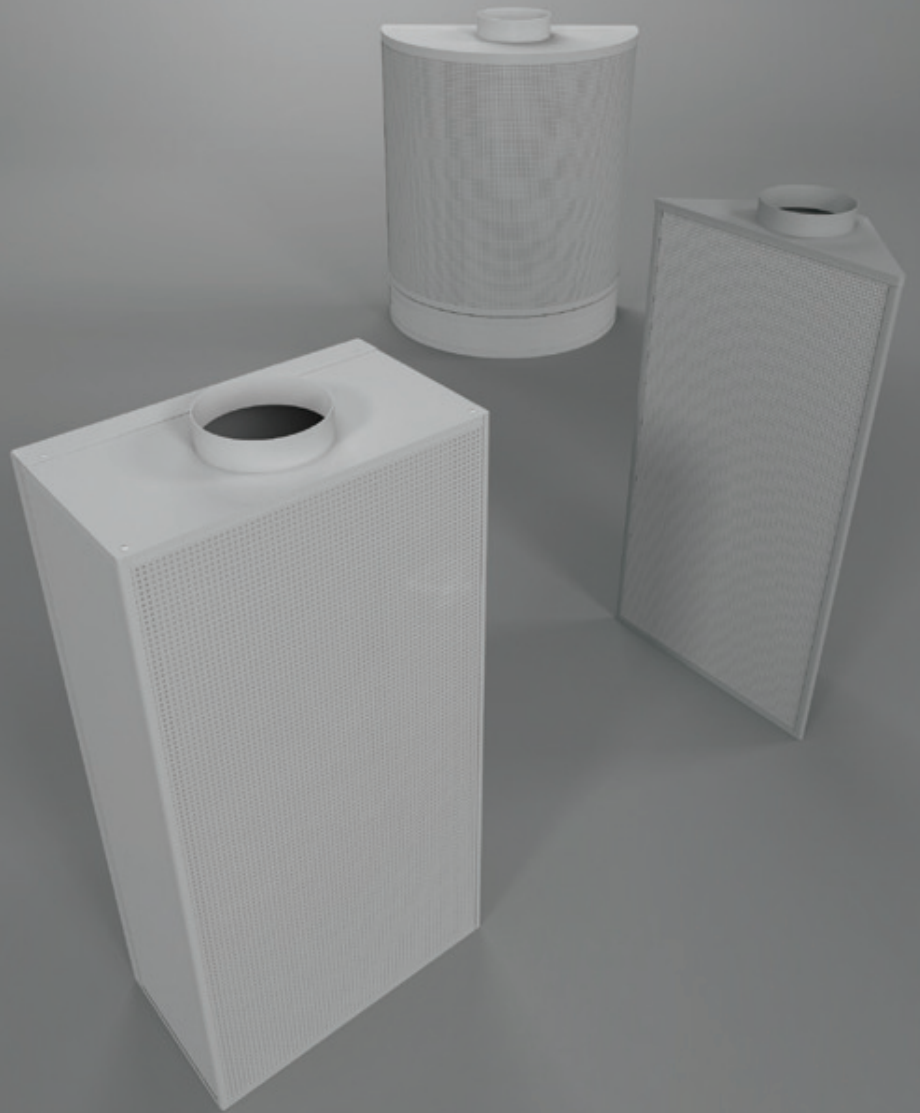


SECTION J



**Wall Mounted  
Displacement  
Diffusers**



# Protective Film

Price is proud to offer a protective plastic film on the face and inlet of displacement ventilation products for protection during shipping and installation.

The protective film:

- Helps protect the diffuser face from damage during shipping and installation
- Seals the inlet and face of the diffuser of most models during installation
- Can contribute to IEQ Credit 3.1: Construction Indoor Air Quality Management Plan – During Construction, LEED for New Construction and Renovations 2009

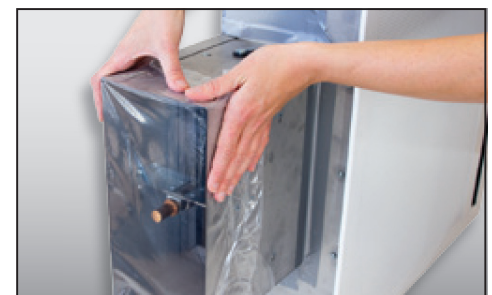
Available for  
Price's entire  
Displacement  
Ventilation  
Product Offering.



Protects the diffuser face from damage

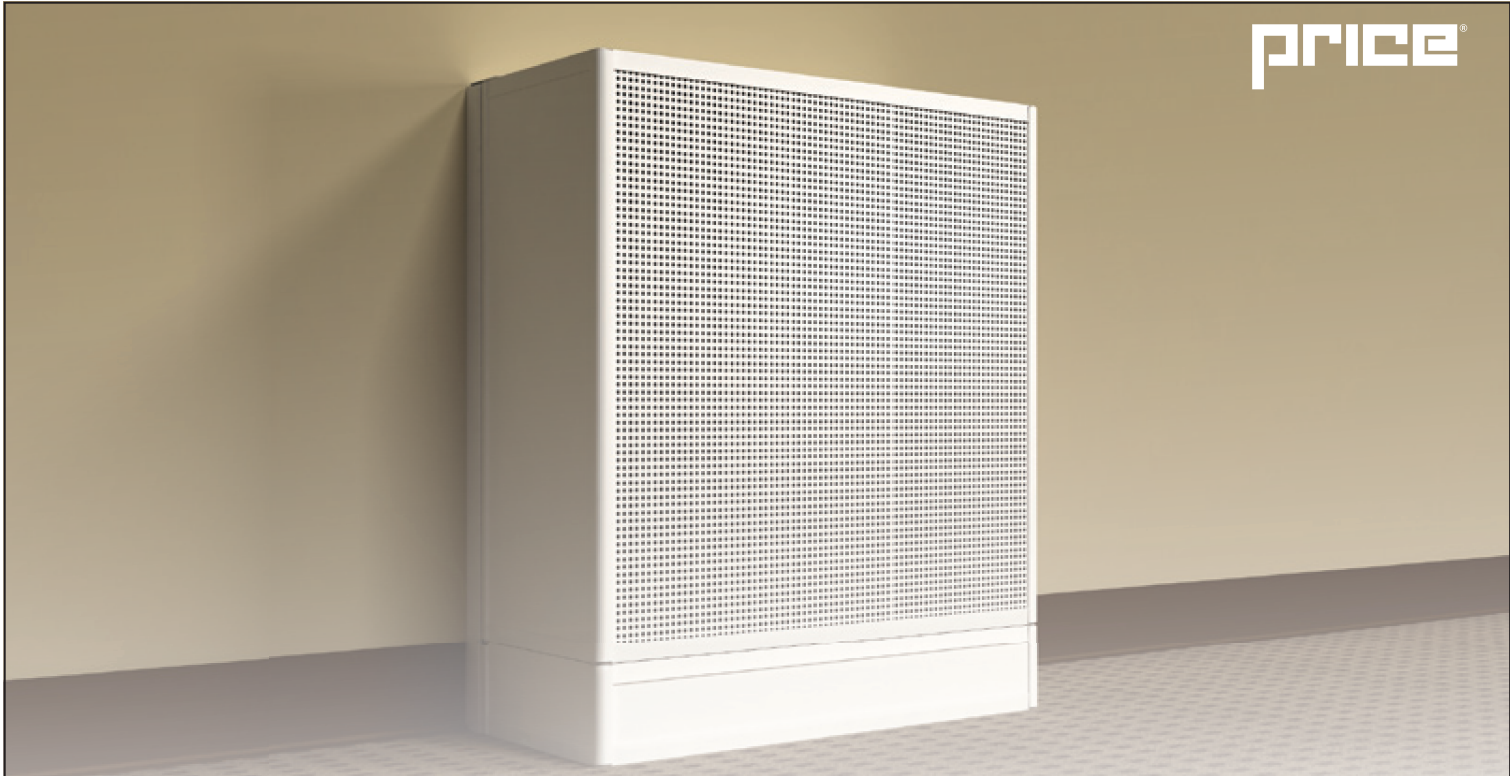


Seals the face of the diffuser



Seals the inlet of the diffuser

[priceindustries.com](http://priceindustries.com) for additional product information, including product videos and brochures.



# Wall Mounted Diffusers

Price Wall Mounted Displacement Diffusers supply fresh, clean air directly into the occupied zone, offer traditional displacement style, and can be easily integrated into architectural features or blended into a space. Typical applications for these diffusers include classrooms, lobbies, offices, and large public spaces such as libraries. The superior air quality achieved by displacement ventilation systems offers unique benefits for educational applications, including reduced absenteeism and higher test scores.

## Wall Mounted Family:

- DF1
- DF3
- DF1C
- DR90
- DR180
- DR180U



Superior air quality for classrooms



Optional duct covers and bases



Rail-mounting system for easy installation



Architectural integration

[priceindustries.com](http://priceindustries.com) for additional product information, including product videos and brochures.

# Displacement Ventilation Wall Mounted Diffusers



## Product Overview

### Models

Price Wall Mounted Displacement Diffusers are designed to be integrated with the architecture in a space and provide a low velocity air pattern into a room. These diffusers are typically placed against a wall, pillar or in the corner of a room with no visible fasteners. They are most commonly used in hotels, schools, office spaces, convention centers and theaters.

### Applications

Price Wall Mounted Displacement Diffusers feature high gauge steel, flat perforated faces that are held by high strength extruded aluminum frames. The perforated faces and internal baffle ensure equalized air flow across the face of the diffuser and provide low velocity air into the room. These diffusers are typically installed along a side-wall, against a pillar, or integrated onto features such as bookcases. The **DF1** can also be recessed into a wall to maintain a flush appearance. With the exception of the **DF1C**, Price Wall Mounted Displacement Diffusers use a patent-pending rail mounting system that is easy to install and has no visible fasteners.

### Accessories

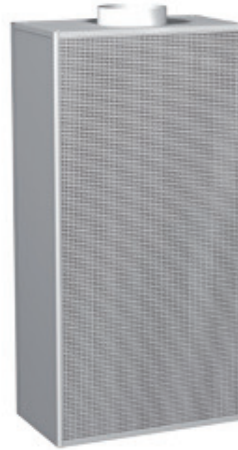
The accessories available for Price Wall Mounted Displacement Diffusers include duct covers, bases and adjustable flow sensing devices (AFSDs).

Duct covers are commonly used to hide ductwork to the diffusers and increase architectural appeal. Price duct covers are constructed of the same heavy gauge steel panels and high strength extruded aluminum frames used in their applicable diffuser. Following the same contour as its respective diffuser, duct covers are available in solid or perforated steel, and are ideal for hiding ductwork and other vertically running cables or conduit. When using a perforated duct cover, Price recommends that the duct be painted black to avoid any visible metal through the duct cover.

With the exception of the DF1C, duct covers are supplied assembled in solid or perforated steel are available in varying lengths, and use the same easy-to-install patent-pending Price rail-mounting system.

Diffuser bases offer a look that is consistent with the rest of the space, providing protection from damage or the moisture of cleaning while hiding the ductwork. The bases are designed to be inset 1" from the face of the diffuser; however, they are free to be specified to match any décor or baseboard appearance.

**DF1**



**DF1C**



The Adjustable Flow Sensing Device features both a manually adjustable damper for volume control and the Price SP300 multi-point sensor to provide accurate pressure measurement. Utilizing the gauge taps for flow measurement and the damper locking mechanism ensures quick and accurate balancing of each diffuser during the balancing process.

# Wall Mounted Displacement Diffusers DF1 Series



## Product Information

**Price DF1 Series** displacement diffusers are designed to produce a 1 way low velocity air supply, perpendicular to the diffuser face. The DF1 discharges air evenly across its perforated face with minimal turbulence or induction of room air. The cool supply air flows down to the floor level and gradually fills the occupied space. Typically installed against a wall or pillar, the diffuser can blend with a variety of surroundings. The superior air quality and low noise levels realized with the DF1 make it suitable for office spaces, restaurants, supermarkets, theaters, hotels, convention centers, schools or any application where air quality and occupant comfort demands are high.

### Features

- Optional inlet locations: bottom, top, rear, or from either side.
- Field-cut inlet option.
- Ships with protective film on face and inlet.

### Construction/Finish

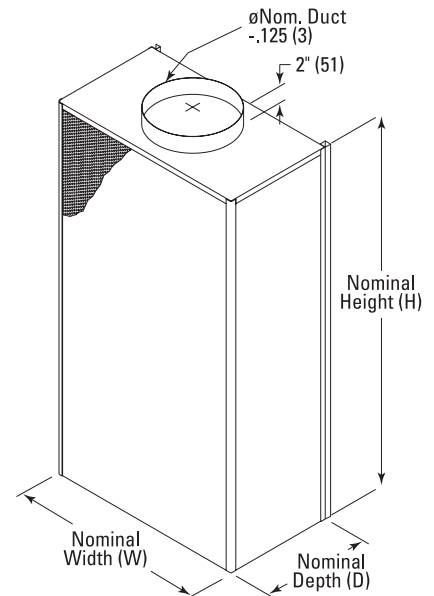
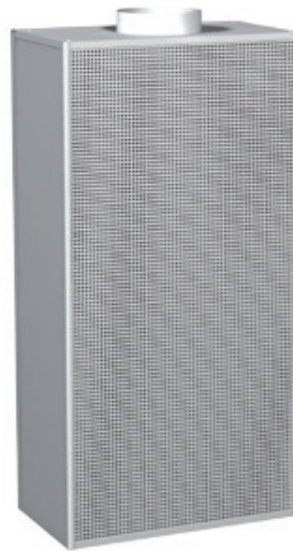
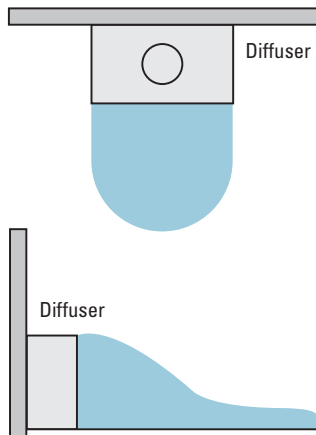
- Diffuser Frame and Equalization Baffle – Aluminum
- Side, Top and Bottom Panels – Coated Steel
- Perforated Front Panel – Coated Steel
- Finish – B12 White (Standard)

For optional and special finishes see color matrix.

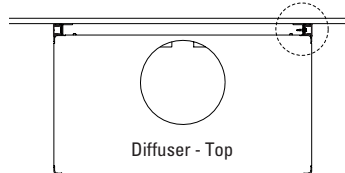
### Accessories

- Base
- Duct Covers
- AFSD

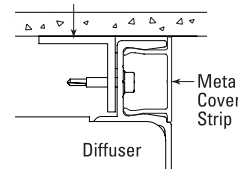
### Air Pattern



### Rail-Mounting System Detail



### Mounting Bracket



### Dimensional Data - Imperial (inches)

| W X H | Duct                   | Depth |
|-------|------------------------|-------|
| 24x24 | 8, 10, 14 x 6          | 13    |
| 24x48 | 8, 10, 16 x 8          | 13    |
| 24x60 | 8, 10, 16 x 8          | 13    |
| 36x48 | 10, 12, 18 x 8         | 16    |
| 36x60 | 10, 12, 18 x 8, 24 x 8 | 16    |
| 48x24 | 8, 10, 14 x 6          | 13    |
| 48x36 | 10, 12, 16 x 8         | 16    |
| 60x24 | 8, 10, 14 x 6          | 13    |
| 60x36 | 10, 12, 16 x 8, 18 x 8 | 16    |

### Dimensional Data - Metric (mm)

| W X H      | Duct                           | Depth |
|------------|--------------------------------|-------|
| 600 x 600  | 200, 250, 400 x 150            | 330   |
| 600 x 1200 | 200, 250, 400 x 200            | 330   |
| 600 x 1500 | 200, 250, 400 x 200            | 330   |
| 900 x 1200 | 250, 315, 500 x 200            | 410   |
| 900 x 1500 | 250, 315, 500 x 200, 600 x 200 | 410   |
| 1200 x 600 | 200, 250, 400 x 150            | 330   |
| 1200 x 900 | 250, 315, 400 x 200            | 410   |
| 1500 x 600 | 200, 250, 400 x 150            | 330   |
| 1500 x 900 | 250, 315, 500 x 200            | 410   |

For a complete list of standard sizes and inlets, refer to [www.priceindustries.com/resources/type/literature/submittals](http://www.priceindustries.com/resources/type/literature/submittals)

