Way	3-5-11	4-7-14	6-9-17	7-11-20	8-13-21	9-14-23	11-16-24
		1-Way	4-6-12	5-8-17	7-10-21	8-12-23	9-14-25	11-17-27	12-20-28
Noise Criteria	17	23	30	36	40	44	47		

For performance notes, see page D216.

PERFORMANCE DATA:

**Models 4330CB, 4330CBA, 4330CBAA • 24 x 24 (600 x 600) and 48 x 24 (1200 x 600)
Module Size • Round Neck**

Nominal Neck Size	Neck Velocity, FPM		300	400	500	600	700	800	900
	Velocity Pressure		.006	.010	.016	.023	.031	.040	.051
Total Pressure		.030		.052	.082	.118	.162	.211	.267
6" Dia.	Flow Rate, CFM		60	80	95	115	135	155	175
	Throw	4-Way	1-2-4	2-3-6	2-3-7	3-4-7	3-5-8	4-6-9	4-6-9
		3-Way	1-2-5	2-3-7	2-4-8	3-5-9	4-6-9	4-7-10	5-7-11
		2-Way	2-3-7	3-4-9	4-6-11	4-7-12	5-8-13	6-9-14	7-11-15
		1-Way	2-4-8	3-5-11	4-7-13	5-8-15	6-9-16	7-11-17	8-12-18
Noise Criteria		—	19	25	30	34	38	41	
8" Dia.	Flow Rate, CFM		105	140	175	210	245	280	315
	Throw	4-Way	2-3-6	2-4-8	3-5-9	4-6-10	4-7-11	4-8-12	5-9-12
		3-Way	2-3-7	3-4-9	3-5-11	4-7-12	5-8-13	6-9-14	7-10-14
		2-Way	3-4-9	4-6-13	5-8-15	6-9-17	7-11-18	8-13-20	9-14-21
		1-Way	3-5-11	5-7-15	6-9-18	7-11-21	8-13-22	10-15-24	11-17-25
Noise Criteria		14	22	28	33	37	41	44	
10" Dia.	Flow Rate, CFM		165	215	270	325	380	435	490
	Throw	4-Way	2-3-7	3-5-10	4-6-12	5-7-13	5-8-14	6-10-15	7-11-16
		3-Way	2-4-8	3-5-11	4-7-13	5-8-15	6-10-16	7-11-17	8-13-18
		2-Way	4-6-12	5-8-16	6-10-20	8-12-22	9-14-23	10-16-25	12-18-27
		1-Way	4-7-14	6-9-18	7-11-23	9-14-26	11-16-28	12-18-29	14-22-31
Noise Criteria		16	24	30	35	39	43	46	
12" Dia.	Flow Rate, CFM		235	315	390	470	550	625	705
	Throw	4-Way	3-4-9	4-6-12	5-7-14	6-9-15	7-10-17	8-12-18	9-13-20
		3-Way	3-5-10	4-7-14	5-8-16	7-10-18	8-12-20	9-14-22	10-15-23
		2-Way	4-7-14	6-9-20	8-12-24	9-14-26	11-17-28	13-20-30	14-23-32
		1-Way	5-8-17	7-11-23	9-14-28	11-17-31	13-20-33	15-23-35	17-26-37
Noise Criteria		18	26	32	37	41	45	48	
14" Dia.	Flow Rate, CFM		320	425	535	640	750	855	960
	Throw	4-Way	3-5-10	4-7-14	5-8-16	7-10-18	8-12-21	9-14-22	10-16-23
		3-Way	4-6-12	5-8-16	6-10-20	8-12-22	9-14-24	10-16-25	12-18-27
		2-Way	5-8-17	7-11-24	9-14-28	11-17-30	13-21-33	15-24-35	17-26-37
		1-Way	6-9-20	8-13-27	11-16-33	13-20-36	15-24-38	17-27-41	20-30-43
Noise Criteria		21	29	35	39	44	48	51	
15" Dia.	Flow Rate, CFM		370	490	615	740	860	985	1100
	Throw	4-Way	3-6-10	4-2-14	5-8-17	8-10-19	8-13-21	10-14-23	10-16-24
		3-Way	4-6-12	6-8-17	6-11-21	8-13-22	10-14-25	11-16-26	13-18-28
		2-Way	4-8-17	7-12-25	9-15-30	11-18-31	13-22-34	16-25-35	17-27-38
		1-Way	6-9-20	8-14-28	12-17-34	14-21-37	16-24-39	18-27-42	17-31-43
Noise Criteria		22	30	36	40	45	49	52	
16" Dia.	Flow Rate, CFM		420	560	700	835	975	1115	1255
	Throw	4-Way	4-6-12	5-8-16	6-10-20	8-12-22	9-14-23	10-16-25	12-18-26
		3-Way	4-7-14	6-9-18	7-11-23	9-14-25	10-16-27	12-18-29	14-22-30
		2-Way	6-9-20	8-13-27	10-16-32	13-20-35	15-24-37	17-27-40	20-30-42
		1-Way	7-11-23	10-15-31	12-18-37	15-23-41	17-27-44	21-31-47	23-35-50
Noise Criteria		23	31	37	41	46	50	53	
18" Dia.	Flow Rate, CFM		530	705	885	1060	1235	1415	1590
	Throw	4-Way	4-7-14	5-9-18	7-10-20	9-13-24	10-16-26	10-19-28	13-21-29
		3-Way	4-7-17	6-10-21	8-12-24	10-15-28	11-20-30	13-22-32	17-24-34
		2-Way	7-10-23	10-14-29	11-17-34	15-22-36	18-28-43	20-30-44	24-34-50
		1-Way	8-12-26	11-17-33	14-21-40	18-25-45	21-32-50	23-38-53	29-40-56
Noise Criteria		25	33	39	43	48	52	55	

