

PERFORATED CURVED BLADE DIFFUSERS

- SUPPLY
- 4-WAY ADJUSTABLE DISCHARGE PATTERN (STANDARD)
- 1, 2 OR 3-WAY DISCHARGE PATTERN (OPTIONAL)

Steel Models:

4320CB Flush Face

4325CB Drop Face

Aluminum Face Models:

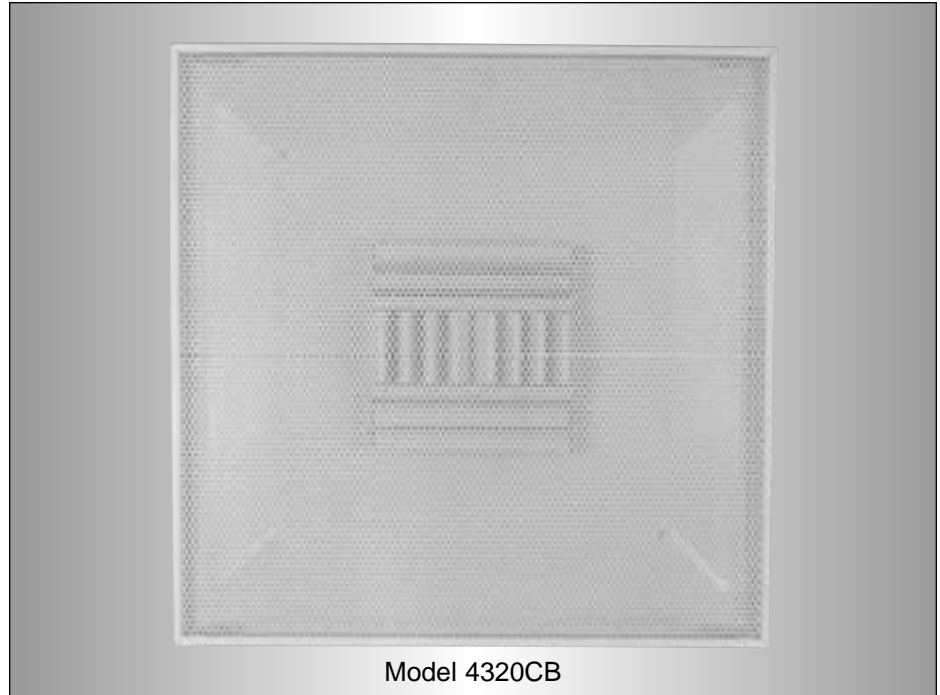
4320CBA Flush Face

4325CBA Drop Face

Aluminum Models:

4320CBAA Flush Face

4325CBAA Drop Face



Model 4320CB

The **Nailor 4320CB Curved Blade Diffusers** provide the unobtrusive, smooth appearance preferred by many architects with superior features and performance characteristics. Designed to maximize throw, this model features individually adjustable, friction pivoted curved blade deflectors mounted directly under the neck. They project a tight, uniform horizontal blanket of air over a wide range of air volumes and provide excellent performance in variable air volume systems.

The **4320CB Diffuser** features a 4-way adjustable discharge pattern as standard. The deflector blades can be adjusted to control both the angle of discharge and hence throw from full horizontal to vertical in each direction and also damper the air volume. By closing off the deflectors in one or more directions, directional control can also be achieved. The **4320CB** is also available with a factory supplied 1, 2 or 3-way adjustable discharge pattern controller.

The **4325CB** features a dropped (extended) face panel that is available to compliment tegular tile ceiling systems, so that the panel remains flush with the ceiling line.

FEATURES:

- Round or square necks available.
- Hinged, removable face plate with quick-release spring latches.
- Discharge pattern can be adjusted from horizontal to vertical before or after installation.
- Discharge pattern is adjusted by dropping the perforated face and moving the curved blade deflectors.
- Inlet collar has 1 1/4" (35) depth for easy duct connection.
- Dropping the perforated face gives access to the optional damper.
- Perforated face with 3/16" (5) diameter holes on staggered 1/4" (6) centers, providing 51% free area.
- Return models (**4360 Series**) have the same face and frame construction as the supply models to match their appearance.

Material: Models 4320CB/4325CB have a corrosion-resistant steel perforated face and backpan. **Models 4320CBA/4325CBA** have an aluminum perforated face and a corrosion-resistant steel backpan. **Models 4320CBAA/4325CBAA** have an aluminum perforated face and backpan.