# Wall Mounted Displacement Diffusers DF1 Series



## Performance Data – Imperial Units

| Unit Size<br>W x H x D [in]<br>Face Area [ft²] | Inlet Size<br>[in] | Face<br>Velocity<br>[fpm] | Air Flow<br>[cfm] | Total<br>Pressure<br>[in. w.g.] | Static<br>Pressure<br>[in. w.g.] | Noise<br>Criteria<br>[NC] | Proximity to Outlet [ft] |     |            |     |
|--|--------------------|---------------------------|-------------------|---------------------------------|----------------------------------|---------------------------|--------------------------|-----|------------|-----|
|  |                    |                           |                   |                                 |                                  |                           | ΔT = 5 °F                |     | ΔT = 10 °F |     |
|  |                    |                           |                   |                                 |                                  |                           | DR                       |     | DR         |     |
|  |                    |                           |                   |                                 |                                  |                           | 15%                      | 20% | 15%        | 20% |
| 24 x 24 x 13<br>[3.6]                          | 8                  | 20                        | 72                | --                              | --                               | --                        | --                       | --  | 1          | --  |
|  |                    | 30                        | 108               | 0.02                            | --                               | --                        | 3                        | 1   | 5          | 2   |
|  |                    | 40                        | 144               | 0.03                            | --                               | --                        | 6                        | 3   | 8          | 5   |
|  |                    | 50                        | 180               | 0.05                            | 0.03                             | --                        | 8                        | 5   | 10         | 7   |
| 24 x 48 x 13<br>[7.4]                          | 8                  | 20                        | 148               | 0.02                            | --                               | --                        | 4                        | 1   | 6          | 3   |
|  |                    | 30                        | 222               | 0.04                            | --                               | --                        | 8                        | 4   | 10         | 6   |
|  |                    | 40                        | 295               | 0.07                            | 0.02                             | --                        | 10                       | 7   | 13         | 9   |
|  |                    | 50                        | 369               | 0.11                            | 0.04                             | 20                        | 13                       | 9   | 15         | 11  |
| 24 x 60 x 13<br>[9.3]                          | 8                  | 20                        | 186               | 0.02                            | --                               | --                        | 5                        | 2   | 7          | 4   |
|  |                    | 30                        | 278               | 0.05                            | --                               | --                        | 9                        | 6   | 11         | 8   |
|  |                    | 40                        | 371               | 0.09                            | --                               | 17                        | 12                       | 8   | 14         | 11  |
|  |                    | 50                        | 464               | 0.14                            | 0.03                             | 25                        | 14                       | 11  | 17         | 13  |
|  | 10                 | 30                        | 278               | 0.03                            | --                               | --                        | 9                        | 6   | 11         | 8   |
|  |                    | 40                        | 371               | 0.06                            | 0.03                             | --                        | 12                       | 8   | 14         | 11  |
|  |                    | 50                        | 464               | 0.10                            | 0.05                             | 20                        | 14                       | 11  | 17         | 13  |
|  |                    | 50                        | 464               | 0.10                            | 0.05                             | 20                        | 14                       | 11  | 17         | 13  |
| 36 x 48 x 16<br>[11.3]                         | 10                 | 20                        | 226               | 0.02                            | --                               | --                        | 5                        | 2   | 8          | 4   |
|  |                    | 30                        | 338               | 0.04                            | --                               | --                        | 9                        | 6   | 12         | 8   |
|  |                    | 40                        | 451               | 0.08                            | 0.03                             | 16                        | 12                       | 9   | 14         | 11  |
|  |                    | 50                        | 564               | 0.12                            | 0.05                             | 23                        | 14                       | 11  | 17         | 13  |
|  | 12                 | 30                        | 338               | 0.03                            | --                               | --                        | 9                        | 6   | 12         | 8   |
|  |                    | 40                        | 451               | 0.06                            | 0.04                             | --                        | 12                       | 9   | 14         | 11  |
|  |                    | 50                        | 564               | 0.09                            | 0.06                             | 19                        | 14                       | 11  | 17         | 13  |
|  |                    | 50                        | 564               | 0.09                            | 0.06                             | 19                        | 14                       | 11  | 17         | 13  |
| 36 x 60 x 16<br>[14.2]                         | 10                 | 20                        | 284               | 0.02                            | --                               | --                        | 7                        | 4   | 9          | 6   |
|  |                    | 30                        | 425               | 0.06                            | --                               | --                        | 11                       | 7   | 13         | 9   |
|  |                    | 40                        | 567               | 0.10                            | 0.03                             | 20                        | 14                       | 10  | 16         | 12  |
|  |                    | 40                        | 567               | 0.07                            | 0.04                             | 16                        | 14                       | 10  | 16         | 12  |
|  | 12                 | 30                        | 425               | 0.04                            | 0.02                             | --                        | 11                       | 7   | 13         | 9   |
|  |                    | 40                        | 567               | 0.07                            | 0.04                             | 16                        | 14                       | 10  | 16         | 12  |
|  |                    | 50                        | 709               | 0.11                            | 0.06                             | 23                        | 16                       | 12  | 18         | 15  |
|  |                    | 50                        | 709               | 0.11                            | 0.06                             | 23                        | 16                       | 12  | 18         | 15  |
| 48 x 24 x 13<br>[7.4]                          | 10                 | 20                        | 148               | 0.01                            | --                               | --                        | 2                        | --  | 4          | 1   |
|  |                    | 30                        | 222               | 0.03                            | --                               | --                        | 6                        | 3   | 8          | 5   |
|  |                    | 40                        | 295               | 0.05                            | 0.03                             | --                        | 8                        | 5   | 11         | 7   |
|  |                    | 50                        | 369               | 0.07                            | 0.05                             | 16                        | 10                       | 7   | 13         | 9   |
| 48 x 36 x 16<br>[11.3]                         | 10                 | 20                        | 226               | 0.02                            | --                               | --                        | 5                        | 2   | 7          | 4   |
|  |                    | 30                        | 338               | 0.04                            | --                               | --                        | 8                        | 5   | 11         | 7   |
|  |                    | 40                        | 451               | 0.08                            | 0.03                             | 16                        | 11                       | 8   | 14         | 10  |
|  |                    | 50                        | 564               | 0.12                            | 0.05                             | 23                        | 13                       | 10  | 16         | 12  |
| 60 x 24 x 13<br>[9.3]                          | 10                 | 20                        | 186               | 0.02                            | --                               | --                        | 3                        | --  | 5          | 2   |
|  |                    | 30                        | 278               | 0.03                            | --                               | --                        | 6                        | 3   | 9          | 5   |
|  |                    | 40                        | 371               | 0.06                            | 0.03                             | --                        | 9                        | 6   | 11         | 8   |
|  |                    | 50                        | 464               | 0.10                            | 0.05                             | 20                        | 11                       | 8   | 14         | 10  |
|  | 12                 | 30                        | 278               | 0.03                            | --                               | --                        | 9                        | 6   | 11         | 8   |
|  |                    | 40                        | 371               | 0.06                            | 0.03                             | --                        | 12                       | 9   | 14         | 11  |
|  |                    | 50                        | 464               | 0.10                            | 0.05                             | 20                        | 14                       | 11  | 17         | 13  |
|  |                    | 50                        | 464               | 0.10                            | 0.05                             | 20                        | 14                       | 11  | 17         | 13  |
| 60 x 36 x 16<br>[14.2]                         | 10                 | 20                        | 284               | 0.02                            | --                               | --                        | 5                        | 2   | 7          | 4   |
|  |                    | 30                        | 425               | 0.06                            | --                               | --                        | 9                        | 6   | 11         | 8   |
|  |                    | 40                        | 567               | 0.10                            | 0.03                             | 20                        | 12                       | 9   | 14         | 11  |
|  |                    | 50                        | 709               | 0.15                            | 0.05                             | 27                        | 14                       | 11  | 17         | 13  |
|  | 12                 | 30                        | 425               | 0.04                            | 0.02                             | --                        | 9                        | 6   | 11         | 8   |
|  |                    | 40                        | 567               | 0.07                            | 0.04                             | 16                        | 12                       | 9   | 14         | 11  |
|  |                    | 50                        | 709               | 0.11                            | 0.06                             | 23                        | 14                       | 11  | 17         | 13  |
|  |                    | 50                        | 709               | 0.11                            | 0.06                             | 23                        | 14                       | 11  | 17         | 13  |
| 18 x 8   | 30                 | 425                       | 0.03              | 0.02                            | --                               | 9                         | 6                        | 11  | 8          |     |
|  | 40                 | 567                       | 0.06              | 0.04                            | --                               | 12                        | 9                        | 14  | 11         |     |
|  | 50                 | 709                       | 0.09              | 0.06                            | 21                               | 14                        | 11                       | 17  | 13         |     |
|  | 50                 | 709                       | 0.09              | 0.06                            | 21                               | 14                        | 11                       | 17  | 13         |     |

### Performance Notes:

- Sound and pressure drop tested in accordance with ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets."
- Air flow is in cubic feet per minute, cfm.
- Pressure is in inches of water, in. w.g.
- The NC values, sound pressure level, are based on a room absorption of 10 dB, re 10<sup>-12</sup> watts and one diffuser.
- ΔT is the difference between the room air temperature 3 ½ ft above the floor and the temperature of the supply air.
- Proximity to outlet is the minimum distance from an outlet to the occupant in order to achieve the listed DR value.
- Distances closer to the diffuser have a higher DR than the cataloged value.
- DR is the predicted percentage of people dissatisfied (PPD) due to draft. A value of less than 20 meets the requirements of ASHRAE Standard 55-2004, Thermal Environmental Conditions for Human Occupancy.
- Blanks (--) indicate that the DR is below the specified value at all distances from the diffuser face.
- DR catalog data is presented for an occupant density of 25 people/1000ft<sup>2</sup>, which is the default occupancy density for classrooms (ages 5-8) given by ASHRAE 62.1-2004. For other occupant densities, please refer to the DV Room Designer Software.
- Performance data for standard diffusers not listed in the catalog is available in Price AIO Software.

# Wall Mounted Displacement Diffusers DF1 Series



## Performance Data – Metric Units

| Unit Size<br>W x H x D [mm]<br>Face Area [m <sup>2</sup> ] | Inlet Size<br>[mm]         | Face<br>Velocity<br>[m/s] | Air Flow<br>[L/s] | Total<br>Pressure<br>[Pa] | Static<br>Pressure<br>[Pa] | Noise<br>Criteria<br>[NC] | Proximity to Outlet [m]                  |     |  |     |     |
|--|----------------------------|---------------------------|-------------------|---------------------------|----------------------------|---------------------------|--|-----|--|-----|-----|
|  |                            |                           |                   |                           |                            |                           | $\Delta T = 2.8\text{ }^{\circ}\text{C}$ |     | $\Delta T = 5.6\text{ }^{\circ}\text{C}$ |     |     |
|  |                            |                           |                   |                           |                            |                           | DR                                       |     | DR                                       |     |     |
|  |                            |                           |                   |                           |                            |                           | 15%                                      | 20% | 15%                                      | 20% |     |
| 600 x 600 x 330<br>[0.33]                                  | 200                        | 0.10                      | 33                | --                        | --                         | --                        | --                                       | --  | 0.3                                      | --  |     |
|  |                            | 0.15                      | 49                | 4.2                       | --                         | --                        | 0.9                                      | 0.3 | 1.5                                      | 0.6 |     |
|  |                            | 0.20                      | 66                | 7.5                       | --                         | --                        | 1.8                                      | 0.9 | 2.4                                      | 1.5 |     |
|  |                            | 0.25                      | 82                | 11.7                      | 7.7                        | --                        | 2.4                                      | 1.5 | 3.0                                      | 2.1 |     |
| 600 x 1200 x 330<br>[0.69]                                 | 200                        | 0.10                      | 67                | 4.2                       | --                         | --                        | 1.2                                      | 0.3 | 1.8                                      | 0.9 |     |
|  |                            | 0.15                      | 101               | 9.5                       | --                         | --                        | 2.4                                      | 1.2 | 3.0                                      | 1.8 |     |
|  |                            | 0.20                      | 135               | 16.9                      | 5.9                        | --                        | 3.0                                      | 2.1 | 4.0                                      | 2.7 |     |
|  |                            | 0.25                      | 168               | 26.5                      | 9.1                        | 20                        | 4.0                                      | 2.7 | 4.6                                      | 3.4 |     |
| 600 x 1500 x 330<br>[0.86]                                 | 200                        | 0.10                      | 85                | 5.5                       | --                         | --                        | 1.5                                      | 0.6 | 2.1                                      | 1.2 |     |
|  |                            | 0.15                      | 127               | 12.3                      | --                         | --                        | 2.7                                      | 1.8 | 3.4                                      | 2.4 |     |
|  |                            | 0.20                      | 169               | 21.9                      | --                         | 17                        | 3.7                                      | 2.4 | 4.3                                      | 3.4 |     |
|  |                            | 0.25                      | 212               | 34.2                      | 6.9                        | 24                        | 4.3                                      | 3.4 | 5.2                                      | 4.0 |     |
|  | 250                        | 0.15                      | 127               | 8.5                       | --                         | --                        | 2.7                                      | 1.8 | 3.4                                      | 2.4 |     |
|  |                            | 0.20                      | 169               | 15.0                      | 7.9                        | --                        | 3.7                                      | 2.4 | 4.3                                      | 3.4 |     |
|  |                            | 0.25                      | 212               | 23.5                      | 12.3                       | 19                        | 4.3                                      | 3.4 | 5.2                                      | 4.0 |     |
|  |                            | 0.10                      | 103               | 4.7                       | --                         | --                        | 1.5                                      | 0.6 | 2.4                                      | 1.2 |     |
| 900 x 1200 x 410<br>[1.05]                                 | 250                        | 0.15                      | 154               | 10.5                      | --                         | --                        | 2.7                                      | 1.8 | 3.7                                      | 2.4 |     |
|  |                            | 0.20                      | 206               | 18.7                      | 8.1                        | 16                        | 3.7                                      | 2.7 | 4.3                                      | 3.4 |     |
|  |                            | 0.25                      | 258               | 29.3                      | 12.7                       | 23                        | 4.3                                      | 3.4 | 5.2                                      | 4.0 |     |
|  |                            | 0.15                      | 154               | 7.1                       | --                         | --                        | 2.7                                      | 1.8 | 3.7                                      | 2.4 |     |
|  | 315                        | 0.20                      | 206               | 12.7                      | 8.5                        | --                        | 3.7                                      | 2.7 | 4.3                                      | 3.4 |     |
|  |                            | 0.25                      | 258               | 19.8                      | 13.3                       | 18                        | 4.3                                      | 3.4 | 5.2                                      | 4.0 |     |
|  |                            | 0.10                      | 129               | 6.1                       | --                         | --                        | 2.1                                      | 1.2 | 2.7                                      | 1.8 |     |
|  |                            | 0.15                      | 194               | 13.6                      | --                         | --                        | 3.4                                      | 2.1 | 4.0                                      | 2.7 |     |
| 900 x 1500 x 400<br>[1.32]                                 | 250                        | 0.20                      | 259               | 24.3                      | 7.5                        | 20                        | 4.3                                      | 3.0 | 4.9                                      | 3.7 |     |
|  |                            | 0.15                      | 194               | 9.2                       | 5.5                        | --                        | 3.4                                      | 2.1 | 4.0                                      | 2.7 |     |
|  |                            | 0.20                      | 259               | 16.4                      | 9.8                        | 15                        | 4.3                                      | 3.0 | 4.9                                      | 3.7 |     |
|  |                            | 0.25                      | 324               | 25.7                      | 15.3                       | 22                        | 4.9                                      | 3.7 | 5.5                                      | 4.6 |     |
|  | 315                        | 0.10                      | 129               | 2.9                       | --                         | --                        | 0.6                                      | --  | 1.2                                      | 0.3 |     |
|  |                            | 0.15                      | 101               | 6.5                       | --                         | --                        | 1.8                                      | 0.9 | 2.4                                      | 1.5 |     |
|  |                            | 0.20                      | 135               | 11.6                      | 7.1                        | --                        | 2.4                                      | 1.5 | 3.4                                      | 2.1 |     |
|  |                            | 0.25                      | 168               | 18.2                      | 11.1                       | 15                        | 3.0                                      | 2.1 | 4.0                                      | 2.7 |     |
| 1200 x 600 x 330<br>[0.69]                                 | 250                        | 0.10                      | 103               | 4.7                       | --                         | --                        | 1.5                                      | 0.6 | 2.1                                      | 1.2 |     |
|  |                            | 0.15                      | 154               | 10.5                      | --                         | --                        | 2.4                                      | 1.5 | 3.4                                      | 2.1 |     |
|  |                            | 0.20                      | 206               | 18.7                      | 8.1                        | 16                        | 3.4                                      | 2.4 | 4.3                                      | 3.0 |     |
|  |                            | 0.25                      | 258               | 29.3                      | 12.7                       | 23                        | 4.0                                      | 3.0 | 4.9                                      | 3.7 |     |
|  | 1500 x 600 x 330<br>[0.86] | 250                       | 0.10              | 85                        | 3.8                        | --                        | --                                       | 0.9 | --                                       | 1.5 | 0.6 |
|  |                            |                           | 0.15              | 127                       | 8.5                        | --                        | --                                       | 1.8 | 0.9                                      | 2.7 | 1.5 |
|  |                            |                           | 0.20              | 169                       | 15.0                       | 7.9                       | --                                       | 2.7 | 1.8                                      | 3.4 | 2.4 |
|  |                            |                           | 0.25              | 212                       | 23.5                       | 12.3                      | 19                                       | 3.4 | 2.4                                      | 4.3 | 3.0 |
| 1500 x 900 x 410<br>[1.32]                                 | 250                        | 0.10                      | 129               | 6.1                       | --                         | --                        | 1.5                                      | 0.6 | 2.1                                      | 1.2 |     |
|  |                            | 0.15                      | 194               | 13.6                      | --                         | --                        | 2.7                                      | 1.8 | 3.4                                      | 2.4 |     |
|  |                            | 0.20                      | 259               | 24.3                      | 7.5                        | 20                        | 3.7                                      | 2.7 | 4.3                                      | 3.4 |     |
|  |                            | 0.25                      | 324               | 37.9                      | 11.7                       | 27                        | 4.3                                      | 3.4 | 5.2                                      | 4.0 |     |
|  | 315                        | 0.15                      | 194               | 9.2                       | 5.5                        | --                        | 2.7                                      | 1.8 | 3.4                                      | 2.4 |     |
|  |                            | 0.20                      | 259               | 16.4                      | 9.8                        | 15                        | 3.7                                      | 2.7 | 4.3                                      | 3.4 |     |
|  |                            | 0.25                      | 324               | 25.7                      | 15.3                       | 22                        | 4.3                                      | 3.4 | 5.2                                      | 4.0 |     |
|  |                            | 0.15                      | 194               | 7.5                       | 5.2                        | --                        | 2.7                                      | 1.8 | 3.4                                      | 2.4 |     |
|  | 500 x 200                  | 0.20                      | 259               | 13.3                      | 9.3                        | --                        | 3.7                                      | 2.7 | 4.3                                      | 3.4 |     |
|  |                            | 0.25                      | 324               | 20.8                      | 14.5                       | 19                        | 4.3                                      | 3.4 | 5.2                                      | 4.0 |     |

### Performance Notes:

- Sound and pressure drop tested in accordance with ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets."
- Air flow is in Litres per second, L/s.
- Pressure is in Pascals, Pa.
- The NC values, sound pressure level, are based on a room absorption of 10 dB, re 10<sup>-12</sup> watts and one diffuser.
- $\Delta T$  is the difference between the room air temperature 1 m above the floor and the temperature of the supply air.
- Proximity to Outlet is the minimum distance from an outlet to the occupant in order to achieve the listed DR Value.
- Distances closer to the diffuser have a higher DR than the cataloged value.
- DR is the predicted percentage of people dissatisfied (PPD) due to draft. A value of less than 20 meets the requirements of ASHRAE Standard 55-2004, Thermal Environmental Conditions for Human Occupancy.
- Blanks (--) indicate that the DR is below the specified value at all distances from the diffuser face.
- DR catalog data is presented for an occupant density of 25 people/100m<sup>2</sup>, which is the default occupancy density for classrooms (ages 5-8) given by ASHRAE 62.1-2004. For other occupant densities, please refer to the DV Room Designer Software.
- Performance data for standard diffusers not listed in the catalog is available in Price AIO Software.

# Wall Mounted Displacement Diffusers DF3 Series



## Product Information

**Price DF3 Series** displacement diffusers are designed to produce a low turbulence horizontal air supply in three directions. Typically installed against a wall pillar or free standing, the DF3 discharges air evenly across its perforated face with minimal turbulence or induction of room air. The cool supply air flows down to the floor level and gradually fills the occupied space. The superior air quality and low noise levels realized with the DF3 make it suitable for office spaces, restaurants, supermarkets, theaters, hotels, convention centers, schools, or any application where air quality demands are high.

### Features

- Optional inlet locations: bottom, top, or rear.
- Field-cut inlet option.
- Ships with protective film on face and inlet.

### Construction/Finish

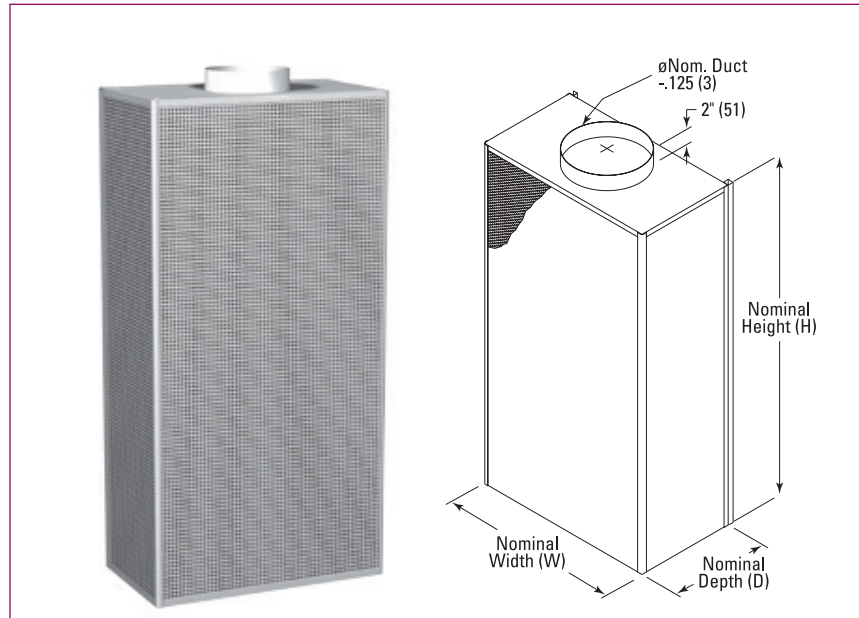
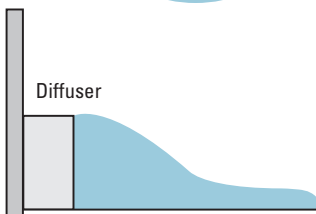
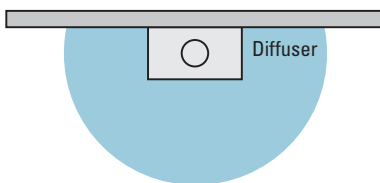
- Diffuser Frame and Equalization Baffle – Aluminum
- Side, Top and Bottom Panels – Coated Steel
- Perforated Front Panel – Coated Steel
- Finish – B12 White (Standard)

For optional and special finishes see color matrix.