For performance notes, see page D216.

D
CEILING DIFFUSERS

PERFORMANCE DATA:

**Models 4330CB, 4330CBA, 4330CBAA • 24 x 24 (600 x 600) and 48 x 24 (1200 x 600)
Module Size • Square Neck**

Nominal Neck Size	Neck Velocity, FPM	300	400	500	600	700	800	900	
	Velocity Pressure	.006	.010	.016	.023	.031	.040	.051	
	Total Pressure	.028	.050	.079	.113	.155	.202	.256	
6 x 6	Flow Rate, CFM	75	100	125	150	175	200	225	
	Throw	4-Way	1-2-5	2-3-7	3-4-8	3-5-8	4-6-9	5-7-10	5-7-11
		3-Way	2-3-6	2-4-8	3-5-11	4-6-12	5-7-13	5-8-14	6-10-15
		2-Way	3-4-9	4-6-12	5-7-15	6-9-17	7-10-20	8-12-21	9-14-22
		1-Way	3-5-10	4-7-14	6-9-18	7-10-21	8-12-23	9-14-24	10-16-26
Noise Criteria	—	20	26	31	35	39	42		
8 x 8	Flow Rate, CFM	135	175	220	265	310	355	400	
	Throw	4-Way	2-3-6	3-4-9	3-5-10	4-6-11	5-8-12	6-9-13	6-10-14
		3-Way	2-3-7	3-5-10	4-6-12	5-7-13	6-9-14	7-10-15	7-11-16
		2-Way	3-5-11	4-7-14	6-9-17	7-11-20	8-13-21	9-14-23	11-16-24
		1-Way	4-6-12	5-8-17	7-10-21	8-12-23	9-14-25	11-17-27	12-20-28
Noise Criteria	15	23	29	34	38	42	45		
10 x 10	Flow Rate, CFM	210	275	345	415	485	555	625	
	Throw	4-Way	2-4-8	3-5-11	4-7-13	5-8-14	6-10-16	7-11-17	8-12-18
		3-Way	3-4-9	4-6-13	5-8-15	6-9-17	7-11-18	8-13-20	9-14-22
		2-Way	4-6-13	6-9-18	7-11-22	9-13-25	10-16-26	12-18-28	13-21-30
		1-Way	5-8-16	7-10-22	8-13-26	10-16-29	12-18-31	14-22-33	16-25-35
Noise Criteria	17	25	31	36	40	44	47		
12 x 12	Flow Rate, CFM	300	400	500	600	700	800	900	
	Throw	4-Way	3-5-10	4-6-13	5-8-16	6-10-17	8-12-20	9-13-21	10-15-22
		3-Way	3-5-11	5-7-15	6-9-18	7-11-21	9-13-23	10-15-24	11-17-26
		2-Way	5-8-16	7-11-23	9-13-27	11-16-29	13-20-32	14-23-34	16-25-36
		1-Way	6-9-20	8-12-26	10-16-31	12-20-34	14-23-37	17-26-40	22-31-44
Noise Criteria	19	25	33	38	42	46	49		