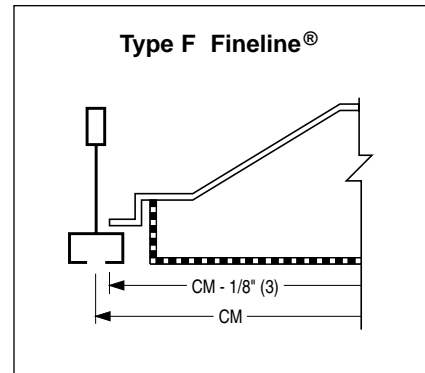
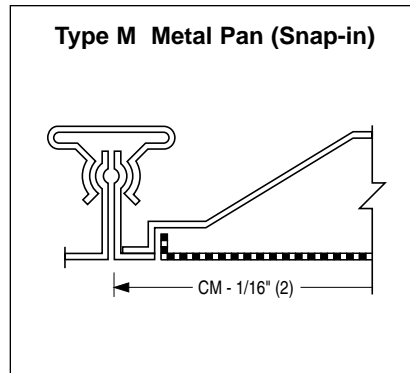
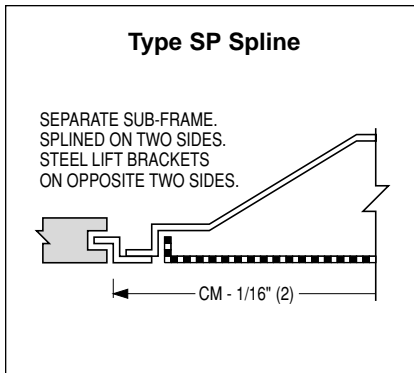
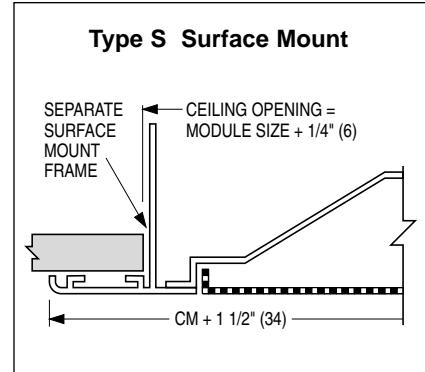
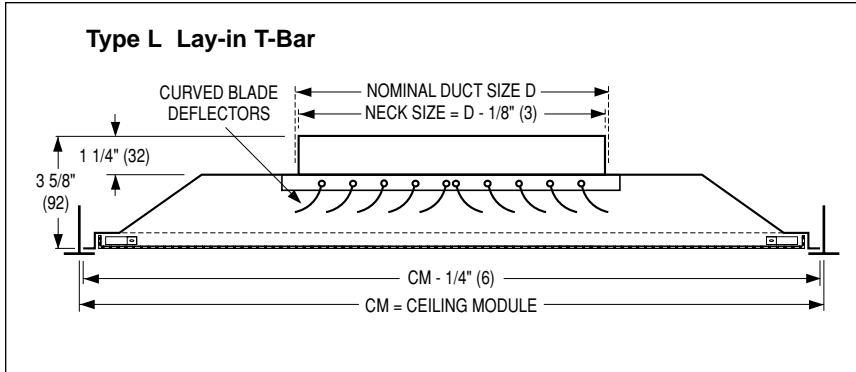
Finish: AW Appliance White baked enamel finish is standard. Other finishes are available.