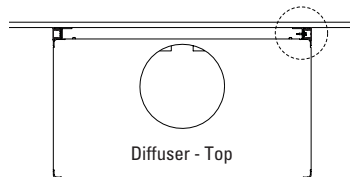
### Accessories

- Base
- Duct Covers
- AFSD

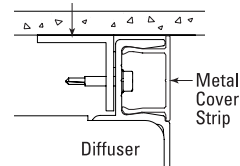
### Air Pattern



### Rail-Mounting System Detail



### Mounting Bracket



### Dimensional Data - Imperial (inches)

| W X H | Duct                          | Depth |
|-------|-------------------------------|-------|
| 24x24 | 8, 10, 14x6                   | 13    |
| 24x48 | 8, 10, 14x6, 16x8             | 13    |
| 24x60 | 8, 10, 14x6, 16x8             | 13    |
| 36x48 | 10, 12, 18x8                  | 16    |
| 36x60 | 10, 12, 16x8, 18x8, 24x8      | 16    |
| 48x24 | 8, 10, 14x6                   | 13    |
| 48x36 | 10, 12, 16x8, 18x8            | 16    |
| 60x24 | 8, 10, 16x8                   | 13    |
| 60x36 | 10, 12, 14, 16x8, 18x8, 20x10 | 16    |
| 60x48 | 10, 12, 14, 16x8, 18x8, 20x10 | 16    |

### Dimensional Data - Metric (mm)

| W X H     | Duct  | Depth |
|-----------|---|-------|
| 600x600   | 200, 250, 400x150                                     | 330   |
| 600x1200  | 200, 250, 400x150, 400x200                            | 330   |
| 600x1500  | 200, 250, 400x150, 400x200                            | 330   |
| 900x1200  | 250, 315, 500x200, 500x300                            | 410   |
| 900x1500  | 250, 315, 400x200, 500x200, 500x300, 600x200          | 410   |
| 1200x600  | 250, 315, 400x200, 500x200                            | 330   |
| 1200x900  | 250, 315, 400x200, 500x200                            | 410   |
| 1500x600  | 200, 250, 400x200                                     | 330   |
| 1500x900  | 250, 315, 400x200, 500x200, 500x300, 600x200, 600x300 | 410   |
| 1500x1200 | 250, 315, 400x200, 500x200, 500x300, 600x200, 600x300 | 410   |

For a complete list of standard sizes and inlets, refer to [www.priceindustries.com/resources/type/literature/submittals](http://www.priceindustries.com/resources/type/literature/submittals)



# Wall Mounted Displacement Diffusers DF3 Series



## Performance Data – Imperial Units

| Unit Size<br>W x H [in]<br>Face Area [ft²] | Inlet Size<br>[in]     | Face<br>Velocity<br>[fpm] | Air Flow<br>[cfm] | Total<br>Pressure<br>[in. w.g.] | Static<br>Pressure<br>[in. w.g.] | Noise<br>Criteria<br>[NC] | Proximity to Outlet [ft] |     |            |     |    |
|--|------------------------|---------------------------|-------------------|---------------------------------|----------------------------------|---------------------------|--------------------------|-----|------------|-----|----|
|  |                        |                           |                   |                                 |                                  |                           | ΔT = 5 °F                |     | ΔT = 10 °F |     |    |
|  |                        |                           |                   |                                 |                                  |                           | DR                       |     | DR         |     |    |
|  |                        |                           |                   |                                 |                                  |                           | 15%                      | 20% | 15%        | 20% |    |
| 24 x 24 x 13<br>[7.7]                      | 10                     | 20                        | 155               | --                              | --                               | --                        | 1                        | --  | 4          | 1   |    |
|  |                        | 30                        | 232               | 0.02                            | 0.01                             | --                        | 5                        | 2   | 8          | 4   |    |
|  |                        | 40                        | 310               | 0.04                            | 0.02                             | --                        | 8                        | 4   | 11         | 7   |    |
|  |                        | 50                        | 387               | 0.06                            | 0.03                             | 17                        | 10                       | 6   | 14         | 9   |    |
| 24 x 48 x 13<br>[11.6]                     | 10                     | 20                        | 232               | 0.02                            | --                               | --                        | 6                        | 3   | 9          | 6   |    |
|  |                        | 30                        | 347               | 0.04                            | 0.01                             | --                        | 11                       | 7   | 14         | 10  |    |
|  |                        | 40                        | 463               | 0.07                            | 0.02                             | 16                        | 14                       | 10  | 17         | 13  |    |
|  |                        | 50                        | 579               | 0.10                            | 0.03                             | 23                        | 17                       | 12  | 20         | 16  |    |
| 24 x 60 x 13<br>[13.5]                     | 10                     | 20                        | 270               | 0.02                            | --                               | --                        | 8                        | 5   | 12         | 7   |    |
|  |                        | 30                        | 405               | 0.05                            | 0.01                             | --                        | 13                       | 9   | 16         | 12  |    |
|  |                        | 40                        | 540               | 0.09                            | 0.03                             | 20                        | 16                       | 12  | 20         | 15  |    |
|  | 14 x 6                 | 30                        | 405               | 0.04                            | 0.01                             | --                        | 13                       | 9   | 16         | 12  |    |
|  |                        | 40                        | 540               | 0.08                            | 0.02                             | 18                        | 16                       | 12  | 20         | 15  |    |
|  |                        | 50                        | 675               | 0.12                            | 0.04                             | 26                        | 19                       | 15  | 22         | 18  |    |
|  | 16 x 8                 | 30                        | 405               | 0.02                            | --                               | --                        | 13                       | 9   | 16         | 12  |    |
|  |                        | 40                        | 540               | 0.04                            | 0.02                             | --                        | 16                       | 12  | 20         | 15  |    |
| 50   |                        | 675                       | 0.06              | 0.02                            | 16                               | 19                        | 15                       | 22  | 18         |     |    |
| 36 x 48 x 16<br>[19.1]                     | 12                     | 20                        | 382               | 0.02                            | --                               | --                        | 7                        | 3   | 9          | 6   |    |
|  |                        | 30                        | 572               | 0.05                            | 0.02                             | --                        | 11                       | 7   | 14         | 10  |    |
|  |                        | 40                        | 763               | 0.09                            | 0.03                             | 21                        | 14                       | 10  | 18         | 13  |    |
|  | 18 x 8                 | 30                        | 572               | 0.03                            | 0.01                             | --                        | 11                       | 7   | 14         | 10  |    |
|  |                        | 40                        | 763               | 0.06                            | 0.02                             | 16                        | 14                       | 10  | 18         | 13  |    |
|  |                        | 50                        | 954               | 0.09                            | 0.04                             | 24                        | 17                       | 12  | 20         | 16  |    |
| 36 x 60 x 16<br>[22]                       | 12                     | 20                        | 440               | 0.03                            | --                               | --                        | 8                        | 5   | 12         | 8   |    |
|  |                        | 30                        | 660               | 0.07                            | 0.02                             | 16                        | 13                       | 9   | 16         | 12  |    |
|  |                        | 40                        | 880               | 0.12                            | 0.04                             | 26                        | 16                       | 12  | 20         | 15  |    |
|  | 18 x 8                 | 30                        | 660               | 0.04                            | 0.02                             | --                        | 13                       | 9   | 16         | 12  |    |
|  |                        | 40                        | 880               | 0.08                            | 0.03                             | 20                        | 16                       | 12  | 20         | 15  |    |
|  |                        | 50                        | 1100              | 0.12                            | 0.05                             | 28                        | 19                       | 15  | 22         | 18  |    |
|  | 24 x 8                 | 30                        | 660               | 0.03                            | 0.01                             | --                        | 13                       | 9   | 16         | 12  |    |
|  |                        | 40                        | 880               | 0.05                            | 0.02                             | --                        | 16                       | 12  | 20         | 15  |    |
|  |                        | 50                        | 1100              | 0.08                            | 0.03                             | 22                        | 19                       | 15  | 22         | 18  |    |
|  | 48 x 24 x 13<br>[15.8] | 10                        | 20                | 317                             | 0.03                             | --                        | --                       | --  | --         | 2   | -- |
|  |                        |                           | 30                | 475                             | 0.06                             | 0.02                      | --                       | 4   | --         | 6   | 3  |
|  |                        |                           | 40                | 633                             | 0.11                             | 0.03                      | 24                       | 6   | 3          | 9   | 6  |
| 16 x 8                                     |                        | 30                        | 475               | 0.06                            | 0.02                             | --                        | 4                        | --  | 6          | 3   |    |
|  |                        | 40                        | 633               | 0.10                            | 0.03                             | 23                        | 6                        | 3   | 9          | 6   |    |
|  |                        | 50                        | 791               | 0.16                            | 0.05                             | 30                        | 9                        | 5   | 12         | 8   |    |
| 18 x 8                                     |                        | 30                        | 475               | 0.02                            | --                               | --                        | 4                        | --  | 6          | 3   |    |
|  |                        | 40                        | 633               | 0.04                            | 0.02                             | --                        | 6                        | 3   | 9          | 6   |    |
|  |                        | 50                        | 791               | 0.07                            | 0.03                             | 18                        | 9                        | 5   | 12         | 8   |    |
| 48 x 36 x 16<br>[21.7]                     |                        | 12                        | 20                | 434                             | 0.03                             | --                        | --                       | 4   | 1          | 7   | 3  |
|  |                        |                           | 30                | 651                             | 0.06                             | 0.02                      | 16                       | 8   | 4          | 11  | 7  |
|  |                        |                           | 40                | 868                             | 0.11                             | 0.04                      | 25                       | 11  | 7          | 14  | 10 |
|  | 18 x 8                 | 30                        | 651               | 0.04                            | 0.02                             | --                        | 8                        | 4   | 11         | 7   |    |
|  |                        | 40                        | 868               | 0.08                            | 0.03                             | 20                        | 11                       | 7   | 14         | 10  |    |
|  |                        | 50                        | 1085              | 0.12                            | 0.04                             | 28                        | 13                       | 9   | 17         | 13  |    |
|  | 24 x 8                 | 30                        | 651               | 0.03                            | 0.01                             | --                        | 8                        | 4   | 11         | 7   |    |
|  |                        | 40                        | 868               | 0.05                            | 0.02                             | --                        | 11                       | 7   | 14         | 10  |    |
|  |                        | 50                        | 1085              | 0.07                            | 0.03                             | 21                        | 13                       | 9   | 17         | 13  |    |
|  | 60 x 24 x 13<br>[19.9] | 10                        | 20                | 397                             | 0.04                             | 0.01                      | --                       | --  | --         | 2   | -- |
|  |                        |                           | 30                | 596                             | 0.10                             | 0.02                      | 21                       | 3   | --         | 6   | 2  |
|  |                        |                           | 40                | 795                             | 0.06                             | 0.02                      | 17                       | 6   | 2          | 9   | 5  |
| 18 x 8                                     |                        | 30                        | 596               | 0.04                            | 0.01                             | --                        | 3                        | --  | 6          | 2   |    |
|  |                        | 40                        | 795               | 0.06                            | 0.02                             | 17                        | 6                        | 2   | 9          | 5   |    |
|  |                        | 50                        | 994               | 0.10                            | 0.04                             | 25                        | 8                        | 4   | 11         | 7   |    |
| 60 x 36 x 16<br>[27.2]                     | 18 x 8                 | 20                        | 545               | 0.03                            | 0.01                             | --                        | 3                        | --  | 6          | 2   |    |
|  |                        | 30                        | 817               | 0.07                            | 0.02                             | 17                        | 7                        | 4   | 10         | 6   |    |
|  |                        | 40                        | 1090              | 0.12                            | 0.04                             | 27                        | 10                       | 6   | 14         | 9   |    |
|  | 24 x 8                 | 30                        | 817               | 0.04                            | 0.02                             | --                        | 7                        | 4   | 10         | 6   |    |
|  |                        | 40                        | 1090              | 0.07                            | 0.03                             | 21                        | 10                       | 6   | 14         | 9   |    |
|  |                        | 50                        | 1362              | 0.11                            | 0.05                             | 28                        | 13                       | 9   | 16         | 12  |    |

### Performance Notes:

- Sound and pressure drop tested in accordance with ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets."
- Air flow is in cubic feet per minute, cfm.
- Pressure is in inches of water, in. w.g.
- The NC values, sound pressure level, are based on a room absorption of 10 dB, re 10<sup>-12</sup> watts and one diffuser.
- ΔT is the difference between the room air temperature 3 ½ ft above the floor and the temperature of the supply air.
- Proximity to outlet is the minimum distance from an outlet to the occupant in order to achieve the listed DR value.
- Distances closer to the diffuser have a higher DR than the cataloged value.
- DR is the predicted percentage of people dissatisfied (PPD) due to draft. A value of less than 20 meets the requirements of ASHRAE Standard 55-2004, Thermal Environmental Conditions for Human Occupancy.
- Blanks (--) indicate that the DR is below the specified value at all distances from the diffuser face.
- DR catalog data is presented for an occupant density of 25 people/1000ft<sup>2</sup>, which is the default occupancy density for classrooms (ages 5-8) given by ASHRAE 62.1-2004. For other occupant densities, please refer to the DV Room Designer Software.
- Performance data for standard diffusers not listed in the catalog is available in Price AIO Software.

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For more information on additional imperial and metric sizes please visit [priceindustries.com](http://priceindustries.com) or contact your local Price representative.