14 x 14	Flow Rate, CFM	410	545	680	815	955	1090	1360	
	Throw	4-Way	1-1-6	1-3-8	2-4-11	3-6-13	4-7-15	5-8-17	7-11-22
		3-Way	1-3-10	2-6-14	4-9-18	6-10-21	8-12-26	9-14-29	11-18-32
		2-Way	2-5-14	4-9-19	7-12-24	9-14-30	11-17-35	13-19-40	16-24-47
		1-Way	3-8-17	6-11-23	9-14-30	11-17-36	13-20-42	15-23-48	19-30-54
Noise Criteria	22	30	36	40	45	49	52		
15 x 15	Flow Rate, CFM	470	625	780	935	1095	1250	1405	
	Throw	4-Way	4-6-12	5-8-17	7-10-21	8-12-23	10-15-25	11-17-26	12-20-28
		3-Way	4-7-14	6-9-20	8-12-24	9-14-26	11-17-28	13-20-30	14-23-32
		2-Way	6-10-21	9-13-28	11-17-33	13-21-37	16-25-40	18-28-42	21-32-45
		1-Way	8-12-25	10-16-33	13-21-39	16-25-43	18-29-46	22-33-49	25-37-53
Noise Criteria	23	31	37	41	46	50	53		
16 x 16	Flow Rate, CFM	530	710	890	1065	1245	1420	1600	
	Throw	4-Way	4-7-14	5-9-18	7-10-20	9-13-24	10-16-26	10-19-28	13-21-29
		3-Way	4-7-17	6-10-21	8-12-24	10-15-28	11-20-30	13-22-32	17-24-34
		2-Way	7-10-23	10-14-29	11-17-34	15-22-36	18-28-43	20-30-44	24-34-50
		1-Way	8-12-26	11-17-33	14-21-40	18-25-45	21-32-50	23-38-53	29-40-56
Noise Criteria	24	32	38	42	47	51	54		
18 x 18	Flow Rate, CFM	675	900	1125	1350	1575	1800	2025	
	Throw	4-Way	5-7-15	6-10-21	8-12-25	10-15-27	12-18-30	13-21-32	15-24-33
		3-Way	5-8-17	7-11-24	9-14-29	11-17-32	13-22-34	15-24-36	17-27-39
		2-Way	8-12-26	11-16-34	13-21-40	16-26-44	20-30-47	23-34-50	26-38-54
		1-Way	9-14-29	12-20-39	16-25-47	20-29-52	23-34-56	26-39-60	29-44-64
Noise Criteria	26	34	40	44	49	53	56		

Performance Notes:

1. All pressures are in inches w.g..
2. Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
3. Noise Criteria (NC) values are based upon 10 dB room absorption, re 10⁻¹² watts. Dash (—) in space indicates an Noise Criteria of less than 20.