Available Combinations of Ceiling Module vs. Neck Size

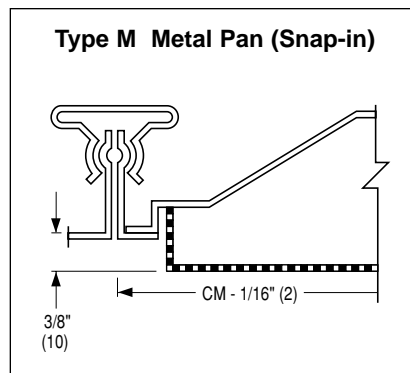
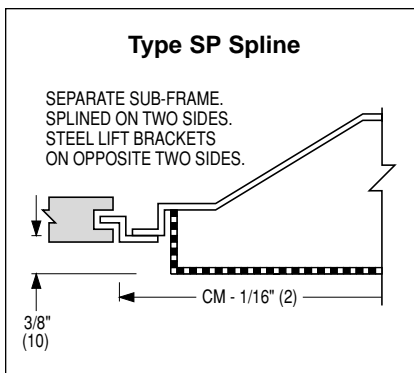
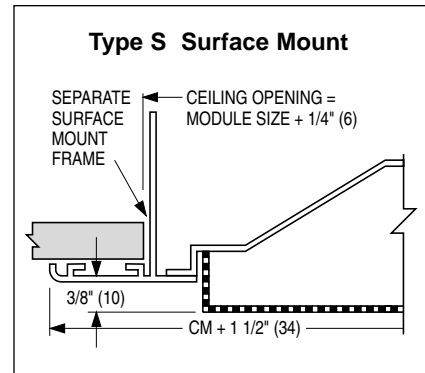
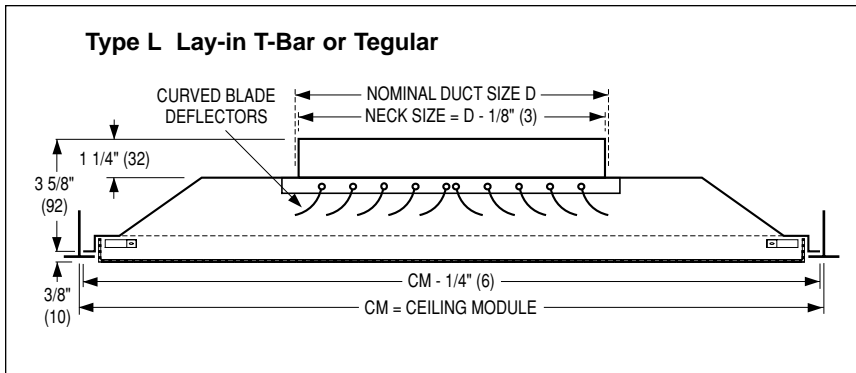
| Ceiling Module CM | | Nominal Duct Size D | | | |
|-------------------|----------------|-----------------------------------|---|--|--|
| Imperial Modules | Metric Modules | Round Neck | | Square Neck | |
| | | Imperial Units (in.) | Metric Units (mm) | Imperial Units (in.) | Metric Units (mm) |
| 12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

Dimensional Data and Frame Types

Models 4320CB, 4320CBA, 4320CBAA • Supply • Flush Face



Models 4325CB, 4325CBA, 4325CBAA • Supply • Drop Face



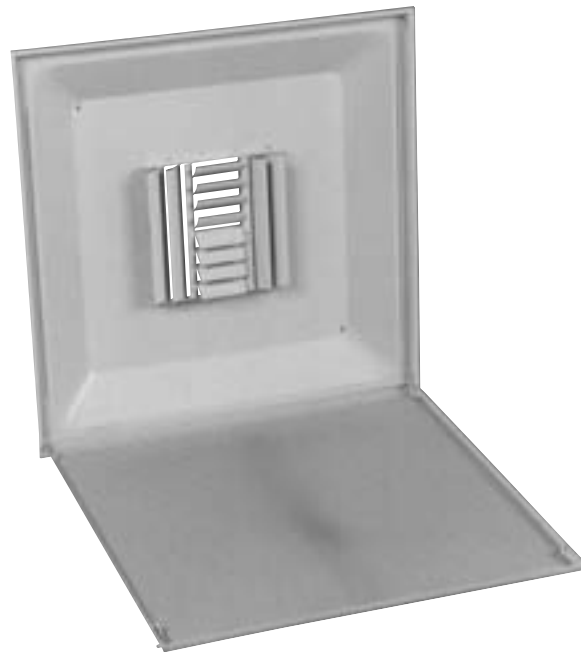
Model Series 4320CB • Adjusting Pattern Controllers

Removing Perforated Face

The **4300 Series** is supplied with a removable face plate that is retained in place by four spring-loaded latches, one located in each corner of the diffuser.

1. Insert a small screwdriver through a perforated hole in the edge of the face plate and push the spring-loaded latch inward from diffuser frame to release face.
2. Repeat procedure on the opposite side.
3. The face plate will now swing down, using the two remaining latches as hinges. The face may be completely removed by depressing in a similar manner, the two remaining latches.
4. To close; lift perforated face, depress spring latches with fingers and snap in place.

The pattern controller in the neck of the diffuser features individually adjustable deflector blades which may be used to vary the discharge pattern from full horizontal to vertical. Each blade is friction pivoted using a tension wire which securely holds its position after adjustment.