**J-63**

# Wall Mounted Displacement Diffusers DF3 Series



## Performance Data – Metric Units

| Unit Size<br>W x H [mm]<br>Face Area [m <sup>2</sup> ] | Inlet Size<br>[mm]         | Face<br>Velocity<br>[m/s] | Air Flow<br>[L/s] | Total<br>Pressure<br>[Pa] | Static<br>Pressure<br>[Pa] | Noise<br>Criteria<br>[NC] | Proximity to Outlet [m] |     |             |     |     |
|--|----------------------------|---------------------------|-------------------|---------------------------|----------------------------|---------------------------|-------------------------|-----|-------------|-----|-----|
|  |                            |                           |                   |                           |                            |                           | ΔT = 2.8 °C             |     | ΔT = 5.6 °C |     |     |
|  |                            |                           |                   |                           |                            |                           | DR                      |     | DR          |     |     |
|  |                            |                           |                   |                           |                            |                           | 15%                     | 20% | 15%         | 20% |     |
| 600 x 600 x 330<br>[0.7]                               | 250                        | 0.10                      | 71                | 2.5                       | --                         | --                        | 0.3                     | --  | 1.2         | 0.3 |     |
|  |                            | 0.15                      | 107               | 5.6                       | 2.8                        | --                        | 1.5                     | 0.6 | 2.4         | 1.2 |     |
|  |                            | 0.20                      | 143               | 10.0                      | 4.9                        | --                        | 2.4                     | 1.2 | 3.4         | 2.1 |     |
|  |                            | 0.25                      | 178               | 15.6                      | 7.7                        | 17                        | 3.0                     | 1.8 | 4.3         | 2.7 |     |
| 600 x 1200 x 330<br>[1.05]                             | 250                        | 0.10                      | 106               | 4.2                       | --                         | --                        | 1.8                     | 0.9 | 2.7         | 1.8 |     |
|  |                            | 0.15                      | 160               | 9.5                       | 3.1                        | --                        | 3.4                     | 2.1 | 4.3         | 3.0 |     |
|  |                            | 0.20                      | 213               | 16.8                      | 5.5                        | 16                        | 4.3                     | 3.0 | 5.2         | 4.0 |     |
|  |                            | 0.25                      | 266               | 26.3                      | 8.6                        | 24                        | 5.2                     | 3.7 | 6.1         | 4.9 |     |
| 600 x 1500 x 330<br>[1.22]                             | 250                        | 0.10                      | 124               | 5.4                       | --                         | --                        | 2.4                     | 1.5 | 3.7         | 2.1 |     |
|  |                            | 0.15                      | 186               | 12.1                      | 3.5                        | --                        | 4.0                     | 2.7 | 4.9         | 3.7 |     |
|  |                            | 0.20                      | 248               | 21.5                      | 6.2                        | 20                        | 4.9                     | 3.7 | 6.1         | 4.6 |     |
|  | 400 x 150                  | 0.15                      | 186               | 8.7                       | 2.9                        | --                        | 4.0                     | 2.7 | 4.9         | 3.7 |     |
|  |                            | 0.20                      | 248               | 15.4                      | 5.2                        | 15                        | 4.9                     | 3.7 | 6.1         | 4.6 |     |
|  |                            | 0.25                      | 310               | 24.1                      | 8.1                        | 23                        | 5.8                     | 4.6 | 6.7         | 5.5 |     |
|  | 400 x 200                  | 0.15                      | 186               | 5.4                       | --                         | --                        | 4.0                     | 2.7 | 4.9         | 3.7 |     |
|  |                            | 0.20                      | 248               | 9.6                       | 3.8                        | --                        | 4.9                     | 3.7 | 6.1         | 4.6 |     |
|  |                            | 0.25                      | 310               | 14.9                      | 5.9                        | 16                        | 5.8                     | 4.6 | 6.7         | 5.5 |     |
| 900 x 1200 x 410<br>[1.73]                             | 315                        | 0.10                      | 176               | 4.7                       | --                         | --                        | 2.1                     | 0.9 | 2.7         | 1.8 |     |
|  |                            | 0.15                      | 264               | 10.6                      | 3.7                        | --                        | 3.4                     | 2.1 | 4.3         | 3.0 |     |
|  |                            | 0.20                      | 352               | 18.9                      | 6.6                        | 19                        | 4.3                     | 3.0 | 5.5         | 4.0 |     |
|  | 500 x 200                  | 0.15                      | 264               | 7.0                       | 2.8                        | --                        | 3.4                     | 2.1 | 4.3         | 3.0 |     |
|  |                            | 0.20                      | 352               | 12.5                      | 5.0                        | --                        | 4.3                     | 3.0 | 5.5         | 4.0 |     |
|  |                            | 0.25                      | 440               | 19.5                      | 7.8                        | 21                        | 5.2                     | 3.7 | 6.1         | 4.9 |     |
| 900 x 1500 x 410<br>[2.0]                              | 305                        | 0.10                      | 203               | 6.9                       | --                         | --                        | 2.4                     | 1.5 | 3.7         | 2.4 |     |
|  |                            | 0.15                      | 304               | 15.5                      | 5.1                        | 15                        | 4.0                     | 2.7 | 4.9         | 3.7 |     |
|  |                            | 0.20                      | 405               | 27.6                      | 9.0                        | 25                        | 4.9                     | 3.7 | 6.1         | 4.6 |     |
|  | 500 x 200                  | 0.15                      | 304               | 9.2                       | 3.6                        | --                        | 4.0                     | 2.7 | 4.9         | 3.7 |     |
|  |                            | 0.20                      | 405               | 16.3                      | 6.4                        | 18                        | 4.9                     | 3.7 | 6.1         | 4.6 |     |
|  |                            | 0.25                      | 507               | 25.5                      | 10.1                       | 26                        | 5.8                     | 4.6 | 6.7         | 5.5 |     |
|  | 600 x 200                  | 0.15                      | 304               | 6.8                       | 2.9                        | --                        | 4.0                     | 2.7 | 4.9         | 3.7 |     |
|  |                            | 0.20                      | 405               | 12.1                      | 5.2                        | --                        | 4.9                     | 3.7 | 6.1         | 4.6 |     |
|  |                            | 0.25                      | 507               | 18.8                      | 8.1                        | 21                        | 5.8                     | 4.6 | 6.7         | 5.5 |     |
|  | 1200 x 600 x 330<br>[1.44] | 250                       | 0.10              | 146                       | 7.2                        | --                        | --                      | --  | --          | 0.6 | --  |
|  |                            |                           | 0.15              | 219                       | 16.1                       | 4.2                       | --                      | 1.2 | --          | 1.8 | 0.9 |
|  |                            |                           | 0.20              | 292                       | 28.7                       | 7.5                       | 24                      | 1.8 | 0.9         | 2.7 | 1.8 |
| 400 x 150  |                            | 0.15                      | 219               | 11.6                      | 3.6                        | --                        | 1.2                     | --  | 1.8         | 0.9 |     |
|  |                            | 0.20                      | 292               | 20.6                      | 6.3                        | 20                        | 1.8                     | 0.9 | 2.7         | 1.8 |     |
|  |                            | 0.25                      | 364               | 32.1                      | 9.9                        | 27                        | 2.7                     | 1.5 | 3.7         | 2.4 |     |
| 500 x 200  |                            | 0.15                      | 219               | 4.9                       | --                         | --                        | 1.2                     | --  | 1.8         | 0.9 |     |
|  |                            | 0.20                      | 292               | 8.8                       | 3.7                        | --                        | 1.8                     | 0.9 | 2.7         | 1.8 |     |
|  |                            | 0.25                      | 364               | 13.7                      | 5.7                        | 16                        | 2.7                     | 1.5 | 3.7         | 2.4 |     |
| 1200 x 900 x 410<br>[1.98]                             | 315                        | 0.10                      | 201               | 6.1                       | --                         | --                        | 1.2                     | 0.3 | 2.1         | 0.9 |     |
|  |                            | 0.15                      | 301               | 13.6                      | 4.7                        | --                        | 2.4                     | 1.2 | 3.4         | 2.1 |     |
|  |                            | 0.20                      | 402               | 24.3                      | 8.3                        | 23                        | 3.4                     | 2.1 | 4.3         | 3.0 |     |
|  | 500 x 200                  | 0.15                      | 301               | 9.0                       | 3.6                        | --                        | 2.4                     | 1.2 | 3.4         | 2.1 |     |
|  |                            | 0.20                      | 402               | 16.0                      | 6.3                        | 18                        | 3.4                     | 2.1 | 4.3         | 3.0 |     |
|  |                            | 0.25                      | 502               | 25.0                      | 9.9                        | 25                        | 4.0                     | 2.7 | 5.2         | 4.0 |     |
|  | 600 x 200                  | 0.15                      | 301               | 6.6                       | 2.9                        | --                        | 2.4                     | 1.2 | 3.4         | 2.1 |     |
|  |                            | 0.20                      | 402               | 11.8                      | 5.1                        | --                        | 3.4                     | 2.1 | 4.3         | 3.0 |     |
|  |                            | 0.25                      | 502               | 18.5                      | 8.0                        | 21                        | 4.0                     | 2.7 | 5.2         | 4.0 |     |
|  | 1500 x 600 x 330<br>[1.8]  | 250                       | 0.10              | 183                       | 11.0                       | 2.6                       | --                      | --  | --          | 0.6 | --  |
|  |                            |                           | 0.15              | 275                       | 24.7                       | 5.9                       | 21                      | 0.9 | --          | 1.8 | 0.6 |
|  |                            | 500 x 200                 | 0.15              | 275                       | 7.6                        | 3.0                       | --                      | 0.9 | --          | 1.8 | 0.6 |
| 0.20   |                            |                           | 366               | 13.4                      | 5.4                        | --                        | 1.8                     | 0.6 | 2.7         | 1.5 |     |
|  |                            | 0.25                      | 458               | 21.0                      | 8.4                        | 22                        | 2.4                     | 1.2 | 3.4         | 2.1 |     |
| 1500 x 900 x 410<br>[2.48]                             | 500 x 200                  | 0.10                      | 252               | 6.2                       | --                         | --                        | 0.9                     | --  | 1.8         | 0.6 |     |
|  |                            | 0.15                      | 378               | 13.9                      | 5.4                        | 15                        | 2.1                     | 1.2 | 3.0         | 1.8 |     |
|  |                            | 0.20                      | 504               | 24.8                      | 9.5                        | 25                        | 3.0                     | 1.8 | 4.3         | 2.7 |     |
|  | 600 x 200                  | 0.15                      | 378               | 10.3                      | 4.3                        | --                        | 2.1                     | 1.2 | 3.0         | 1.8 |     |
|  |                            | 0.20                      | 504               | 18.3                      | 7.7                        | 21                        | 3.0                     | 1.8 | 4.3         | 2.7 |     |
|  |                            | 0.25                      | 630               | 28.6                      | 12.0                       | 28                        | 4.0                     | 2.7 | 4.9         | 3.7 |     |

### Performance Notes:

- Sound and pressure drop tested in accordance with ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets."
- Air flow is in Litres per second, L/s.
- Pressure is in Pascals, Pa.
- The NC values, sound pressure level, are based on a room absorption of 10 dB, re 10<sup>-12</sup> watts and one diffuser.
- ΔT is the difference between the room air temperature 1 m above the floor and the temperature of the supply air.
- Proximity to outlet is the minimum distance from an outlet to the occupant in order to achieve the listed DR value.
- Distances closer to the diffuser have a higher DR than the cataloged value.
- DR is the predicted percentage of people dissatisfied (PPD) due to draft. A value of less than 20 meets the requirements of ASHRAE Standard 55-2004, Thermal Environmental Conditions for Human Occupancy.
- Blanks (--) indicate that the DR is below the specified value at all distances from the diffuser face.
- DR catalog data is presented for an occupant density of 25 people/100m<sup>2</sup>, which is the default occupancy density for classrooms (ages 5-8) given by ASHRAE 62.1-2004. For other occupant densities, please refer to the DV Room Designer Software.
- Performance data for standard diffusers not listed in the catalog is available in Price AIO Software.

# Wall Mounted Displacement Diffusers DF1C Series



## Product Information

The **Price DF1C Series** displacement diffusers are designed to produce a low velocity air supply perpendicular to the diffuser face. The DF1C discharges air evenly across its perforated face with minimal turbulence or induction of room air. The cool supply air flows down to the floor level and gradually fills the occupied space. Typically installed at the junction of two walls or in a 90° recess, this appealing diffuser meshes seamlessly into any décor. The superior air quality and low noise levels realized with the DF1C make it suitable for office space, restaurants, supermarkets, theaters, hotels, convention centers, schools, or any application where air quality and occupant comfort demands are high.

### Features

Optional inlet location:

- Top inlet location for exposed ductwork or with duct cover option.
- Bottom inlet location for hidden ductwork.
- Field-cut inlet option.
- Ships with protective film on face and inlet.

### Construction/Finish

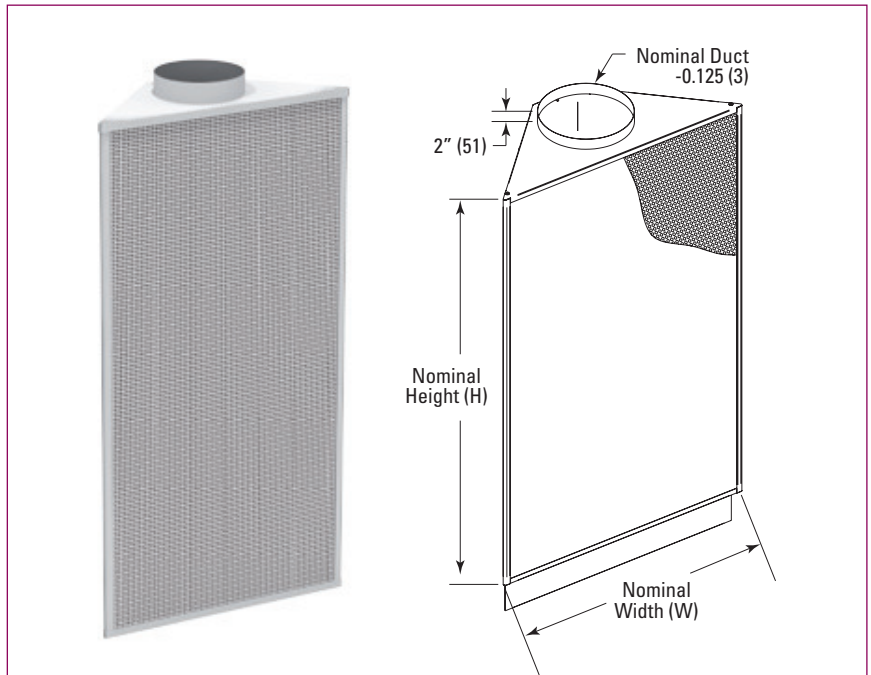
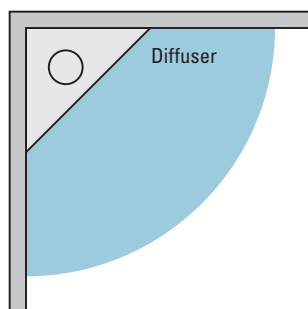
- Diffuser Frame and Equalization Baffle – Aluminum
- Side, Top and Bottom Panels – Coated Steel
- Perforated Front Panel – Coated Steel
- Finish – B12 White (Standard)

For optional and special finishes see color matrix.

### Accessories

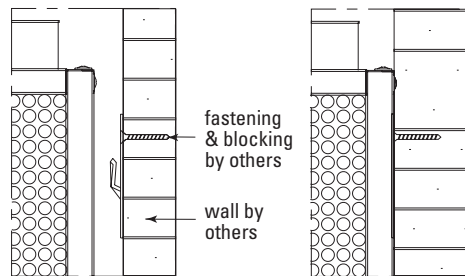
- Base
- Duct Covers
- AFSD

### Air Pattern



### Surface Mount Detail

Slide Plenum Onto Wall Mount Plate



### Dimensional Data - Imperial (inches)/Metric (mm)

| W X H | Duct | W X H | Duct |
|-------|------|-------|------|
| 24x24 | 8    | 30x60 | 10   |
| 24x36 | 8    | 30x72 | 10   |
| 24x48 | 8    | 36x24 | 8    |
| 24x60 | 8    | 36x24 | 10   |
| 24x72 | 8    | 36x24 | 12   |
| 30x24 | 8    | 36x36 | 12   |
| 30x24 | 10   | 36x48 | 12   |
| 30x36 | 8    | 36x60 | 12   |
| 30x36 | 10   | 36x72 | 12   |
| 30x48 | 10   |       |      |

For a complete list of standard sizes and inlets, refer to [www.priceindustries.com/resources/type/literature/submittals](http://www.priceindustries.com/resources/type/literature/submittals)

### Dimensional Data - Metric (mm)

| W X H      | Duct          |
|------------|---------------|
| 600 x 600  | 200           |
| 600 x 900  | 200           |
| 600 x 1200 | 200           |
| 600 x 1500 | 200           |
| 750 x 600  | 200, 250      |
| 750 x 900  | 200           |
| 750 x 1200 | 250           |
| 750 x 1500 | 250           |
| 750 x 1800 | 250           |
| 900 x 600  | 200, 250, 315 |
| 900 x 900  | 315           |
| 900 x 1500 | 315           |
| 900 x 1800 | 315           |

# Wall Mounted Displacement Diffusers DF1C Series



## Performance Data – Imperial Units

| Unit Size<br>W x H [in]<br>Face Area [ft <sup>2</sup> ] | Inlet Size<br>[in] | Face<br>Velocity<br>[fpm] | Air Flow<br>[cfm] | Total<br>Pressure<br>[in. w.g.] | Static<br>Pressure<br>[in. w.g.] | Noise<br>Criteria<br>[NC] | Proximity to Outlet [ft] |     |            |     |
|---|--------------------|---------------------------|-------------------|---------------------------------|----------------------------------|---------------------------|--------------------------|-----|------------|-----|
|   |                    |                           |                   |                                 |                                  |                           | ΔT = 5 °F                |     | ΔT = 10 °F |     |
|   |                    |                           |                   |                                 |                                  |                           | DR                       |     | DR         |     |
|   |                    |                           |                   |                                 |                                  |                           | 15%                      | 20% | 15%        | 20% |
| 24 x 24<br>[3.6]  | 8                  | 20                        | 71                | --                              | --                               | --                        | --                       | 2   | --         |     |
|   |                    | 30                        | 107               | 0.02                            | 0.01                             | --                        | 2                        | --  | 5          |     |
|   |                    | 40                        | 142               | 0.03                            | 0.02                             | --                        | 4                        | 1   | 7          |     |
|   |                    | 50                        | 178               | 0.04                            | 0.03                             | --                        | 5                        | 3   | 8          |     |
| 30 X 24<br>[4.5]  | 10                 | 20                        | 90                | --                              | --                               | --                        | --                       | 2   | --         |     |
|   |                    | 30                        | 135               | 0.01                            | --                               | --                        | 2                        | --  | 4          |     |
|   |                    | 40                        | 180               | 0.02                            | 0.02                             | --                        | 4                        | 1   | 6          |     |
|   |                    | 50                        | 225               | 0.04                            | 0.02                             | --                        | 5                        | 2   | 8          |     |
| 36 x 24<br>[5.5]  | 12                 | 20                        | 109               | --                              | --                               | --                        | --                       | 2   | --         |     |
|   |                    | 30                        | 164               | 0.01                            | --                               | --                        | 2                        | --  | 4          |     |
|   |                    | 40                        | 218               | 0.02                            | 0.01                             | --                        | 3                        | 1   | 6          |     |
|   |                    | 50                        | 273               | 0.03                            | 0.02                             | --                        | 5                        | 2   | 8          |     |
| 24 x 36<br>[5.4]  | 8                  | 20                        | 109               | 0.01                            | --                               | --                        | 3                        | --  | 5          |     |
|   |                    | 30                        | 163               | 0.02                            | 0.01                             | --                        | 5                        | 2   | 8          |     |
|   |                    | 40                        | 217               | 0.04                            | 0.02                             | --                        | 7                        | 4   | 10         |     |
|   |                    | 50                        | 272               | 0.07                            | 0.03                             | --                        | 9                        | 6   | 10         |     |
| 30 x 36<br>[6.9]  | 10                 | 20                        | 138               | --                              | --                               | --                        | 2                        | --  | 5          |     |
|   |                    | 30                        | 206               | 0.02                            | 0.01                             | --                        | 5                        | 2   | 8          |     |
|   |                    | 40                        | 275               | 0.03                            | 0.02                             | --                        | 7                        | 4   | 10         |     |
|   |                    | 50                        | 344               | 0.05                            | 0.03                             | --                        | 9                        | 5   | 12         |     |
| 36 x 36<br>[8.3]  | 12                 | 20                        | 167               | --                              | --                               | --                        | 2                        | --  | 5          |     |
|   |                    | 30                        | 250               | 0.02                            | --                               | --                        | 5                        | 2   | 8          |     |
|   |                    | 40                        | 333               | 0.03                            | 0.02                             | --                        | 7                        | 4   | 10         |     |
|   |                    | 50                        | 417               | 0.04                            | 0.03                             | --                        | 9                        | 5   | 12         |     |
| 24 x 48<br>[7.3]  | 8                  | 20                        | 146               | 0.01                            | --                               | --                        | 5                        | 2   | 8          |     |
|   |                    | 30                        | 219               | 0.03                            | --                               | --                        | 8                        | 5   | 11         |     |
|   |                    | 40                        | 292               | 0.06                            | 0.01                             | --                        | 10                       | 7   | 13         |     |
|   |                    | 50                        | 365               | 0.09                            | 0.02                             | 19                        | 12                       | 8   | 15         |     |
| 30 x 48<br>[9.3]  | 10                 | 20                        | 185               | 0.01                            | --                               | --                        | 5                        | 2   | 7          |     |
|   |                    | 30                        | 278               | 0.03                            | --                               | --                        | 7                        | 4   | 10         |     |
|   |                    | 40                        | 370               | 0.05                            | 0.02                             | --                        | 10                       | 6   | 13         |     |
|   |                    | 50                        | 463               | 0.07                            | 0.03                             | 16                        | 11                       | 8   | 15         |     |
| 36 x 48<br>[11.2]                                       | 12                 | 20                        | 224               | --                              | --                               | --                        | 4                        | 2   | 7          |     |
|   |                    | 30                        | 336               | 0.02                            | 0.01                             | --                        | 7                        | 4   | 10         |     |
|   |                    | 40                        | 448               | 0.04                            | 0.02                             | --                        | 9                        | 6   | 13         |     |
|   |                    | 50                        | 560               | 0.06                            | 0.03                             | --                        | 11                       | 8   | 15         |     |
| 24 x 60<br>[9.2]  | 8                  | 20                        | 184               | 0.02                            | --                               | --                        | 7                        | 4   | 10         |     |
|   |                    | 30                        | 276               | 0.04                            | --                               | --                        | 10                       | 6   | 13         |     |
|   |                    | 40                        | 367               | 0.07                            | --                               | 15                        | 12                       | 9   | 15         |     |
|   |                    | 50                        | 459               | 0.11                            | --                               | 22                        | 14                       | 10  | 17         |     |
| 30 x 60<br>[11.6]                                       | 10                 | 20                        | 233               | 0.01                            | --                               | --                        | 7                        | 3   | 9          |     |
|   |                    | 30                        | 349               | 0.03                            | --                               | --                        | 9                        | 6   | 13         |     |
|   |                    | 40                        | 465               | 0.06                            | 0.01                             | --                        | 12                       | 8   | 15         |     |
|   |                    | 50                        | 582               | 0.09                            | 0.02                             | 19                        | 14                       | 10  | 17         |     |
| 36 x 60<br>[14.1]                                       | 12                 | 20                        | 282               | 0.01                            | --                               | --                        | 6                        | 3   | 9          |     |
|   |                    | 30                        | 422               | 0.03                            | --                               | --                        | 9                        | 6   | 13         |     |
|   |                    | 40                        | 563               | 0.05                            | 0.02                             | --                        | 12                       | 8   | 15         |     |
|   |                    | 50                        | 704               | 0.07                            | 0.02                             | 17                        | 14                       | 10  | 17         |     |
| 24 x 72<br>[11.1]                                       | 8                  | 20                        | 221               | 0.02                            | --                               | --                        | 8                        | 5   | 12         |     |
|   |                    | 30                        | 332               | 0.05                            | --                               | --                        | 12                       | 8   | 15         |     |
|   |                    | 40                        | 442               | 0.08                            | --                               | 18                        | 14                       | 10  | 17         |     |
|   |                    | 50                        | 553               | 0.13                            | --                               | 25                        | 16                       | 12  | 19         |     |
| 30 x 72<br>[14]   | 10                 | 20                        | 280               | 0.02                            | --                               | --                        | 8                        | 5   | 11         |     |
|   |                    | 30                        | 420               | 0.04                            | --                               | --                        | 11                       | 8   | 14         |     |
|   |                    | 40                        | 560               | 0.07                            | --                               | 15                        | 14                       | 10  | 17         |     |
|   |                    | 50                        | 700               | 0.11                            | --                               | 22                        | 16                       | 12  | 19         |     |
| 36 x 72<br>[17]   | 12                 | 20                        | 339               | 0.01                            | --                               | --                        | 8                        | 5   | 11         |     |
|   |                    | 30                        | 509               | 0.03                            | --                               | --                        | 11                       | 8   | 14         |     |
|   |                    | 40                        | 678               | 0.06                            | 0.01                             | --                        | 14                       | 10  | 17         |     |
|   |                    | 50                        | 848               | 0.09                            | 0.02                             | 20                        | 16                       | 12  | 19         |     |

### Performance Notes:

- Sound and pressure drop tested in accordance with ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets."
- Air flow is in cubic feet per minute, cfm.
- Pressure is in inches of water, in. w.g.
- The NC values, sound pressure level, are based on a room absorption of 10 dB, re 10<sup>-12</sup> watts and one diffuser.
- ΔT is the difference between the room air temperature 3 ½ ft above the floor and the temperature of the supply air.
- Proximity to outlet is the minimum distance from an outlet to the occupant in order to achieve the listed DR value.
- Distances closer to the diffuser have a higher DR than the cataloged value.
- DR is the predicted percentage of people dissatisfied (PPD) due to draft. A value of less than 20 meets the requirements of ASHRAE Standard 55-2004, Thermal Environmental Conditions for Human Occupancy.
- Blanks (--) indicate that the DR is below the specified value at all distances from the diffuser face.
- DR catalog data is presented for an occupant density of 25 people/1000ft<sup>2</sup>, which is the default occupancy density for classrooms (ages 5-8) given by ASHRAE 62.1-2004. For other occupant densities, please refer to the DV Room Designer Software.
- Performance data for standard diffusers not listed in the catalog is available in Price AIO Software.