Balancing:

It is recommended that a commercially available 'Flow Hood' is used for field balancing. The airflow meter directly reads average flow rate with great accuracy at all volumes. It is a much faster and more accurate alternative to time consuming multiple velocity readings, eliminating the use of Ak factors and the calculations required to convert the average velocity into airflow.

D
CEILING DIFFUSERS

PERFORMANCE DATA:

Models 4340CB, 4340CBA • Surface Mount • Square Neck

Nominal Neck Size	Neck Velocity, FPM	200	300	400	500	600	700	800	900	
	Velocity Pressure	.003	.006	.010	.016	.022	.031	.040	.050	
	Total Pressure	.014	.032	.057	.089	.129	.175	.229	.290	
6 x 6	Flow Rate, CFM	50	75	100	125	150	175	200	225	
	Throw	4-Way	1-1-3	2-3-4	3-4-5	3-5-6	4-5-7	4-6-8	5-7-9	6-8-10
		3-Way	1-2-3	2-3-4	3-5-6	4-5-7	5-7-9	6-8-10	6-9-12	7-10-13
		2-Way	2-3-4	3-4-5	4-5-7	5-7-9	6-9-12	7-10-13	8-12-15	8-12-16
		1-Way	3-4-5	4-5-7	5-7-9	6-8-11	7-11-14	8-12-16	9-14-18	11-16-21
Noise Criteria	—	21	25	28	31	34	36	38		
8 x 8	Flow Rate, CFM	89	133	176	222	267	311	356	400	
	Throw	4-Way	2-3-4	3-4-5	3-5-6	4-5-7	4-6-8	5-7-9	5-7-10	6-9-12
		3-Way	2-3-4	3-4-5	4-5-7	4-6-8	5-7-10	6-9-12	7-10-13	7-11-14
		2-Way	3-4-5	3-5-6	4-6-8	5-7-10	7-10-13	7-11-14	8-12-16	9-14-18
		1-Way	3-5-6	4-6-8	5-7-10	6-9-12	8-12-15	9-13-17	10-15-19	11-16-22
Noise Criteria	—	23	27	30	33	35	37	39		
10 x 10	Flow Rate, CFM	139	208	278	347	417	486	556	625	
	Throw	4-Way	2-3-4	3-5-6	4-6-8	6-8-11	6-9-12	7-11-14	8-12-16	9-14-18
		3-Way	3-5-6	4-6-8	5-7-10	7-10-13	8-12-15	9-14-18	10-15-20	11-16-22
		2-Way	4-6-8	6-8-11	7-10-13	8-12-16	10-15-20	12-17-23	13-19-26	15-20-23
		1-Way	5-7-9	6-9-12	8-12-16	10-15-20	12-18-24	14-21-28	16-24-32	18-27-36
Noise Criteria	—	23	28	31	34	36	38	40		
12 x 12	Flow Rate, CFM	200	300	400	500	600	700	800	900	
	Throw	4-Way	3-5-6	4-6-8	5-7-10	6-9-12	8-12-15	9-13-17	10-15-20	12-17-23
		3-Way	3-5-6	5-7-9	6-9-12	8-12-15	9-14-18	11-16-22	13-19-25	14-20-27
		2-Way	5-7-9	6-9-12	8-12-16	11-16-21	12-18-24	15-22-29	17-25-33	18-27-36
		1-Way	6-9-12	8-12-16	10-15-20	12-18-24	15-22-29	17-25-33	18-27-36	21-31-42
Noise Criteria	—	23	27	31	34	36	39	41		
14 x 14	Flow Rate, CFM	272	408	544	681	817	953	1089	1225	
	Throw	4-Way	4-5-7	4-6-9	6-9-12	7-11-14	9-14-18	10-15-20	12-18-24	14-21-28
		3-Way	4-5-9	5-8-11	6-10-13	8-13-16	10-15-20	11-17-23	13-19-27	16-23-31
		2-Way	5-7-10	6-9-13	8-12-18	11-17-22	12-19-26	16-23-31	18-26-36	19-29-39
		1-Way	6-9-12	8-12-18	10-15-22	13-19-26	15-23-30	17-25-35	19-28-39	21-31-43
Noise Criteria	—	24	28	32	35	37	40	42		
16 x 16	Flow Rate, CFM	355	533	711	889	1067	1244	1422	1600	
	Throw	4-Way	5-7-9	6-8-11	8-10-14	9-13-18	10-15-21	13-18-27	14-20-28	16-22-31
		3-Way	5-7-11	6-9-13	8-13-17	10-15-22	13-19-26	15-22-30	18-25-36	19-29-39
		2-Way	6-10-12	9-14-16	11-17-24	14-21-28	17-25-32	19-26-34	21-34-40	24-34-44
		1-Way	7-10-16	9-15-18	12-18-26	15-22-32	18-27-36	19-28-37	24-35-42	26-36-46
Noise Criteria	—	27	31	35	37	40	42	44		
18 x 18	Flow Rate, CFM	450	675	900	1125	1350	1575	1800	2025	
	Throw	4-Way	5-7-10	6-9-12	8-12-16	10-15-20	12-18-24	14-21-28	16-24-32	18-27-36
		3-Way	5-7-12	7-11-14	9-14-18	11-16-22	13-19-26	16-24-31	18-27-36	21-31-41
		2-Way	8-12-18	10-15-20	13-19-26	16-24-32	20-29-39	23-34-45	26-39-52	29-43-58
		1-Way	9-14-22	11-16-24	15-23-30	18-27-36	22-32-43	25-37-49	28-42-56	30-45-60
Noise Criteria	—	28	32	36	38	41	43	45		