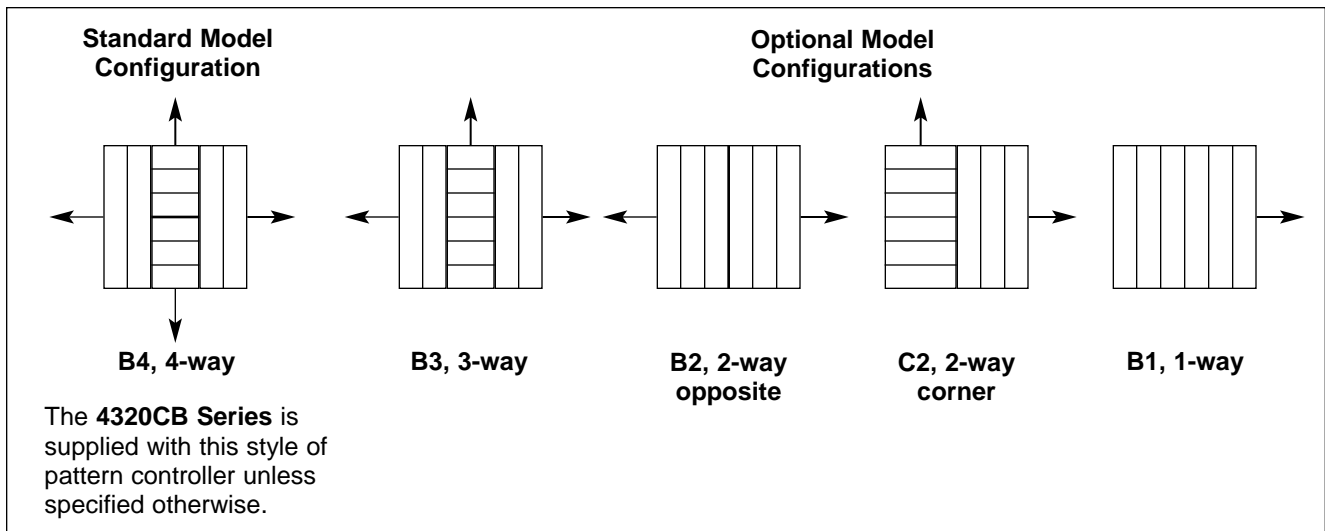


Round or Square Neck • 4-way Pattern

D

CEILING DIFFUSERS

Pattern Controller Options



HOW TO SPECIFY OR TO ORDER

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

Perforated Curved Blade Supply Ceiling Diffusers – Model Series 4320CB

4320CB - 08 - 24 x 24 - L - AW - B4 - -

D
CEILING DIFFUSERS

MODEL

| | | |
|-----------------|------------|----------|
| - Steel | Flush Face | 4320CB |
| | Drop Face | 4325CB |
| - Aluminum Face | Flush Face | 4320CBA |
| | Drop Face | 4325CBA |
| - Aluminum | Flush Face | 4320CBAA |
| | Drop Face | 4325CBAA |

NECK SIZE (inches)

Round

06, 08, 10, 12, 14, 15, 16, 18

Square

6 x 6, 8 x 8, 10 x 10, 12 x 12,
14 x 14, 15 x 15, 16 x 16,
18 x 18

CEILING MODULE

Imperial (inches) Metric (mm)

| | |
|-----------|-----------|
| - 12 x 12 | 300 x 300 |
| - 16 x 16 | 400 x 400 |
| - 24 x 12 | 600 x 300 |
| - 20 x 20 | 500 x 500 |
| - 24 x 24 | 600 x 600 |

FRAME TYPE

| | |
|---------------------|----|
| - Lay-in T-Bar | L |
| - Surface Mount | S |
| - Spline | SP |
| - Metal Pan Snap-in | M |
| - Fineline® | F |

ACCESSORIES

| | |
|---------------------------------|-----|
| - None (default) | — |
| - External Foil Back Insulation | EX |
| - Earthquake Tabs | EQT |

AIR BALANCING DEVICES

Round Neck

| | |
|-------------------------------|------|
| - Radial Sliding Blade Damper | 4250 |
| - Radial Opposed Blade Damper | 4275 |
| - Butterfly Damper | 4675 |
| - Equalizing Grid | EGR |
| - Damper/Equalizing Grid | DEGR |

Square Neck

| | |
|--------------------------|------|
| - Opposed Blade Damper | OBD |
| - Equalizing Grid | EGL |
| - Damper/Equalizing Grid | DEGL |

BLOW PATTERN

| | |
|-------------------|----|
| - 4-Way (default) | B4 |
| - 3-Way | B3 |
| - 2-Way Opposite | B2 |
| - 2-Way Corner | C2 |
| - 1-Way | B1 |

FINISH

| | |
|-----------------------------|----|
| - Appliance White (default) | AW |
| - Special | SP |
| - AW Face/Black Backpan | BA |

Notes:

1. Consult individual models as to limitations and availability of ceiling module and neck size combinations.
2. If more than one accessory is required, list in order.