# Wall Mounted Displacement Diffusers DF1C Series



## Performance Data – Metric Units

| Unit Size<br>W x H [mm]<br>Face Area [m <sup>2</sup> ] | Inlet Size<br>[mm] | Face<br>Velocity<br>[m/s] | Air Flow<br>[L/s] | Total<br>Pressure<br>[Pa] | Static<br>Pressure<br>[Pa] | Noise<br>Criteria<br>[NC] | Proximity to Outlet [m] |     |             |     |
|--|--------------------|---------------------------|-------------------|---------------------------|----------------------------|---------------------------|-------------------------|-----|-------------|-----|
|  |                    |                           |                   |                           |                            |                           | ΔT = 2.8 °C             |     | ΔT = 5.6 °C |     |
|  |                    |                           |                   |                           |                            |                           | DR                      |     | DR          |     |
|  |                    |                           |                   |                           |                            |                           | 15%                     | 20% | 15%         | 20% |
| 600 x 600<br>[0.3]                                     | 200                | 0.10                      | 35                | --                        | --                         | --                        | --                      | --  | 0.6         | --  |
|  |                    | 0.15                      | 52                | 4.5                       | 2.9                        | --                        | 0.6                     | --  | 1.5         | 0.6 |
|  |                    | 0.20                      | 70                | 8.2                       | 5.2                        | --                        | 1.2                     | --  | 2.1         | 1.2 |
|  |                    | 0.25                      | 88                | 12.9                      | 8.2                        | --                        | 1.5                     | 0.9 | 2.4         | 1.5 |
| 750 X 600<br>[0.4]                                     | 200                | 0.10                      | 44                | 2.5                       | --                         | --                        | --                      | --  | 0.6         | --  |
|  |                    | 0.15                      | 66                | 5.7                       | 3.0                        | --                        | 0.6                     | --  | 1.2         | 0.6 |
|  |                    | 0.20                      | 88                | 10.1                      | 5.4                        | --                        | 1.2                     | --  | 1.8         | 0.9 |
|  |                    | 0.25                      | 110               | 15.8                      | 8.4                        | --                        | 1.5                     | 0.6 | 2.4         | 1.5 |
| 900 x 600<br>[0.5]                                     | 315                | 0.10                      | 53                | --                        | --                         | --                        | --                      | --  | 0.6         | --  |
|  |                    | 0.15                      | 79                | 2.7                       | --                         | --                        | 0.6                     | --  | 1.2         | 0.6 |
|  |                    | 0.20                      | 106               | 4.9                       | 3.8                        | --                        | 0.9                     | --  | 1.8         | 0.9 |
|  |                    | 0.25                      | 132               | 7.6                       | 5.8                        | --                        | 1.5                     | 0.6 | 2.4         | 1.5 |
| 600 x 900<br>[0.5]                                     | 200                | 0.10                      | 53                | 3.0                       | --                         | --                        | 0.9                     | --  | 1.5         | 0.6 |
|  |                    | 0.15                      | 79                | 6.7                       | 2.9                        | --                        | 1.5                     | 0.6 | 2.4         | 1.5 |
|  |                    | 0.20                      | 106               | 12.1                      | 5.2                        | --                        | 2.1                     | 1.2 | 3.0         | 2.1 |
|  |                    | 0.25                      | 132               | 18.7                      | 8.1                        | --                        | 2.7                     | 1.8 | 3.0         | 3.7 |
| 750 x 900<br>[0.6]                                     | 250                | 0.10                      | 67                | --                        | --                         | --                        | 0.6                     | --  | 1.5         | 0.6 |
|  |                    | 0.15                      | 100               | 5.4                       | 2.9                        | --                        | 1.5                     | 0.6 | 2.4         | 1.5 |
|  |                    | 0.20                      | 133               | 9.6                       | 5.2                        | --                        | 2.1                     | 1.2 | 3.0         | 2.1 |
|  |                    | 0.25                      | 166               | 14.9                      | 8.0                        | --                        | 2.7                     | 1.5 | 3.7         | 2.4 |
| 900 x 900<br>[0.7]                                     | 315                | 0.10                      | 80                | --                        | --                         | --                        | 0.6                     | --  | 1.5         | 0.6 |
|  |                    | 0.15                      | 120               | 4.04                      | 2.61                       | --                        | 1.5                     | 0.6 | 2.4         | 1.5 |
|  |                    | 0.20                      | 160               | 7.18                      | 4.6                        | --                        | 2.1                     | 1.2 | 3.0         | 2.1 |
|  |                    | 0.25                      | 200               | 11.22                     | 7.3                        | --                        | 2.7                     | 1.5 | 3.7         | 2.4 |
| 600 x 1200<br>[0.7]                                    | 315                | 0.10                      | 71                | --                        | --                         | --                        | 1.5                     | 0.6 | 2.4         | 1.5 |
|  |                    | 0.15                      | 106               | 3.6                       | 2.50                       | --                        | 2.4                     | 1.5 | 3.4         | 2.1 |
|  |                    | 0.20                      | 142               | 6.5                       | 4.5                        | --                        | 3.0                     | 2.1 | 4.0         | 3.0 |
|  |                    | 0.25                      | 177               | 10.1                      | 7.0                        | --                        | 3.7                     | 2.4 | 4.6         | 3.4 |
| 750 x 1200<br>[0.8]                                    | 250                | 0.10                      | 89                | 3.2                       | --                         | --                        | 1.5                     | 0.6 | 2.1         | 1.2 |
|  |                    | 0.15                      | 134               | 7.2                       | 2.7                        | --                        | 2.1                     | 1.2 | 3.0         | 2.1 |
|  |                    | 0.20                      | 178               | 12.6                      | 4.7                        | --                        | 3.0                     | 1.8 | 4.0         | 2.7 |
|  |                    | 0.25                      | 222               | 19.6                      | 7.3                        | --                        | 3.4                     | 2.4 | 4.6         | 3.4 |
| 900 x 1200<br>[1.0]                                    | 315                | 0.10                      | 107               | --                        | --                         | --                        | 1.2                     | 0.6 | 2.1         | 1.2 |
|  |                    | 0.15                      | 160               | 5.3                       | 2.8                        | --                        | 2.1                     | 1.2 | 3.0         | 2.1 |
|  |                    | 0.20                      | 214               | 9.5                       | 4.9                        | --                        | 2.7                     | 1.8 | 4.0         | 2.7 |
|  |                    | 0.25                      | 268               | 14.8                      | 7.7                        | --                        | 3.4                     | 2.4 | 4.6         | 3.4 |
| 600 x 1500<br>[0.8]                                    | 200                | 0.10                      | 89                | 5.0                       | --                         | --                        | 2.1                     | 1.2 | 3.0         | 1.8 |
|  |                    | 0.15                      | 133               | 11.1                      | --                         | --                        | 3.0                     | 1.8 | 4.0         | 2.7 |
|  |                    | 0.20                      | 177               | 19.6                      | --                         | --                        | 3.7                     | 2.7 | 4.6         | 3.7 |
|  |                    | 0.25                      | 222               | 30.9                      | --                         | 20                        | 4.3                     | 3.0 | 5.2         | 4.3 |
| 750 x 1500<br>[1]                                      | 250                | 0.10                      | 111               | 3.9                       | --                         | --                        | 2.1                     | 0.9 | 2.7         | 1.8 |
|  |                    | 0.15                      | 167               | 8.8                       | --                         | --                        | 2.7                     | 1.8 | 4.0         | 2.7 |
|  |                    | 0.20                      | 223               | 15.7                      | 3.2                        | --                        | 3.7                     | 2.4 | 4.6         | 3.7 |
|  |                    | 0.25                      | 278               | 24.3                      | 5.0                        | 17                        | 4.3                     | 3.0 | 5.2         | 4.0 |
| 900 x 1500<br>[1.3]                                    | 315                | 0.10                      | 134               | 2.9                       | --                         | --                        | 1.8                     | 0.9 | 2.7         | 1.8 |
|  |                    | 0.15                      | 201               | 6.6                       | 2.60                       | --                        | 2.7                     | 1.8 | 4.0         | 2.7 |
|  |                    | 0.20                      | 268               | 11.7                      | 4.6                        | --                        | 3.7                     | 2.4 | 4.6         | 3.4 |
|  |                    | 0.25                      | 335               | 18.3                      | 7.2                        | --                        | 4.3                     | 3.0 | 5.2         | 4.0 |
| 600 x 1800<br>[1.0]                                    | 200                | 0.10                      | 107               | 5.9                       | --                         | --                        | 2.4                     | 1.5 | 3.7         | 2.4 |
|  |                    | 0.15                      | 160               | 13.2                      | --                         | --                        | 3.7                     | 2.4 | 4.6         | 3.4 |
|  |                    | 0.20                      | 213               | 23.5                      | --                         | 16                        | 4.3                     | 3.0 | 5.2         | 4.0 |
|  |                    | 0.25                      | 267               | 36.9                      | --                         | 23                        | 4.9                     | 3.7 | 5.8         | 4.6 |
| 750 x 1800<br>[1.3]                                    | 250                | 0.10                      | 134               | 4.7                       | --                         | --                        | 2.4                     | 1.5 | 3.4         | 2.4 |
|  |                    | 0.15                      | 201               | 10.5                      | --                         | --                        | 3.4                     | 2.4 | 4.3         | 3.4 |
|  |                    | 0.20                      | 268               | 18.7                      | --                         | --                        | 4.3                     | 3.0 | 5.2         | 4.0 |
|  |                    | 0.25                      | 335               | 29.2                      | --                         | 20                        | 4.9                     | 3.7 | 5.8         | 4.6 |
| 900 x 1800<br>[1.5]                                    | 315                | 0.10                      | 161               | 3.5                       | --                         | --                        | 2.4                     | 1.5 | 3.4         | 2.4 |
|  |                    | 0.15                      | 242               | 7.9                       | --                         | --                        | 3.4                     | 2.4 | 4.3         | 3.4 |
|  |                    | 0.20                      | 322               | 14.0                      | 3.7                        | --                        | 4.3                     | 3.0 | 5.2         | 4.0 |
|  |                    | 0.25                      | 403               | 21.9                      | 5.8                        | 17                        | 4.9                     | 3.7 | 5.8         | 4.6 |

### Performance Notes:

- Sound and pressure drop tested in accordance with ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets."
- Air flow is in Litres per second, L/s.
- Pressure is in Pascals, Pa.
- The NC values, sound pressure level, are based on a room absorption of 10 dB, re 10<sup>-12</sup> watts and one diffuser.
- ΔT is the difference between the room air temperature 1 m above the floor and the temperature of the supply air.
- Proximity to outlet is the minimum distance from an outlet to the occupant in order to achieve the listed DR value.
- Distances closer to the diffuser have a higher DR than the cataloged value.
- DR is the predicted percentage of people dissatisfied (PPD) due to draft. A value of less than 20 meets the requirements of ASHRAE Standard 55-2004, Thermal Environmental Conditions for Human Occupancy.
- Blanks (--) indicate that the DR is below the specified value at all distances from the diffuser face.
- DR catalog data is presented for an occupant density of 25 people/100m<sup>2</sup>, which is the default occupancy density for classrooms (ages 5-8) given by ASHRAE 62.1-2004. For other occupant densities, please refer to the DV Room Designer Software.
- Performance data for standard diffusers not listed in the catalog is available in Price AIO Software.

# Wall Mounted Displacement Diffusers DR180 Series



## Product Information

**Price DR180 Series** displacement diffusers are designed to produce a low turbulence horizontal air supply in an 180° pattern. Typically installed against a wall or pillar, the DR180 discharges air evenly across its perforated face. The cool air then drops to the floor and gently floats into the occupied zone. This appealing diffuser meshes seamlessly into any décor, providing a curved detail to the space. The superior air quality and low noise levels realized with the DR180 make it suitable for office spaces, hotels, convention centers, schools or any application where air quality demands are high.

### Features

- Optional inlet locations:
  - Top inlet available for use with duct covers.
  - Bottom and rear inlet locations also available.
- Field-cut inlet option.
- Ships with protective film on face and inlet.

### Construction/Finish: DR180

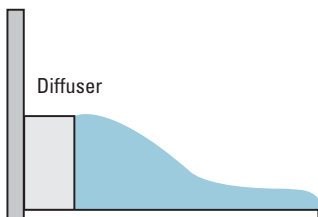
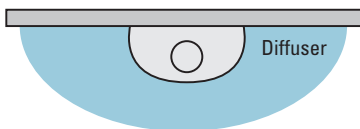
- Diffuser Frame and Equalization Baffle - Aluminum
- Plenum Caps – Rolled Steel
- Perforated Face and Plenum Back – Coated Steel
- Finish – B12 White (Standard)

For optional and special finishes see color matrix.

### Options

- Base
- Duct Cover
- AFSD

### Air Pattern



**Rail-Mounting System Detail**

**Mounting Bracket**

**Diffuser - Top**

**Diffuser**

**Diffuser**

**Dimensional Data - Imperial (inches)**

| W X H | Duct           |
|-------|----------------|
| 18x24 | 6,7            |
| 18x36 | 6, 7, 10x4     |
| 18x48 | 6, 7, 10x4     |
| 24x24 | 8, 9, 10       |
| 24x36 | 8, 9, 10       |
| 24x48 | 8, 9, 10       |
| 24x60 | 9, 10, 16x5    |
| 30x24 | 8, 10          |
| 30x36 | 8, 10, 12      |
| 30x48 | 10, 12         |
| 30x60 | 10, 12, 20x6   |
| 36x24 | 10, 12         |
| 36x36 | 10, 12, 14, 16 |
| 36x48 | 12, 14, 16     |
| 36x60 | 14, 16         |
| 42x36 | 12, 14, 16     |
| 42x48 | 12, 14, 16     |
| 42x60 | 12, 14, 16     |
| 48x36 | 12, 14, 16     |
| 48x48 | 14, 16         |
| 48x60 | 14, 16         |

**Dimensional Data - Metric (mm)**

| W X H     | Duct              |
|-----------|-------------------|
| 457x600   | 150, 200          |
| 457x900   | 150, 200, 250x100 |
| 457x1200  | 150, 200, 250x100 |
| 610x600   | 200, 250          |
| 610x900   | 200, 250          |
| 610x1200  | 200, 250          |
| 610x1500  | 200, 250, 400x150 |
| 762x610   | 200, 250          |
| 762x900   | 200, 250, 315     |
| 762x1200  | 250, 315          |
| 762x1500  | 250, 315, 500x150 |
| 915x600   | 250, 315          |
| 915x900   | 250, 315, 400     |
| 915x1200  | 315, 400          |
| 915x1500  | 400               |
| 1067x900  | 315, 400          |
| 1067x1200 | 315, 400          |
| 1067x1500 | 315, 400          |
| 1219x900  | 315, 400          |
| 1219x1200 | 400               |
| 1219x1500 | 400               |

For a complete list of standard sizes and inlets, refer to [www.priceindustries.com/resources/type/literature/submittals](http://www.priceindustries.com/resources/type/literature/submittals)