Performance Notes:

1. All pressures are in inches w.g..
2. Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
3. Noise Criteria (NC) values are based upon 10 dB room absorption, re 10⁻¹² watts. Dash (—) in space indicates an Noise Criteria of less than 20.

4. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2023.

Balancing:

It is recommended that a commercially available 'Flow Hood' is used for field balancing. The airflow meter directly reads average flow rate with great accuracy at all volumes. It is a much faster and more accurate alternative to time consuming multiple velocity readings, eliminating the use of Ak factors and the calculations required to convert the average velocity into airflow.

PERFORMANCE DATA:

Models 4340M, 4340MA • Surface Mount • Square Neck

Nominal Neck Size	Neck Velocity, FPM		300	400	500	600	700	800
	Velocity Pressure		.006	.010	.016	.023	.031	.040
	Total Pressure		.028	.047	.075	.103	.146	.188
6 x 6	Flow Rate, CFM		75	100	125	150	175	200
	Throw	4-Way	2-3-7	3-4-8	4-5-8	4-7-9	5-7-10	6-8-11
		3-Way	3-4-8	4-5-9	4-7-10	5-8-11	6-8-12	7-9-13
		2-Way	4-5-10	5-7-12	6-9-13	7-10-15	8-11-16	9-12-17
		1-Way	4-7-13	6-9-15	7-11-17	9-13-18	10-14-20	12-15-21
Noise Criteria		—	—	19	25	31	35	
8 x 8	Flow Rate, CFM		133	176	222	267	311	356
	Throw	4-Way	2-4-8	3-5-10	4-6-11	5-8-12	6-9-13	7-10-14
		3-Way	2-5-9	4-6-12	5-8-13	6-9-15	7-11-18	8-12-17
		2-Way	3-6-12	5-8-16	7-10-18	8-12-20	10-14-25	11-16-23
		1-Way	4-8-15	7-10-20	8-13-22	10-15-25	12-18-31	14-20-28
Noise Criteria		—	—	22	28	34	38	
10 x 10	Flow Rate, CFM		208	278	347	417	486	556
	Throw	4-Way	2-5-9	4-6-12	5-8-14	6-9-15	7-11-17	8-12-18
		3-Way	3-5-11	5-7-14	6-9-17	7-11-18	8-13-20	10-14-21
		2-Way	3-7-14	6-10-19	8-12-22	10-14-25	11-17-27	13-19-28
		1-Way	4-9-18	8-12-24	10-15-28	12-18-31	14-21-33	16-24-35
Noise Criteria		—	16	24	30	36	41	
12 x 12	Flow Rate, CFM		300	400	500	600	700	800
	Throw	4-Way	2-5-11	4-7-14	6-9-17	7-11-18	8-12-20	9-14-21
		3-Way	3-6-13	5-8-17	7-11-20	8-13-22	10-15-24	11-17-26
		2-Way	4-8-17	7-11-22	9-14-27	11-17-29	13-20-32	15-22-34