SUGGESTED SPECIFICATION:**Models 4320CB, 4325CB – Steel**

Furnish and install **Nailor Model** (select one) **4320CB Flush Face** or **4325CB Drop Face, Perforated Supply Curved Blade Ceiling Diffusers** of the sizes and capacities as shown on the plans and air distribution schedules. The diffuser shall have a heavy gauge, stamped corrosion-resistant steel backpan with a round or square neck as specified. A corrosion-resistant steel perforated face shall have 3/16" (5) dia. holes on 1/4" (6) staggered centers, providing 51% free area. Mounted on the neck of the diffuser shall be a factory installed curved blade pack with individually adjustable blades configured for a 4-way (standard) throw. (Optional) Factory installed 3, 2 or 1-way (select one) pattern to be supplied. The face shall be removable, hinged and include quick-release spring latches allowing easy access for cleaning and adjusting the deflectors (or optional damper). The finish shall be AW Appliance White baked enamel (optional finishes are available).

The manufacturer shall provide published performance data for the diffuser, which shall be tested in accordance with ANSI/ASHRAE Standard 70 – 1991.

Models 4320CBA, 4325CBA – Aluminum Face

Furnish and install **Nailor Model** (select one) **4320CBA Flush Face** or **4325CBA Drop Face, Perforated Supply Curved Blade Ceiling Diffusers** of the sizes and capacities as shown on the plans and air distribution schedules. The diffuser shall have a heavy gauge, stamped corrosion-resistant steel backpan with a round or square neck as specified. An aluminum perforated face shall have 3/16" (5) dia. holes on 1/4" (6) staggered centers, providing 51% free area. Mounted on the neck of the diffuser shall be a factory installed curved blade pack with individually adjustable blades configured for a 4-way (standard) throw. (Optional) Factory installed 3, 2 or 1-way (select one) pattern to be supplied. The face shall be removable, hinged and include quick-release spring latches allowing easy access for cleaning and adjusting the deflectors (or optional damper). The finish shall be AW Appliance White baked enamel (optional finishes are available).

The manufacturer shall provide published performance data for the diffuser, which shall be tested in accordance with ANSI/ASHRAE Standard 70 – 1991.

Models 4320CBAA, 4325CBAA – Aluminum

Furnish and install **Nailor Model** (select one) **4320CBAA Flush Face** or **4325CBAA Drop Face, Perforated Supply Curved Blade Ceiling Diffusers** of the sizes and capacities as shown on the plans and air distribution schedules. The diffuser shall have a stamped aluminum backpan with a round or square neck as specified. An aluminum perforated face shall have 3/16" (5) dia. holes on 1/4" (6) staggered centers, providing 51% free area. Mounted on the neck of the diffuser shall be a factory installed curved blade pack with individually adjustable blades configured for a 4-way (standard) throw. (Optional) Factory installed 3, 2 or 1-way (select one) pattern to be supplied. The face shall be removable, hinged and include quick-release spring latches allowing easy access for cleaning and adjusting the deflectors (or optional damper). The finish shall be AW Appliance White baked enamel (optional finishes are available).

The manufacturer shall provide published performance data for the diffuser, which shall be tested in accordance with ANSI/ASHRAE Standard 70 – 1991.

Performance Data

Models 4320CB, 4320CBA, 4320CBAA • 12 x 12 (300 x 300) Module Size

| Nominal Neck Size | Neck Velocity, FPM | | 300 | 400 | 500 | 600 | 700 | 800 | 900 |
|-------------------|--------------------|-------|--------|--------|---------|---------|---------|----------|----------|
| | VP | | .006 | .010 | .016 | .023 | .031 | .040 | .051 |
| | TP | | .030 | .052 | .082 | .118 | .162 | .211 | .267 |
| 6" Dia. | Flow Rate, CFM | | 60 | 80 | 95 | 115 | 135 | 155 | 175 |
| | T | 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 |
| NC | | — | 20 | 25 | 30 | 35 | 39 | 42 | |
| 8" Dia. | Flow Rate, CFM | | 105 | 140 | 175 | 210 | 245 | 280 | 315 |
| | T | 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 |
| NC | | — | 21 | 27 | 33 | 37 | 41 | 44 | |
| 6 x 6 | Flow Rate, CFM | | 75 | 100 | 125 | 150 | 175 | 200 | 225 |
| | T | 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 |
| NC | | — | — | 25 | 30 | 34 | 38 | 41 | |
| 8 x 8 | Flow Rate, CFM | | 135 | 175 | 220 | 265 | 310 | 355 | 400 |
| | T | 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 |
| NC | | — | 21 | 28 | 34 | 38 | 42 | 45 | |