DISPLACEMENT VENTILATION

# Wall Mounted Displacement Diffusers DR180 Series



## Performance Data – Imperial Units

| Unit Size<br>W x H [in]<br>Face Area [ft²] | Inlet Size<br>[in] | Face<br>Velocity<br>[fpm] | Air Flow<br>[cfm] | Total<br>Pressure<br>[in. w.g.] | Static<br>Pressure<br>[in. w.g.] | Noise<br>Criteria<br>[NC] | Proximity to Outlet [ft] |     |            |     |
|--|--------------------|---------------------------|-------------------|---------------------------------|----------------------------------|---------------------------|--------------------------|-----|------------|-----|
|  |                    |                           |                   |                                 |                                  |                           | ΔT = 5 °F                |     | ΔT = 10 °F |     |
|  |                    |                           |                   |                                 |                                  |                           | DR                       |     | DR         |     |
|  |                    |                           |                   |                                 |                                  |                           | 15%                      | 20% | 15%        | 20% |
| 18 x 24<br>[4.3]                           | 6                  | 20                        | 85                | 0.02                            | --                               | --                        | 1                        | --  | 2          | 1   |
|  |                    | 30                        | 128               | 0.05                            | 0.02                             | --                        | 2                        | 1   | 5          | 2   |
|  |                    | 40                        | 171               | 0.09                            | 0.04                             | 21                        | 3                        | 1   | 7          | 3   |
|  |                    | 50                        | 213               | 0.13                            | 0.06                             | 28                        | 5                        | 2   | 10         | 5   |
| 24 x 24<br>[5.8]                           | 8                  | 20                        | 115               | 0.01                            | --                               | --                        | 1                        | --  | 2          | 1   |
|  |                    | 30                        | 173               | 0.03                            | 0.02                             | --                        | 2                        | 1   | 5          | 2   |
|  |                    | 40                        | 230               | 0.05                            | 0.03                             | --                        | 3                        | 1   | 7          | 3   |
|  |                    | 50                        | 288               | 0.08                            | 0.04                             | 19                        | 5                        | 2   | 10         | 5   |
| 30 x 24<br>[7.2]                           | 8                  | 20                        | 145               | 0.02                            | --                               | --                        | 1                        | --  | 2          | 1   |
|  |                    | 30                        | 217               | 0.04                            | 0.02                             | --                        | 2                        | 1   | 5          | 2   |
|  |                    | 40                        | 290               | 0.07                            | 0.03                             | --                        | 3                        | 1   | 7          | 3   |
|  |                    | 50                        | 362               | 0.12                            | 0.05                             | 18                        | 5                        | 2   | 10         | 5   |
| 18 x 36<br>[6.5]                           | 6                  | 20                        | 130               | 0.04                            | 0.01                             | --                        | 2                        | 1   | 4          | 2   |
|  |                    | 30                        | 196               | 0.09                            | 0.02                             | 22                        | 4                        | 2   | 8          | 4   |
|  | 10 x 4             | 40                        | 261               | 0.09                            | 0.04                             | 26                        | 6                        | 3   | 12         | 6   |
|  |                    | 50                        | 326               | 0.14                            | 0.06                             | 34                        | 9                        | 4   | 17         | 8   |
| 24 x 36<br>[8.8]                           | 8                  | 20                        | 176               | 0.02                            | --                               | --                        | 2                        | 1   | 4          | 2   |
|  |                    | 30                        | 264               | 0.05                            | 0.02                             | --                        | 4                        | 2   | 8          | 4   |
|  |                    | 40                        | 352               | 0.10                            | 0.03                             | 20                        | 6                        | 3   | 12         | 6   |
|  |                    | 50                        | 440               | 0.15                            | 0.05                             | 27                        | 9                        | 4   | 17         | 8   |
| 30 x 36<br>[11.1]                          | 8                  | 20                        | 221               | 0.03                            | --                               | --                        | 2                        | 1   | 4          | 2   |
|  |                    | 30                        | 332               | 0.04                            | 0.01                             | --                        | 4                        | 2   | 8          | 4   |
|  | 10                 | 40                        | 443               | 0.07                            | 0.03                             | --                        | 6                        | 3   | 12         | 6   |
|  |                    | 50                        | 554               | 0.11                            | 0.04                             | 19                        | 9                        | 4   | 17         | 8   |
| 18 x 48<br>[8.8]                           | 6                  | 20                        | 175               | 0.06                            | --                               | 20                        | 3                        | 1   | 7          | 3   |
|  |                    | 30                        | 263               | 0.13                            | 0.02                             | 33                        | 6                        | 2   | 12         | 6   |
|  | 10 x 4             | 40                        | 351               | 0.14                            | 0.04                             | 36                        | 9                        | 4   | 18         | 9   |
|  |                    | 50                        | 439               | 0.21                            | 0.06                             | 44                        | 12                       | 6   | 25         | 12  |
| 24 x 48<br>[11.8]                          | 8                  | 20                        | 237               | 0.04                            | --                               | --                        | 3                        | 1   | 7          | 3   |
|  |                    | 30                        | 355               | 0.08                            | 0.02                             | 19                        | 6                        | 2   | 12         | 6   |
|  | 9                  | 40                        | 473               | 0.10                            | 0.03                             | 25                        | 9                        | 4   | 18         | 9   |
|  |                    | 50                        | 592               | 0.16                            | 0.05                             | 32                        | 12                       | 6   | 25         | 12  |
| 30 x 48<br>[14.9]                          | 10                 | 20                        | 298               | 0.03                            | --                               | --                        | 3                        | 1   | 7          | 3   |
|  |                    | 30                        | 447               | 0.06                            | 0.02                             | --                        | 6                        | 2   | 12         | 6   |
|  | 12                 | 40                        | 596               | 0.10                            | 0.03                             | 19                        | 9                        | 4   | 18         | 9   |
|  |                    | 50                        | 745               | 0.09                            | 0.04                             | 21                        | 12                       | 6   | 25         | 12  |
| 24 x 60<br>[14.9]                          | 9                  | 20                        | 297               | 0.03                            | --                               | --                        | 4                        | 2   | 9          | 4   |
|  |                    | 30                        | 446               | 0.08                            | 0.01                             | 23                        | 8                        | 4   | 16         | 8   |
|  | 16 x 5             | 40                        | 595               | 0.10                            | 0.03                             | 28                        | 12                       | 6   | 24         | 12  |
|  |                    | 50                        | 744               | 0.15                            | 0.04                             | 36                        | 17                       | 8   | 31         | 16  |
| 30 x 60<br>[18.7]                          | 12                 | 20                        | 374               | 0.02                            | --                               | --                        | 4                        | 2   | 9          | 4   |
|  |                    | 30                        | 561               | 0.04                            | 0.01                             | --                        | 8                        | 4   | 16         | 8   |
|  |                    | 40                        | 749               | 0.08                            | 0.02                             | 19                        | 12                       | 6   | 24         | 12  |
|  | 20 x 6             | 50                        | 936               | 0.12                            | 0.04                             | 27                        | 17                       | 8   | 31         | 16  |
|  |                    | 40                        | 749               | 0.07                            | 0.02                             | 18                        | 12                       | 6   | 24         | 12  |
|  |                    | 50                        | 936               | 0.11                            | 0.04                             | 26                        | 17                       | 8   | 31         | 16  |

### Performance Notes:

- Sound and pressure drop tested in accordance with ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets."
- Air flow is in cubic feet per minute, cfm.
- Pressure is in inches of water, in. w.g.
- The NC values, sound pressure level, are based on a room absorption of 10 dB, re 10<sup>-12</sup> watts and one diffuser.
- ΔT is the difference between the room air temperature 3 ½ ft above the floor and the temperature of the supply air.
- Proximity to outlet is the minimum distance from an outlet to the occupant in order to achieve the listed DR value.
- Distances closer to the diffuser have a higher DR than the cataloged value.
- DR is the predicted percentage of people dissatisfied (PPD) due to draft. A value of less than 20 meets the requirements of ASHRAE Standard 55-2004, Thermal Environmental Conditions for Human Occupancy.
- Blanks (--) indicate that the DR is below the specified value at all distances from the diffuser face.
- DR catalog data is presented for an occupant density of 25 people/1000ft<sup>2</sup>, which is the default occupancy density for classrooms (ages 5-8) given by ASHRAE 62.1-2004. For other occupant densities, please refer to the DV Room Designer Software.
- Performance data for standard diffusers not listed in the catalog is available in Price AIO Software.

# Wall Mounted Displacement Diffusers DR180 Series



## Performance Data – Metric Units

| Unit Size<br>W x H [in]<br>Face Area [m <sup>2</sup> ] | Inlet Size<br>[mm] | Face<br>Velocity<br>[m/s] | Air Flow<br>[L/s] | Total<br>Pressure<br>[Pa] | Static<br>Pressure<br>[Pa] | Noise<br>Criteria<br>[NC] | Proximity to Outlet [m]                  |     |  |     |
|--|--------------------|---------------------------|-------------------|---------------------------|----------------------------|---------------------------|--|-----|--|-----|
|  |                    |                           |                   |                           |                            |                           | $\Delta T = 2.8\text{ }^{\circ}\text{C}$ |     | $\Delta T = 5.6\text{ }^{\circ}\text{C}$ |     |
|  |                    |                           |                   |                           |                            |                           | DR                                       |     | DR                                       |     |
|  |                    |                           |                   |                           |                            |                           | 15%                                      | 20% | 15%                                      | 20% |
| 457 x 600<br>[0.39]                                    | 150                | 0.10                      | 40                | 5.4                       | --                         | --                        | 0.3                                      | --  | 0.6                                      | 0.3 |
|  |                    | 0.15                      | 59                | 12.3                      | 5.5                        | --                        | 0.6                                      | 0.3 | 1.5                                      | 0.6 |
|  |                    | 0.20                      | 79                | 21.8                      | 9.7                        | 21                        | 0.9                                      | 0.3 | 2.1                                      | 0.9 |
|  |                    | 0.25                      | 99                | 34.0                      | 15.1                       | 28                        | 1.5                                      | 0.6 | 3.0                                      | 1.5 |
| 610 x 600<br>[0.53]                                    | 200                | 0.10                      | 53                | 3.5                       | --                         | --                        | 0.3                                      | --  | 0.6                                      | 0.3 |
|  |                    | 0.15                      | 80                | 7.8                       | 3.9                        | --                        | 0.6                                      | 0.3 | 1.5                                      | 0.6 |
|  |                    | 0.20                      | 107               | 13.8                      | 6.9                        | --                        | 0.9                                      | 0.3 | 2.1                                      | 0.9 |
|  |                    | 0.25                      | 134               | 21.6                      | 10.7                       | 19                        | 1.5                                      | 0.6 | 3.0                                      | 1.5 |
| 762 x 600<br>[0.66]                                    | 200                | 0.10                      | 67                | 4.7                       | --                         | --                        | 0.3                                      | --  | 0.6                                      | 0.3 |
|  |                    | 0.15                      | 101               | 10.6                      | 4.4                        | --                        | 0.6                                      | 0.3 | 1.5                                      | 0.6 |
|  |                    | 0.20                      | 135               | 18.9                      | 7.9                        | --                        | 0.9                                      | 0.3 | 2.1                                      | 0.9 |
|  |                    | 0.25                      | 168               | 29.5                      | 12.3                       | 18                        | 1.5                                      | 0.6 | 3.0                                      | 1.5 |
| 457 x 900<br>[0.6]                                     | 150                | 0.10                      | 60                | 9.7                       | 2.6                        | --                        | 0.6                                      | 0.3 | 1.2                                      | 0.6 |
|  |                    | 0.15                      | 91                | 21.8                      | 5.9                        | 22                        | 1.2                                      | 0.6 | 2.4                                      | 1.2 |
|  | 250 x 100          | 0.20                      | 121               | 23.1                      | 9.0                        | 26                        | 1.8                                      | 0.9 | 3.7                                      | 1.8 |
|  |                    | 0.25                      | 151               | 36.0                      | 14.0                       | 34                        | 2.7                                      | 1.2 | 5.2                                      | 2.4 |
| 610 x 900<br>[0.8]                                     | 200                | 0.10                      | 82                | 6.2                       | --                         | --                        | 0.6                                      | 0.3 | 1.2                                      | 0.6 |
|  |                    | 0.15                      | 123               | 13.8                      | 4.7                        | --                        | 1.2                                      | 0.6 | 2.4                                      | 1.2 |
|  |                    | 0.20                      | 163               | 24.6                      | 8.4                        | 20                        | 1.8                                      | 0.9 | 3.7                                      | 1.8 |
|  |                    | 0.25                      | 204               | 38.4                      | 13.1                       | 28                        | 2.7                                      | 1.2 | 5.2                                      | 2.4 |
| 762 x 900<br>[1.01]                                    | 200                | 0.10                      | 103               | 8.4                       | --                         | --                        | 0.6                                      | 0.3 | 1.2                                      | 0.6 |
|  |                    | 0.15                      | 154               | 9.7                       | 3.8                        | --                        | 1.2                                      | 0.6 | 2.4                                      | 1.2 |
|  | 250                | 0.20                      | 206               | 17.2                      | 6.7                        | --                        | 1.8                                      | 0.9 | 3.7                                      | 1.8 |
|  |                    | 0.25                      | 257               | 26.9                      | 10.5                       | 20                        | 2.7                                      | 1.2 | 5.2                                      | 2.4 |
| 457 x 1200<br>[0.8]                                    | 150                | 0.10                      | 82                | 14.5                      | --                         | 20                        | 0.9                                      | 0.3 | 2.1                                      | 0.9 |
|  |                    | 0.15                      | 122               | 19.4                      | 5.1                        | 27                        | 1.8                                      | 0.6 | 3.7                                      | 1.8 |
|  | 250 x 100          | 0.20                      | 163               | 34.5                      | 9.0                        | 36                        | 2.7                                      | 1.2 | 5.5                                      | 2.7 |
|  |                    | 0.25                      | 204               | 54.0                      | 14.1                       | 44                        | 3.7                                      | 1.8 | 7.6                                      | 3.7 |
| 610 x 1200<br>[1.08]                                   | 200                | 0.10                      | 110               | 9.2                       | --                         | --                        | 0.9                                      | 0.3 | 2.1                                      | 0.9 |
|  |                    | 0.15                      | 165               | 20.7                      | 4.2                        | 19                        | 1.8                                      | 0.6 | 3.7                                      | 1.8 |
|  | 250                | 0.20                      | 220               | 18.9                      | 6.8                        | 21                        | 2.7                                      | 1.2 | 5.5                                      | 2.7 |
|  |                    | 0.25                      | 275               | 29.5                      | 10.7                       | 29                        | 3.7                                      | 1.8 | 7.6                                      | 3.7 |
| 762 x 1200<br>[1.36]                                   | 250                | 0.10                      | 138               | 6.5                       | --                         | --                        | 0.9                                      | 0.3 | 2.1                                      | 0.9 |
|  |                    | 0.15                      | 208               | 14.5                      | 3.8                        | --                        | 1.8                                      | 0.6 | 3.7                                      | 1.8 |
|  | 315                | 0.20                      | 277               | 25.8                      | 6.7                        | 19                        | 2.7                                      | 1.2 | 5.5                                      | 2.7 |
|  |                    | 0.25                      | 346               | 20.2                      | 8.3                        | 19                        | 3.7                                      | 1.8 | 7.6                                      | 3.7 |
| 610 x 1200<br>[1.08]                                   | 250                | 0.10                      | 110               | 4.7                       | --                         | --                        | 1.2                                      | 0.6 | 2.7                                      | 1.2 |
|  |                    | 0.15                      | 165               | 10.6                      | 3.8                        | --                        | 2.4                                      | 1.2 | 4.9                                      | 2.4 |
|  | 400 x 150          | 0.20                      | 220               | 14.0                      | 5.9                        | 18                        | 3.7                                      | 1.8 | 7.3                                      | 3.7 |
|  |                    | 0.25                      | 275               | 21.8                      | 9.2                        | 26                        | 5.2                                      | 2.4 | 9.4                                      | 4.9 |
| 762 x 1500<br>[1.71]                                   | 315                | 0.10                      | 174               | 4.4                       | --                         | --                        | 1.2                                      | 0.6 | 2.7                                      | 1.2 |
|  |                    | 0.15                      | 261               | 9.9                       | 3.2                        | --                        | 2.4                                      | 1.2 | 4.9                                      | 2.4 |
|  |                    | 0.20                      | 348               | 17.6                      | 5.7                        | 18                        | 3.7                                      | 1.8 | 7.3                                      | 3.7 |
|  |                    | 0.25                      | 435               | 27.5                      | 8.8                        | 25                        | 5.2                                      | 2.4 | 9.4                                      | 4.9 |
|  | 508 x 152          | 0.20                      | 348               | 18.7                      | 5.7                        | 18                        | 3.7                                      | 1.8 | 7.3                                      | 3.7 |
|  |                    | 0.25                      | 435               | 29.2                      | 9.0                        | 26                        | 5.2                                      | 2.4 | 9.4                                      | 4.9 |

### Performance Notes:

- Sound and pressure drop tested in accordance with ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets."
- Air flow is in Litres per second, L/s.
- Pressure is in Pascals, Pa.
- The NC values, sound pressure level, are based on a room absorption of 10 dB, re 10<sup>-12</sup> watts and one diffuser.
- $\Delta T$  is the difference between the room air temperature 1 m above the floor and the temperature of the supply air.
- Proximity to outlet is the minimum distance from an outlet to the occupant in order to achieve the listed DR value.
- Distances closer to the diffuser have a higher DR than the cataloged value.
- DR is the predicted percentage of people dissatisfied (PPD) due to draft. A value of less than 20 meets the requirements of ASHRAE Standard 55-2004, Thermal Environmental Conditions for Human Occupancy.
- Blanks (--) indicate that the DR is below the specified value at all distances from the diffuser face.
- DR catalog data is presented for an occupant density of 25 people/100m<sup>2</sup>, which is the default occupancy density for classrooms (ages 5-8) given by ASHRAE 62.1-2004. For other occupant densities, please refer to the DV Room Designer Software.
- Performance data for standard diffusers not listed in the catalog is available in Price AIO Software.



# Wall Mounted Displacement Diffusers DR180U Series



## Product Information

**Price DR180U Series** displacement diffusers produce a low turbulence horizontal air supply in an 180° pattern. Due to its shape, the DR180U can accommodate large inlets and can handle higher flows than a standard DR180. Typically installed against a wall or pillar, this unit has a seamless curved front and makes an appealing addition to any decor.

The superior air quality and low noise levels realized with the DR180U make it suitable for office spaces, hotels, convention centers, schools or any application where air quality demands are high. The DR180U is constructed of a perforated steel face and with a solid steel back, top and bottom. With the option of both top and rear ducted units, as well as its optional bases or duct covers, the DR180U can adapt to be part of any interior design.

### Features

- Top inlet available for use with duct covers.
- Bottom and rear inlets also available
- Ships with protective film on face and inlet.

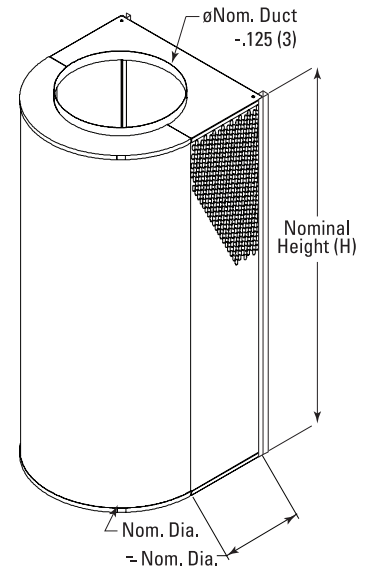
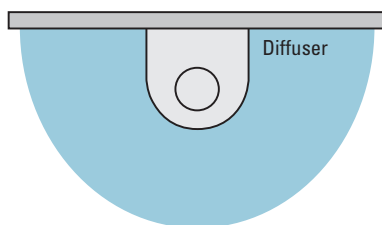
### Construction/Finish: DR180U

- Diffuser Frame and Equalization Baffle - Aluminium
  - Plenum Caps and Perforated Face - Rolled Steel
  - Plenum Back - Coated Steel
  - Finish - B12 White (Standard)
- For optional and special finishes see color matrix.