		1-Way	5-11-21	9-14-28	12-18-34	14-21-37	16-25-40	19-28-43
Noise Criteria		—	18	26	32	38	43	
14 x 14	Flow Rate, CFM		408	544	681	817	953	1089
	Throw	4-Way	3-6-12	5-8-16	7-10-20	8-12-21	9-14-23	11-16-25
		3-Way	3-7-15	6-10-19	8-12-24	10-15-26	11-17-28	13-19-30
		2-Way	4-10-19	8-13-26	11-16-31	13-19-34	15-23-37	17-26-40
		1-Way	5-12-24	10-16-32	13-20-39	16-24-43	19-28-46	22-32-50
Noise Criteria		—	19	27	34	39	44	
15 x 15	Flow Rate, CFM		469	625	781	938	1094	1250
	Throw	4-Way	3-6-13	5-9-17	7-11-21	9-13-23	10-15-25	11-17-27
		3-Way	3-8-15	6-10-21	9-13-25	10-15-28	12-18-30	14-21-32
		2-Way	5-10-21	8-14-28	11-17-34	14-21-37	16-24-40	18-28-43
		1-Way	6-13-26	10-17-34	14-22-42	17-26-46	20-30-50	23-34-53
Noise Criteria		—	20	28	35	40	45	
16 x 16	Flow Rate, CFM		533	711	889	1067	1244	1422
	Throw	4-Way	3-7-14	5-9-18	8-11-22	9-14-25	11-16-27	12-18-28
		3-Way	4-8-16	6-11-22	9-14-27	11-16-29	13-19-32	15-22-34
		2-Way	5-11-22	8-15-29	12-18-36	15-22-39	17-26-42	20-29-45
		1-Way	6-13-27	11-18-37	15-23-45	18-27-49	21-32-53	24-37-57
Noise Criteria		—	21	29	35	41	46	
18 x 18	Flow Rate, CFM		675	900	1125	1350	1575	1800
	Throw	4-Way	3-7-15	6-10-20	9-13-25	10-15-28	12-18-30	14-20-32
		3-Way	4-9-18	7-12-25	10-15-30	12-18-33	14-21-36	16-25-38
		2-Way	5-12-25	9-16-33	14-20-40	16-25-44	19-29-48	22-33-51
		1-Way	7-15-31	12-20-41	17-26-50	20-31-55	24-36-60	27-41-64
Noise Criteria		—	22	30	37	42	47	

Performance Notes:

1. All pressures are in inches w.g..
2. Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
3. Noise Criteria (NC) values are based upon 10 dB room absorption, re 10⁻¹² watts. Dash (—) in space indicates an Noise Criteria of less than 15.

4. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2023.

Balancing:

It is recommended that a commercially available 'Flow Hood' is used for field balancing. The airflow meter directly reads average flow rate with great accuracy at all volumes. It is a much faster and more accurate alternative to time consuming multiple velocity readings, eliminating the use of Ak factors and the calculations required to convert the average velocity into airflow.