Models 4320CB, 4320CBA, 4320CBAA • 24 x 12 (600 x 300) Module Size

| Nominal Neck Size | Neck Velocity, FPM | | 300 | 400 | 500 | 600 | 700 | 800 | 900 |
|-------------------|--------------------|-------|--------|--------|---------|---------|---------|----------|----------|
| | VP | | .006 | .010 | .016 | .023 | .031 | .040 | .051 |
| | TP | | .030 | .052 | .082 | .118 | .162 | .211 | .267 |
| 6" Dia. | Flow Rate, CFM | | 60 | 80 | 95 | 115 | 135 | 155 | 175 |
| | T | 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 |
| NC | | — | 20 | 25 | 30 | 35 | 39 | 42 | |
| 8" Dia. | Flow Rate, CFM | | 105 | 140 | 175 | 210 | 245 | 280 | 315 |
| | T | 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 |
| NC | | — | 21 | 27 | 33 | 37 | 41 | 44 | |
| 6 x 6 | Flow Rate, CFM | | 75 | 100 | 125 | 150 | 175 | 200 | 225 |
| | T | 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 |
| NC | | — | — | 25 | 30 | 34 | 38 | 41 | |
| 8 x 8 | Flow Rate, CFM | | 135 | 175 | 220 | 265 | 310 | 355 | 400 |
| | T | 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 |
| NC | | — | 21 | 28 | 34 | 38 | 42 | 45 | |

For performance notes, see page D154.

Performance Data

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

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

D
CEILING DIFFUSERS

For performance notes, see page D154.

Performance Data

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

| Nominal Neck Size | Neck Velocity, FPM | | 300 | 400 | 500 | 600 | 700 | 800 | 900 |
|-------------------|--------------------|-------|---------|----------|----------|----------|----------|----------|----------|
| | VP | TP | .006 | .010 | .016 | .023 | .031 | .040 | .051 |
| 6 x 6 | Flow Rate, CFM | | 75 | 100 | 125 | 150 | 175 | 200 | 225 |
| | T | 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 |
| NC | | — | 18 | 24 | 29 | 33 | 37 | 40 | |
| 8 x 8 | Flow Rate, CFM | | 135 | 175 | 220 | 265 | 310 | 355 | 400 |
| | T | 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 |
| NC | | 13 | 21 | 27 | 32 | 36 | 40 | 43 | |
| 10 x 10 | Flow Rate, CFM | | 210 | 275 | 345 | 415 | 485 | 555 | 625 |
| | T | 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 |
| NC | | 15 | 23 | 29 | 34 | 38 | 42 | 45 | |
| 12 x 12 | Flow Rate, CFM | | 300 | 400 | 500 | 600 | 700 | 800 | 900 |
| | T | 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 |
| NC | | 17 | 23 | 31 | 36 | 40 | 44 | 47 | |
| 14 x 14 | Flow Rate, CFM | | 410 | 545 | 680 | 815 | 955 | 1090 | 1360 |
| | T | 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 | 11-17-36 | 13-20-42 | 15-23-48 | 19-30-54 |
| NC | | 20 | 28 | 34 | 38 | 43 | 47 | 50 | |
| 15 x 15 | Flow Rate, CFM | | 470 | 625 | 780 | 935 | 1095 | 1250 | 1405 |
| | T | 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 |
| NC | | 21 | 29 | 35 | 39 | 44 | 48 | 51 | |
| 16 x 16 | Flow Rate, CFM | | 530 | 710 | 890 | 1065 | 1245 | 1420 | 1600 |
| | T | 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 |
| NC | | 22 | 30 | 36 | 40 | 45 | 49 | 52 | |
| 18 x 18 | Flow Rate, CFM | | 675 | 900 | 1125 | 1350 | 1575 | 1800 | 2025 |
| | T | 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 |
| NC | | 24 | 32 | 38 | 42 | 47 | 51 | 54 | |

D
CEILING DIFFUSERS

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

Performance Notes:
 1. Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
 2. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 1991.

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.