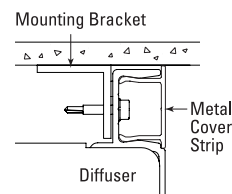
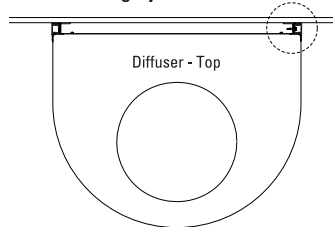
### Accessories

- Base
- Duct Cover
- AFSD flow sensor/damper

### Air Pattern



### Rail-Mounting System Detail



### Dimensional Data - Imperial (inches)

| Diameter | Duct   | Height* |      |
|----------|--------|---------|------|
|          |        | Min.    | Max. |
| 18       | 10, 12 | 24      | 60   |
| 24       | 16     | 24      | 60   |
| 30       | 20     | 24      | 60   |
| 36       | 24     | 24      | 60   |

\*Standard heights available in 1" increments

### Dimensional Data - Metric (mm)

| Diameter | Duct     | Height* |      |
|----------|----------|---------|------|
|          |          | Min.    | Max. |
| 457      | 250, 315 | 600     | 1500 |
| 610      | 400      | 600     | 1500 |
| 762      | 500      | 600     | 1500 |
| 914      | 600      | 600     | 1500 |

\*Standard heights available in 25 mm increments

For a complete list of standard sizes and inlets, refer to [www.priceindustries.com/resources/type/literature/submittals](http://www.priceindustries.com/resources/type/literature/submittals)

# Wall Mounted Displacement Diffusers DR180U Series



## Performance Data – Imperial Units

| Unit Size<br>W x H [in]<br>Face Area [ft²] | Inlet Size<br>[in] | Face<br>Velocity<br>[fpm] | Air Flow<br>[cfm] | Total<br>Pressure<br>[in. w.g.] | Static<br>Pressure<br>[in. w.g.] | Noise<br>Criteria<br>[NC] | Proximity to Outlet [ft] |     |            |     |
|--|--------------------|---------------------------|-------------------|---------------------------------|----------------------------------|---------------------------|--------------------------|-----|------------|-----|
|  |                    |                           |                   |                                 |                                  |                           | ΔT = 5 °F                |     | ΔT = 10 °F |     |
|  |                    |                           |                   |                                 |                                  |                           | DR                       |     | DR         |     |
|  |                    |                           |                   |                                 |                                  |                           | 15%                      | 20% | 15%        | 20% |
| 18 x 36<br>[10.86]                         | 12                 | 20                        | 217               | 0.01                            | --                               | --                        | 2                        | 1   | 3          | 2   |
|  |                    | 30                        | 326               | 0.02                            | 0.01                             | --                        | 3                        | 2   | 4          | 2   |
|  |                    | 40                        | 434               | 0.04                            | 0.03                             | --                        | 3                        | 2   | 5          | 3   |
|  |                    | 50                        | 543               | 0.07                            | 0.04                             | 21                        | 4                        | 2   | 6          | 4   |
| 24 x 36<br>[14.58]                         | 16                 | 20                        | 292               | 0.01                            | --                               | --                        | 2                        | 1   | 3          | 2   |
|  |                    | 30                        | 437               | 0.02                            | 0.01                             | --                        | 3                        | 2   | 4          | 2   |
|  |                    | 40                        | 583               | 0.03                            | 0.02                             | --                        | 3                        | 2   | 5          | 3   |
|  |                    | 50                        | 729               | 0.05                            | 0.03                             | 17                        | 4                        | 2   | 6          | 4   |
| 30 x 36<br>[22.03]                         | 20                 | 20                        | 366               | 0.01                            | --                               | --                        | 2                        | 1   | 3          | 2   |
|  |                    | 30                        | 549               | 0.01                            | --                               | --                        | 3                        | 2   | 4          | 2   |
|  |                    | 40                        | 732               | 0.02                            | 0.01                             | --                        | 3                        | 2   | 5          | 3   |
|  |                    | 50                        | 915               | 0.03                            | 0.02                             | --                        | 4                        | 2   | 6          | 4   |
| 36 x 36<br>[22.03]                         | 24                 | 20                        | 441               | 0.00                            | --                               | --                        | 2                        | 1   | 3          | 2   |
|  |                    | 30                        | 661               | 0.01                            | --                               | --                        | 3                        | 2   | 4          | 2   |
|  |                    | 40                        | 881               | 0.02                            | 0.01                             | --                        | 3                        | 2   | 5          | 3   |
|  |                    | 50                        | 1101              | 0.03                            | 0.02                             | --                        | 4                        | 2   | 6          | 4   |
| 18 x 48<br>[14.61]                         | 12                 | 20                        | 292               | 0.01                            | --                               | --                        | 3                        | 2   | 4          | 2   |
|  |                    | 30                        | 438               | 0.03                            | 0.01                             | --                        | 4                        | 2   | 5          | 3   |
|  |                    | 40                        | 585               | 0.06                            | 0.02                             | 18                        | 5                        | 3   | 7          | 4   |
|  |                    | 50                        | 731               | 0.09                            | 0.03                             | 25                        | 6                        | 4   | 8          | 5   |
| 24 x 48<br>[19.62]                         | 16                 | 20                        | 392               | 0.01                            | --                               | --                        | 3                        | 2   | 4          | 2   |
|  |                    | 30                        | 589               | 0.02                            | 0.01                             | --                        | 4                        | 2   | 5          | 3   |
|  |                    | 40                        | 785               | 0.04                            | 0.02                             | --                        | 5                        | 3   | 7          | 4   |
|  |                    | 50                        | 981               | 0.06                            | 0.03                             | 20                        | 6                        | 4   | 8          | 5   |
| 30 x 48<br>[24.62]                         | 20                 | 20                        | 492               | 0.01                            | --                               | --                        | 3                        | 2   | 4          | 2   |
|  |                    | 30                        | 739               | 0.02                            | 0.01                             | --                        | 4                        | 2   | 5          | 3   |
|  |                    | 40                        | 985               | 0.03                            | 0.02                             | --                        | 5                        | 3   | 6          | 4   |
|  |                    | 50                        | 1231              | 0.05                            | 0.03                             | --                        | 6                        | 4   | 8          | 5   |
| 18 x 60<br>[18.36]                         | 12                 | 20                        | 367               | 0.01                            | --                               | --                        | 3                        | 2   | 4          | 3   |
|  |                    | 30                        | 551               | 0.03                            | --                               | --                        | 5                        | 3   | 6          | 4   |
|  |                    | 40                        | 735               | 0.06                            | --                               | 20                        | 6                        | 4   | 8          | 5   |
|  |                    | 50                        | 918               | 0.09                            | --                               | 27                        | 7                        | 5   | 10         | 7   |
| 24 x 60<br>[24.65]                         | 16                 | 20                        | 493               | 0.01                            | --                               | --                        | 3                        | 2   | 4          | 3   |
|  |                    | 30                        | 740               | 0.03                            | --                               | --                        | 5                        | 3   | 6          | 4   |
|  |                    | 40                        | 986               | 0.05                            | 0.02                             | --                        | 6                        | 4   | 8          | 5   |
|  |                    | 50                        | 1233              | 0.08                            | 0.03                             | 20                        | 7                        | 5   | 10         | 7   |

### Performance Notes:

- Sound and pressure drop tested in accordance with ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets."
- Air flow is in cubic feet per minute, cfm.
- Pressure is in inches of water, in. w.g.
- The NC values, sound pressure level, are based on a room absorption of 10 dB, re 10<sup>-12</sup> watts and one diffuser.
- ΔT is the difference between the room air temperature 3 ½ ft above the floor and the temperature of the supply air.
- Proximity to outlet is the minimum distance from an outlet to the occupant in order to achieve the listed DR value.
- Distances closer to the diffuser have a higher DR than the cataloged value.
- DR is the predicted percentage of people dissatisfied (PPD) due to draft. A value of less than 20 meets the requirements of ASHRAE Standard 55-2004, Thermal Environmental Conditions for Human Occupancy.
- Blanks (--) indicate that the DR is below the specified value at all distances from the diffuser face.
- DR catalog data is presented for an occupant density of 25 people/1000ft<sup>2</sup>, which is the default occupancy density for classrooms (ages 5-8) given by ASHRAE 62.1-2004. For other occupant densities, please refer to the DV Room Designer Software.
- Performance data for standard diffusers not listed in the catalog is available in Price AIO Software.

# Wall Mounted Displacement Diffusers DR180U Series



## Performance Data – Metric Units

| Unit Size<br>W x H [mm]<br>Face Area [m <sup>2</sup> ] | Inlet Size<br>[mm] | Face<br>Velocity<br>[m/s] | Air Flow<br>[L/s] | Total<br>Pressure<br>[Pa] | Static<br>Pressure<br>[Pa] | Noise<br>Criteria<br>[NC] | Proximity to Outlet [m]                  |     |  |     |
|--|--------------------|---------------------------|-------------------|---------------------------|----------------------------|---------------------------|--|-----|--|-----|
|  |                    |                           |                   |                           |                            |                           | $\Delta T = 2.8\text{ }^{\circ}\text{C}$ |     | $\Delta T = 5.6\text{ }^{\circ}\text{C}$ |     |
|  |                    |                           |                   |                           |                            |                           | DR                                       |     | DR                                       |     |
|  |                    |                           |                   |                           |                            |                           | 15%                                      | 20% | 15%                                      | 20% |
| 457 x 900<br>[0.99]                                    | 315                | 0.10                      | 99                | --                        | --                         | --                        | 0.6                                      | 0.3 | 0.9                                      | 0.6 |
|  |                    | 0.15                      | 149               | 5.44                      | 3.25                       | --                        | 0.9                                      | 0.6 | 1.2                                      | 0.6 |
|  |                    | 0.20                      | 199               | 9.68                      | 5.77                       | --                        | 0.9                                      | 0.6 | 1.5                                      | 0.9 |
|  |                    | 0.25                      | 248               | 15.12                     | 9.02                       | 21                        | 1.2                                      | 0.6 | 1.8                                      | 1.2 |
| 610 x 900<br>[1.41]                                    | 400                | 0.10                      | 141               | --                        | --                         | --                        | 0.6                                      | 0.3 | 0.9                                      | 0.6 |
|  |                    | 0.15                      | 212               | 4.45                      | 2.75                       | --                        | 0.9                                      | 0.6 | 1.2                                      | 0.6 |
|  |                    | 0.20                      | 282               | 7.92                      | 4.89                       | --                        | 0.9                                      | 0.6 | 1.5                                      | 0.9 |
|  |                    | 0.25                      | 353               | 12.37                     | 7.64                       | 17                        | 1.2                                      | 0.6 | 1.8                                      | 1.2 |
| 762 x 900<br>[1.76]                                    | 500                | 0.10                      | 176               | --                        | --                         | --                        | 0.6                                      | 0.3 | 0.9                                      | 0.6 |
|  |                    | 0.15                      | 264               | 3.25                      | --                         | --                        | 0.9                                      | 0.6 | 1.2                                      | 0.6 |
|  |                    | 0.20                      | 353               | 5.78                      | 3.84                       | --                        | 0.9                                      | 0.6 | 1.5                                      | 0.9 |
|  |                    | 0.25                      | 441               | 9.03                      | 6.01                       | --                        | 1.2                                      | 0.6 | 1.8                                      | 1.2 |
| 915 x 900<br>[2.12]                                    | 600                | 0.10                      | 212               | --                        | --                         | --                        | 0.6                                      | 0.3 | 0.9                                      | 0.6 |
|  |                    | 0.15                      | 317               | --                        | --                         | --                        | 0.9                                      | 0.6 | 1.2                                      | 0.6 |
|  |                    | 0.20                      | 423               | 4.42                      | 3.07                       | --                        | 0.9                                      | 0.6 | 1.5                                      | 0.9 |
|  |                    | 0.25                      | 529               | 6.91                      | 4.80                       | --                        | 1.2                                      | 0.6 | 1.8                                      | 1.2 |
| 457 x 1200<br>[1.41]                                   | 315                | 0.10                      | 141               | 3.29                      | --                         | --                        | 0.9                                      | 0.6 | 1.2                                      | 0.6 |
|  |                    | 0.15                      | 212               | 7.39                      | 2.97                       | --                        | 1.2                                      | 0.6 | 1.5                                      | 0.9 |
|  |                    | 0.20                      | 282               | 13.15                     | 5.27                       | 18                        | 1.5                                      | 0.9 | 2.1                                      | 1.2 |
|  |                    | 0.25                      | 353               | 20.54                     | 8.24                       | 25                        | 1.8                                      | 1.2 | 2.4                                      | 1.5 |
| 610 x 1200<br>[1.88]                                   | 400                | 0.10                      | 188               | 2.63                      | --                         | --                        | 0.9                                      | 0.6 | 1.2                                      | 0.6 |
|  |                    | 0.15                      | 282               | 5.91                      | 2.88                       | --                        | 1.2                                      | 0.6 | 1.5                                      | 0.9 |
|  |                    | 0.20                      | 376               | 10.50                     | 5.12                       | --                        | 1.5                                      | 0.9 | 2.1                                      | 1.2 |
|  |                    | 0.25                      | 470               | 16.41                     | 8.00                       | 20                        | 1.8                                      | 1.2 | 2.4                                      | 1.5 |
| 762 x 1200<br>[2.35]                                   | 500                | 0.10                      | 235               | --                        | --                         | --                        | 0.9                                      | 0.6 | 1.2                                      | 0.6 |
|  |                    | 0.15                      | 353               | 4.50                      | 2.56                       | --                        | 1.2                                      | 0.6 | 1.5                                      | 0.9 |
|  |                    | 0.20                      | 470               | 7.99                      | 4.55                       | --                        | 1.5                                      | 0.9 | 1.8                                      | 1.2 |
|  |                    | 0.25                      | 588               | 12.49                     | 7.11                       | --                        | 1.8                                      | 1.2 | 2.4                                      | 1.5 |
| 457 x 1500<br>[1.76]                                   | 315                | 0.10                      | 176               | 3.55                      | --                         | --                        | 0.9                                      | 0.6 | 1.2                                      | 0.9 |
|  |                    | 0.15                      | 264               | 7.99                      | --                         | --                        | 1.5                                      | 0.9 | 1.8                                      | 1.2 |
|  |                    | 0.20                      | 353               | 14.20                     | --                         | 20                        | 1.8                                      | 1.2 | 2.4                                      | 1.5 |
|  |                    | 0.25                      | 441               | 22.19                     | 2.98                       | 27                        | 2.1                                      | 1.5 | 3.0                                      | 2.1 |
| 600 x 1500<br>[2.35]                                   | 400                | 0.10                      | 235               | 3.02                      | --                         | --                        | 0.9                                      | 0.6 | 1.2                                      | 0.9 |
|  |                    | 0.15                      | 353               | 6.80                      | --                         | --                        | 1.5                                      | 0.9 | 1.8                                      | 1.2 |
|  |                    | 0.20                      | 470               | 12.08                     | 3.67                       | --                        | 1.8                                      | 1.2 | 2.4                                      | 1.5 |
|  |                    | 0.25                      | 588               | 18.88                     | 5.74                       | 20                        | 2.1                                      | 1.5 | 3.0                                      | 2.1 |

### Performance Notes:

- Sound and pressure drop tested in accordance with ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets."
- Air flow is in Litres per second, L/s.
- Pressure is in Pascals, Pa.
- The NC values, sound pressure level, are based on a room absorption of 10 dB, re 10<sup>-12</sup> watts and one diffuser.
- $\Delta T$  is the difference between the room air temperature 1 m above the floor and the temperature of the supply air.
- Proximity to outlet is the minimum distance from an outlet to the occupant in order to achieve the listed DR value.
- Distances closer to the diffuser have a higher DR than the cataloged value.
- DR is the predicted percentage of people dissatisfied (PPD) due to draft. A value of less than 20 meets the requirements of ASHRAE Standard 55-2004, Thermal Environmental Conditions for Human Occupancy.
- Blanks (--) indicate that the DR is below the specified value at all distances from the diffuser face.
- DR catalog data is presented for an occupant density of 25 people/100m<sup>2</sup>, which is the default occupancy density for classrooms (ages 5-8) given by ASHRAE 62.1-2004. For other occupant densities, please refer to the DV Room Designer Software.
- Performance data for standard diffusers not listed in the catalog is available in Price AIO Software.

# Wall Mounted Displacement Diffusers DR90 Series



## Product Information

**Price DR90 Series** displacement diffusers are designed to produce a low turbulence horizontal air supply in a 90° pattern. Typically installed at the joining of two walls or in a 90° recess, the DR90 discharges air evenly across its perforated face. The cool air then drops to the floor and gently floats into the occupied zone in a layer 2-5" thick. This appealing diffuser meshes seamlessly into any décor, providing a curved detail to the space. The superior air quality and low noise levels realized with the DR90 make it suitable for office space, hotels, convention centers, schools, or any application where air quality demands are high.

### Features

- Top inlet option for use with duct covers.
- Bottom inlet option for bottom duct connection.
- Field-cut inlet option available.
- Ships with protective film on face and inlet.

### Construction/Finish: DR90

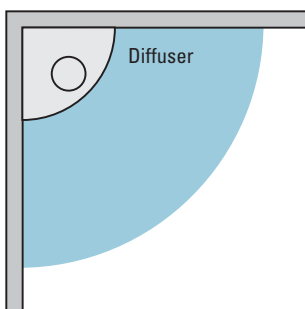
- Diffuser Frame and Equalization Baffle – Aluminum
- Plenum Caps – Rolled Steel
- Perforated Face and Plenum Back – Coated Steel
- Finish – B12 White (Standard)


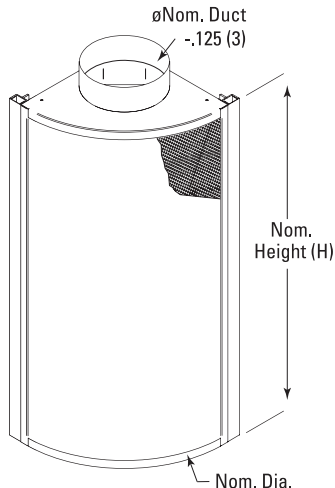
For optional and special finishes see color matrix.

### Accessories

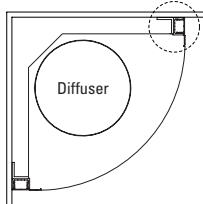
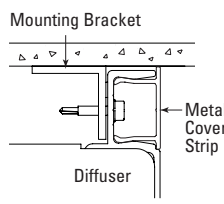
- Base
- Duct Covers
- AFSD

### Air Pattern



**Rail-Mounting System Detail**

**Dimensional Data - Imperial (inches)**

| Dia. X H | Duct           |
|----------|----------------|
| 18x24    | 6,7            |
| 18x36    | 6, 7, 10x4     |
| 18x48    | 6, 7, 10x4     |
| 24x24    | 8, 9, 10       |
| 24x36    | 8, 9, 10       |
| 24x48    | 8, 9, 10       |
| 24x60    | 9, 10, 16x5    |
| 30x24    | 8, 10          |
| 30x36    | 8, 10, 12      |
| 30x48    | 10, 12         |
| 30x60    | 10, 12, 20x6   |
| 36x24    | 10, 12         |
| 36x36    | 10, 12, 14, 16 |
| 36x48    | 12, 14, 16     |
| 36x60    | 14, 16         |
| 42x36    | 12, 14, 16     |
| 42x48    | 12, 14, 16     |
| 42x60    | 12, 14, 16     |
| 48x36    | 12, 14, 16     |
| 48x48    | 14, 16         |
| 48x60    | 14, 16         |

**Dimensional Data - Metric (mm)**

| Dia. X H    | Duct     |
|-------------|----------|
| 457 x 600   | 100      |
| 457 x 900   | 100      |
| 610 x 600   | 150      |
| 610 x 900   | 150      |
| 610 x 1200  | 150      |
| 610 x 1500  | 150      |
| 762 x 600   | 200      |
| 762 x 900   | 200      |
| 762 x 1200  | 200      |
| 762 x 1500  | 200      |
| 915 x 610   | 250, 315 |
| 915 x 900   | 250, 315 |
| 915 x 1200  | 250, 315 |
| 915 x 1500  | 250, 315 |
| 1067 x 1200 | 315      |
| 1067 x 1500 | 315      |
| 1219 x 1200 | 400      |
| 1219 x 1500 | 400      |
| 1219x900    | 315, 400 |
| 1219x1200   | 400      |
| 1219x1500   | 400      |

For a complete list of standard sizes and inlets, refer to [www.priceindustries.com/resources/type/literature/submittals](http://www.priceindustries.com/resources/type/literature/submittals)

# Wall Mounted Displacement Diffusers DR90 Series



## Performance Data – Imperial Units

| Unit Size<br>Dia. x H [in]<br>Face Area [ft <sup>2</sup> ] | Inlet Size<br>[in] | Face<br>Velocity<br>[fpm] | Air Flow<br>[cfm] | Total<br>Pressure<br>[in. w.g.] | Static<br>Pressure<br>[in. w.g.] | Noise<br>Criteria<br>[NC] | Proximity to Outlet [ft] |     |           |     |
|--|--------------------|---------------------------|-------------------|---------------------------------|----------------------------------|---------------------------|--------------------------|-----|-----------|-----|
|  |                    |                           |                   |                                 |                                  |                           | ΔT = 5°F                 |     | ΔT = 10°F |     |
|  |                    |                           |                   |                                 |                                  |                           | DR                       |     | DR        |     |
|  |                    |                           |                   |                                 |                                  |                           | 15%                      | 20% | 15%       | 20% |
| 18 x 24<br>[2]   | 4                  | 20                        | 41                | 0.03                            | 0.01                             | --                        | 1                        | --  | 3         | 2   |
|  |                    | 30                        | 61                | 0.06                            | 0.03                             | --                        | 2                        | 1   | 4         | 2   |
|  |                    | 40                        | 81                | 0.10                            | 0.05                             | 19                        | 2                        | 1   | 6         | 3   |
|  |                    | 50                        | 102               | 0.16                            | 0.08                             | 26                        | 3                        | 1   | 8         | 4   |
| 24 x 24<br>[2.8]   | 6                  | 20                        | 56                | 0.01                            | --                               | --                        | 1                        | --  | 3         | 1   |
|  |                    | 30                        | 83                | 0.03                            | 0.02                             | --                        | 2                        | 1   | 5         | 2   |
|  |                    | 40                        | 111               | 0.06                            | 0.04                             | --                        | 3                        | 2   | 7         | 3   |
|  |                    | 50                        | 139               | 0.09                            | 0.06                             | 17                        | 4                        | 2   | 9         | 4   |
| 30 x 24<br>[3.5]   | 8                  | 20                        | 70                | 0.01                            | --                               | --                        | 1                        | --  | 3         | 1   |
|  |                    | 30                        | 106               | 0.02                            | 0.02                             | --                        | 3                        | 1   | 5         | 3   |
|  |                    | 40                        | 141               | 0.04                            | 0.03                             | --                        | 3                        | 2   | 8         | 4   |
|  |                    | 50                        | 176               | 0.06                            | 0.04                             | --                        | 5                        | 2   | 10        | 5   |
| 18 x 36<br>[3.1]   | 4                  | 20                        | 62                | 0.03                            | --                               | --                        | 2                        | --  | 4         | 2   |
|  |                    | 30                        | 93                | 0.06                            | --                               | 16                        | 3                        | 1   | 6         | 3   |
|  |                    | 40                        | 124               | 0.11                            | --                               | 25                        | 4                        | 2   | 9         | 4   |
|  |                    | 50                        | 155               | 0.18                            | --                               | 33                        | 5                        | 2   | 11        | 6   |
| 24 x 36<br>[4.2]   | 6                  | 20                        | 85                | 0.02                            | 0.01                             | --                        | 2                        | 1   | 4         | 2   |
|  |                    | 30                        | 127               | 0.05                            | 0.02                             | --                        | 4                        | 2   | 7         | 3   |
|  |                    | 40                        | 170               | 0.09                            | 0.04                             | 16                        | 5                        | 2   | 10        | 5   |
|  |                    | 50                        | 212               | 0.14                            | 0.07                             | 23                        | 7                        | 3   | 13        | 7   |
| 30 x 36<br>[5.4]   | 8                  | 20                        | 108               | 0.02                            | --                               | --                        | 2                        | 1   | 5         | 2   |
|  |                    | 30                        | 162               | 0.04                            | 0.02                             | --                        | 4                        | 2   | 8         | 4   |
|  |                    | 40                        | 215               | 0.06                            | 0.04                             | --                        | 6                        | 3   | 11        | 6   |
|  |                    | 50                        | 269               | 0.10                            | 0.06                             | 17                        | 7                        | 4   | 15        | 8   |
| 24 x 48<br>[5.7]   | 6                  | 20                        | 114               | 0.03                            | --                               | --                        | 2                        | 1   | 6         | 3   |
|  |                    | 30                        | 171               | 0.06                            | 0.01                             | --                        | 4                        | 2   | 9         | 5   |
|  |                    | 40                        | 229               | 0.10                            | 0.02                             | 20                        | 7                        | 3   | 13        | 7   |
|  |                    | 50                        | 286               | 0.16                            | 0.03                             | 28                        | 9                        | 4   | 18        | 10  |
| 30 x 48<br>[7.2]   | 8                  | 20                        | 145               | 0.02                            | 0.01                             | --                        | 3                        | 1   | 7         | 3   |
|  |                    | 30                        | 217               | 0.05                            | 0.02                             | --                        | 5                        | 2   | 11        | 6   |
|  |                    | 40                        | 290               | 0.08                            | 0.04                             | --                        | 8                        | 4   | 15        | 8   |
|  |                    | 50                        | 362               | 0.13                            | 0.06                             | 21                        | 10                       | 5   | 20        | 11  |
| 24 x 60<br>[7.2]   | 6                  | 20                        | 144               | 0.02                            | --                               | --                        | 3                        | 2   | 7         | 3   |
|  |                    | 30                        | 215               | 0.05                            | --                               | --                        | 6                        | 3   | 12        | 6   |
|  |                    | 40                        | 287               | 0.09                            | --                               | 24                        | 8                        | 4   | 17        | 9   |
|  |                    | 50                        | 359               | 0.15                            | --                               | 31                        | 11                       | 6   | 22        | 12  |
| 30 x 60<br>[9.1]   | 8                  | 20                        | 182               | 0.02                            | --                               | --                        | 4                        | 2   | 8         | 4   |
|  |                    | 30                        | 273               | 0.05                            | 0.02                             | --                        | 7                        | 3   | 14        | 7   |
|  |                    | 40                        | 364               | 0.09                            | 0.03                             | 17                        | 9                        | 5   | 19        | 10  |
|  |                    | 50                        | 455               | 0.15                            | 0.04                             | 24                        | 13                       | 7   | 25        | 14  |

### Performance Notes:

- Sound and pressure drop tested in accordance with ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets."
- Air flow is in cubic feet per minute, cfm.
- Pressure is in inches of water, in. w.g.
- The NC values, sound pressure level, are based on a room absorption of 10 dB, re 10<sup>-12</sup> watts and one diffuser.
- ΔT is the difference between the room air temperature 3 ½ ft above the floor and the temperature of the supply air.
- Proximity to outlet is the minimum distance from an outlet to the occupant in order to achieve the listed DR value.
- Distances closer to the diffuser have a higher DR than the cataloged value.
- DR is the predicted percentage of people dissatisfied (PPD) due to draft. A value of less than 20 meets the requirements of ASHRAE Standard 55-2004, Thermal Environmental Conditions for Human Occupancy.
- Blanks (--) indicate that the DR is below the specified value at all distances from the diffuser face.
- DR catalog data is presented for an occupant density of 25 people/1000ft<sup>2</sup>, which is the default occupancy density for classrooms (ages 5-8) given by ASHRAE 62.1-2004. For other occupant densities, please refer to the DV Room Designer Software.
- Performance data for standard diffusers not listed in the catalog is available in Price AIO Software.

# Wall Mounted Displacement Diffusers DR90 Series



## Performance Data – Metric Units

| Unit Size<br>Dia. x H [mm]<br>Face Area [m <sup>2</sup> ] | Inlet Size<br>[mm] | Face<br>Velocity<br>[m/s] | Air Flow<br>[L/s] | Total<br>Pressure<br>[Pa] | Static<br>Pressure<br>[Pa] | Noise<br>Criteria<br>[NC] | Proximity to Outlet [m]                  |     |  |     |
|---|--------------------|---------------------------|-------------------|---------------------------|----------------------------|---------------------------|--|-----|--|-----|
|   |                    |                           |                   |                           |                            |                           | $\Delta T = 2.8\text{ }^{\circ}\text{C}$ |     | $\Delta T = 5.6\text{ }^{\circ}\text{C}$ |     |
|   |                    |                           |                   |                           |                            |                           | DR                                       |     | DR                                       |     |
|   |                    |                           |                   |                           |                            |                           | 15%                                      | 20% | 15%                                      | 20% |
| 457 x 600<br>[0.19]                                       | 100                | 0.10                      | 19                | 6.5                       | 3.0                        | --                        | 0.3                                      | --  | 0.9                                      | 0.6 |
|   |                    | 0.15                      | 28                | 14.6                      | 6.8                        | --                        | 0.6                                      | 0.3 | 1.2                                      | 0.6 |
|   |                    | 0.20                      | 38                | 25.9                      | 12.0                       | 19                        | 0.6                                      | 0.3 | 1.8                                      | 0.9 |
|   |                    | 0.25                      | 47                | 40.5                      | 18.8                       | 26                        | 0.9                                      | 0.3 | 2.4                                      | 1.2 |
| 610 x 600<br>[0.25]                                       | 150                | 0.10                      | 26                | 3.7                       | --                         | --                        | 0.3                                      | --  | 0.9                                      | 0.3 |
|   |                    | 0.15                      | 39                | 8.4                       | 5.5                        | --                        | 0.6                                      | 0.3 | 1.5                                      | 0.6 |
|   |                    | 0.20                      | 51                | 14.9                      | 9.7                        | --                        | 0.9                                      | 0.6 | 2.1                                      | 0.9 |
|   |                    | 0.25                      | 65                | 23.2                      | 15.2                       | 17                        | 1.2                                      | 0.6 | 2.7                                      | 1.2 |
| 762 x 600<br>[0.32]                                       | 200                | 0.10                      | 33                | 2.3                       | --                         | --                        | 0.3                                      | --  | 0.9                                      | 0.3 |
|   |                    | 0.15                      | 49                | 5.3                       | 3.8                        | --                        | 0.9                                      | 0.3 | 1.5                                      | 0.9 |
|   |                    | 0.20                      | 66                | 9.4                       | 6.8                        | --                        | 0.9                                      | 0.6 | 2.4                                      | 1.2 |
|   |                    | 0.25                      | 82                | 14.7                      | 10.6                       | --                        | 1.5                                      | 0.6 | 3.0                                      | 1.5 |
| 457 x 900<br>[0.28]                                       | 100                | 0.10                      | 29                | 7.0                       | --                         | --                        | 0.6                                      | --  | 1.2                                      | 0.6 |
|   |                    | 0.15                      | 43                | 15.8                      | --                         | 16                        | 0.9                                      | 0.3 | 1.8                                      | 0.9 |
|   |                    | 0.20                      | 58                | 28.1                      | --                         | 25                        | 1.2                                      | 0.6 | 2.7                                      | 1.2 |
|   |                    | 0.25                      | 72                | 43.9                      | --                         | 33                        | 1.5                                      | 0.6 | 3.4                                      | 1.8 |
| 610 x 900<br>[0.39]                                       | 150                | 0.10                      | 40                | 5.7                       | 2.7                        | --                        | 0.6                                      | 0.3 | 1.2                                      | 0.6 |
|   |                    | 0.15                      | 59                | 12.8                      | 6.1                        | --                        | 1.2                                      | 0.6 | 2.1                                      | 0.9 |
|   |                    | 0.20                      | 79                | 22.8                      | 10.8                       | 16                        | 1.5                                      | 0.6 | 3.0                                      | 1.5 |
|   |                    | 0.25                      | 99                | 35.6                      | 16.9                       | 23                        | 2.1                                      | 0.9 | 4.0                                      | 2.1 |
| 762 x 900<br>[0.49]                                       | 200                | 0.10                      | 50                | 4.0                       | --                         | --                        | 0.6                                      | 0.3 | 1.5                                      | 0.6 |
|   |                    | 0.15                      | 75                | 8.9                       | 5.5                        | --                        | 1.2                                      | 0.6 | 2.4                                      | 1.2 |
|   |                    | 0.20                      | 100               | 15.8                      | 9.7                        | --                        | 1.8                                      | 0.9 | 3.4                                      | 1.8 |
|   |                    | 0.25                      | 125               | 24.7                      | 15.2                       | 17                        | 2.1                                      | 1.2 | 4.6                                      | 2.4 |
| 610 x 1200<br>[0.52]                                      | 150                | 0.10                      | 53                | 6.5                       | --                         | --                        | 0.6                                      | 0.3 | 1.8                                      | 0.9 |
|   |                    | 0.15                      | 80                | 14.7                      | --                         | --                        | 1.2                                      | 0.6 | 2.7                                      | 1.5 |
|   |                    | 0.20                      | 106               | 26.1                      | 4.4                        | 20                        | 2.1                                      | 0.9 | 4.0                                      | 2.1 |
|   |                    | 0.25                      | 133               | 40.7                      | 6.9                        | 28                        | 2.7                                      | 1.2 | 5.5                                      | 3.0 |
| 762 x 1200<br>[0.66]                                      | 200                | 0.10                      | 67                | 5.2                       | --                         | --                        | 0.9                                      | 0.3 | 2.1                                      | 0.9 |
|   |                    | 0.15                      | 101               | 11.8                      | 5.6                        | --                        | 1.5                                      | 0.6 | 3.4                                      | 1.8 |
|   |                    | 0.20                      | 135               | 21.0                      | 9.9                        | --                        | 2.4                                      | 1.2 | 4.6                                      | 2.4 |
|   |                    | 0.25                      | 168               | 32.8                      | 15.5                       | 21                        | 3.0                                      | 1.5 | 6.1                                      | 3.4 |
| 610 x 1500<br>[0.66]                                      | 150                | 0.10                      | 67                | 5.7                       | --                         | --                        | 0.9                                      | 0.6 | 2.1                                      | 0.9 |
|   |                    | 0.15                      | 100               | 12.8                      | --                         | --                        | 1.8                                      | 0.9 | 3.7                                      | 1.8 |
|   |                    | 0.20                      | 134               | 22.8                      | --                         | 24                        | 2.4                                      | 1.2 | 5.2                                      | 2.7 |
|   |                    | 0.25                      | 167               | 35.6                      | --                         | 31                        | 3.4                                      | 1.8 | 6.7                                      | 3.7 |
| 762 x 1500<br>[0.83]                                      | 200                | 0.10                      | 84                | 5.9                       | --                         | --                        | 1.2                                      | 0.6 | 2.4                                      | 1.2 |
|   |                    | 0.15                      | 127               | 13.4                      | 3.6                        | --                        | 2.1                                      | 0.9 | 4.3                                      | 2.1 |
|   |                    | 0.20                      | 169               | 23.4                      | 7.1                        | 17                        | 2.7                                      | 1.5 | 5.8                                      | 3.0 |
|   |                    | 0.25                      | 211               | 36.6                      | 11.0                       | 24                        | 4.0                                      | 2.1 | 7.6                                      | 4.3 |

### Performance Notes:

1. Sound and pressure drop tested in accordance with ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets."
2. Air flow is in Litres per second, L/s.
3. Pressure is in Pascals, Pa.
4. The NC values, sound pressure level, are based on a room absorption of 10 dB, re 10<sup>-12</sup> watts and one diffuser.
5.  $\Delta T$  is the difference between the room air temperature 1 m above the floor and the temperature of the supply air.
6. Proximity to outlet is the minimum distance from an outlet to the occupant in order to achieve the listed DR value.
7. Distances closer to the diffuser have a higher DR than the cataloged value.
8. DR is the predicted percentage of people dissatisfied (PPD) due to draft. A value of less than 20 meets the requirements of ASHRAE Standard 55-2004, Thermal Environmental Conditions for Human Occupancy.
9. Blanks (-) indicate that the DR is below the specified value at all distances from the diffuser face.
10. DR catalog data is presented for an occupant density of 25 people/100m<sup>2</sup>, which is the default occupancy density for classrooms (ages 5-8) given by ASHRAE G2.1-2004. For other occupant densities, please refer to the DV Room Designer Software.
11. Performance data for standard diffusers not listed in the catalog is available in Price AIO Software.

# Wall Mounted Displacement Accessories Duct Covers

## Product Information

**Price Duct Covers** for displacement diffusers provide a consistent look from floor to ceiling. These products continue the appearance of the diffuser while concealing the ductwork for an architecturally appealing installation. Duct covers can be supplied in solid steel or perforated material to match the diffuser face. When using a perforated duct cover, the ductwork can be painted black for a finished look. The duct cover is available in varying lengths and can be split into multiple sections to create a symmetric look with the diffuser. These units are perfect for top ducted diffusers where exposed ductwork is not desired, such as hotel lobbies, office boardrooms, schools, and restaurants. See specific product for availability.

### Features

- Seamless construction.
- Matches corresponding product design.
- Variable height to match look of diffuser and fit into any room height.
- Duct covers for DF1, DF3, DR90, DR180, and DR180U:
  - Ship assembled from factory.
  - Use rail-mounting method.
- Available with protective film.

### Construction/Finish

- Face – 21 Gauge steel
  - Support Extrusion (where required) – Aluminum
  - Finish – B12 White (Standard)
- For optional and special finishes see color matrix.

### Options

- Solid steel duct cover.
- Perforated steel duct cover.

### Sizes

- Width, radius/diameter, depth are all based on diffuser.
- Support extrusion (where required) - Aluminum.

### Duct Covers are available for:

- DF1
- DF3
- DF1C
- DR90
- DR180
- DR180U



For a complete list of standard sizes and inlets, refer to [www.priceindustries.com/resources/type/literature/submittals](http://www.priceindustries.com/resources/type/literature/submittals)

# Wall Mounted Displacement Accessories Bases



## Product Information

**Price Bases** for displacement diffusers allow the diffuser to be installed above floor level, creating a look that is consistent with the existing décor. These products continue the look of base board heights and provide access to bottom ducted units for easier installation. The base also provides protection from damage or moisture during cleaning. The base is available in varying lengths and is inset from the face of the diffuser by 1 inch (25 mm). The easy installation of the product allows it to be ordered with a displacement unit or as a secondary order if the look is required after the original diffuser's installation. See specific product for availability.

### Features

- Seamless construction.
- Matches corresponding product design.
- Variable height to match desired look of diffuser.
- Ships with protective film.

### Construction/Finish

- Face – 21 Gauge steel
- Legs – Extruded Aluminum
- Finish – B12 White (Standard)

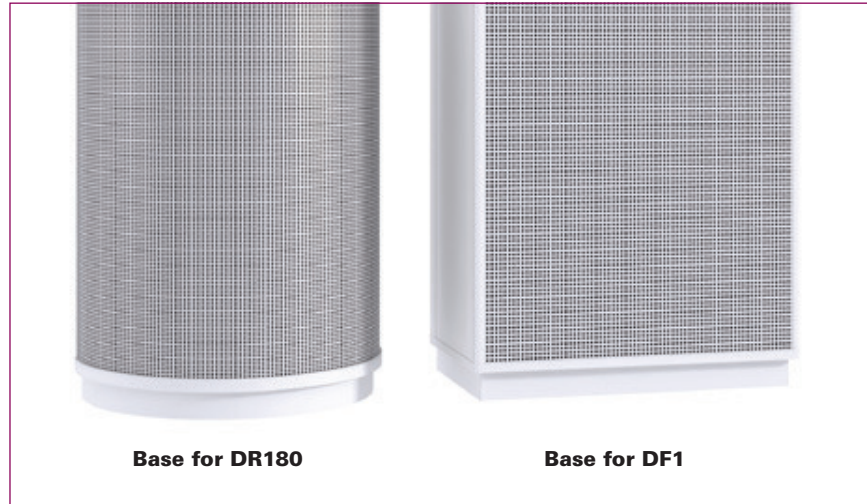
For optional and special finishes see color matrix.

### Sizes

- Width, radius/diameter, depth are all based on diffuser ordered.
- Height ranges from 2" to 6" (50mm to 150mm).

### Bases are available for:

- DF1
- DF3
- DF1C
- DR90
- DR180
- DR180U
- DR360



For a complete list of standard sizes and inlets, refer to [www.priceindustries.com/resources/type/literature/submittals](http://www.priceindustries.com/resources/type/literature/submittals)