







## **BEVELLED FACE DIFFUSER BD31**

# AIRFOIL





## BEVELLED FACE DIFFUSER — THREE WAY BLOW BD31

#### PRODUCT DESCRIPTION AND APPLICATION

Airfoil's Bevelled Face Diffuser (BD31) is a high-quality surface-mounted model crafted from Airfoil's finest aluminium. Featuring a built-in anti-smudge 45° bevelled edged frame, this practical diffuser offers increased ceiling protection on installation.

The BD31 boasts a multi-core 3 Way Pattern, ensuring even airflow distribution to the targeted area for both heating and cooling purposes. Available in 4 different sizes and 5 different air patterns, it provides versatility to suit various requirements.

The bevelled outer frame can be paired with an Optional Fixing Clip Reducer Neck (FCRN) for easy installation into a plasterboard ceiling. Alternatively, Airfoil's Insulated Cushion Box (ICB) is available for commercial use purposes.

This popular and visually appealing diffuser is offered in our standard white range, with the option for custom powder-coating to any specific colour. The BD31 finds its ideal application in various settings, including domestic homes and commercial spaces such as airports, hospitals, office spaces, shopping centres, schools, or any building where uniform air distribution is essential.





#### PRODUCT SPECIFICATIONS AND INFORMATION

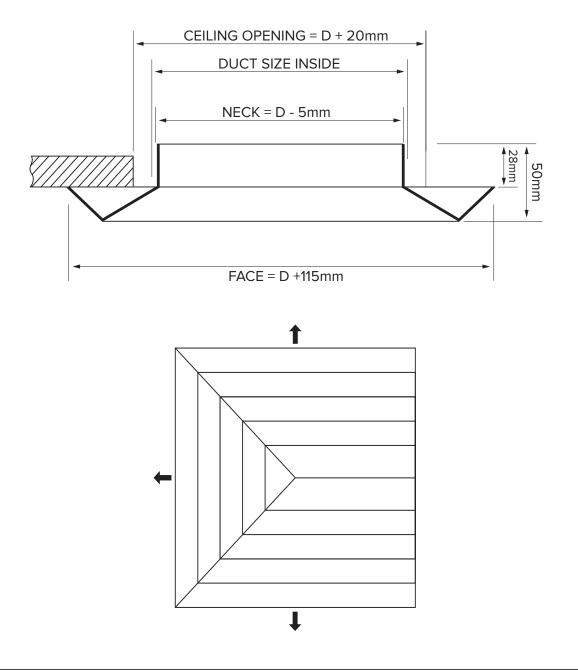
- Product ordering code BD31
- Aluminium construction
- Multi-Core 3 Way Blow Supply Air pattern
- Neck Sizes available: 450mm x 450mm Neck Size, 375mm x 375mm Neck Size, 300mm x 300mm Neck Size, 225mm x 225mm Neck Size,
- Suited to surface mounted applications (plasterboard ceiling)
- Quick release removable core for easy access and installation
- Suited to heating and cooling outcomes
- Available in standard white
- In stock
- Special powder-coated colours available on request
- Product suitable for office space, shopping centres, hotels, colleges, universities, hospitals and most commercial or industrial buildings
- Available with Airfoil's Fixing Clip Square to Round Reducer Neck (FCRN) and Airfoil's Square to Square Reducer Neck (FCRN)
- Available with Airfoil's Insulated Cushion Box (ICB) to suit BD
- Airfoil tested information available
- The following metric performance data has been derived from exhaustive testing in elaborate labratories of acoustic and vibrational engineers Louis A. Challis and Associates Proprietarv Limited. Darling Street. Svdnev 2000







#### **CROSS SECTIONAL DIAGRAM**





#### **DISCLAIMER:**

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#### **PERFORMANCE DATA**

| Neck Area   | Rating                         | 1.5       | 2.0     | 2.5     | 3.0     | 3.5     |
|-------------|--------------------------------|-----------|---------|---------|---------|---------|
| (sq. metre) | Total Pressure Drop in Pascals | 10        | 15      | 23      | 33      | 44      |
| 225x225     | l/s                            | 76        | 101     | 127     | 152     | 177     |
|             | NR - dB                        | _         | _       | 23      | 29      | 35      |
| 0.0506      | NC - dB                        | _         | _       | 22      | 28      | 34      |
|             | Min-Max Throw (metres)         | L 1.2-3.0 | 1.5-3.7 | 1.8-4.0 | 2.4-4.6 | 2.7-4.9 |
|             |                                | S 1.2-2.7 | 1.2-3.0 | 1.5-3.7 | 1.8-3.7 | 2.1-4.0 |
| 300x300     | l/s                            | 135       | 180     | 225     | 270     | 315     |
|             | NR - dB                        | _         | 21      | 26      | 32      | 38      |
| 0.0900      | NC - dB                        | _         | 20      | 25      | 31      | 37      |
|             | Min-Max Throw (metres)         | L 1.5-4.3 | 2.1-4.9 | 2.4-5.5 | 3.0-5.5 | 3.7-6.4 |
|             |                                | S 1.2-3.7 | 1.5-3.7 | 2.1-4.0 | 2.4-4.9 | 3.0-5.2 |
| 375x375     | I/s                            | 210       | 260     | 345     | 421     | 490     |
|             | NR - dB                        | _         | 23      | 29      | 34      | 40      |
| 0.1406      | NC - dB                        | _         | 22      | 28      | 33      | 39      |
|             | Min-Max Throw (metres)         | L 1.8-5.2 | 2.4-6.1 | 3.0-6.7 | 3.7-7.0 | 4.9-7.6 |
|             |                                | S 1.5-4.3 | 2.1-4.9 | 2.4-5.5 | 3.4-6.1 | 4.3-6.4 |
| 450x450     | l/s                            | 304       | 405     | 506     | 607     | 708     |
|             | NR - dB                        | -         | 24      | 30      | 35      | 42      |
| 0.2025      | NC -dB                         | _         | 23      | 29      | 34      | 41      |
|             | Min-Max Throw (metres)         | L 2.4-6.4 | 3.0-7.3 | 4.0-8.2 | 4.9-8.8 | 5.5-9.4 |
|             |                                | S 1.8-4.9 | 2.4-5.8 | 3.4-6.7 | 4.0-7.3 | 4.6-7.6 |

Throw measurements are at 1.5mls min and .65mls max terminal velocity.





#### **ORDERING CODES**

| BD41 450x450 | 4 way blow diffuser 450 X 450 NECK SIZE               |  |  |  |
|--------------|---|--|--|--|
| BD31 450x450 | 3 way blow diffuser 450mm by 450mm NECK SIZE          |  |  |  |
| BD25 450x450 | 2 way corner blow diffuser 450mm by 450mm NECK SIZE   |  |  |  |
| BD21 450x450 | 2 way opposite blow diffuser 450mm by 450mm NECK SIZE |  |  |  |
| BD11 450x450 | 1 way blow diffuser 450mm by 450mm NECK SIZE          |  |  |  |
| BD41 375x375 | 4 way blow diffuser 375mm x 375mm NECK SIZE           |  |  |  |
| BD31 375x375 | 3 way blow diffuser 375mm x 375mm NECK SIZE           |  |  |  |
| BD25 375x375 | 2 way corner blow diffuser 375mm x 375mm NECK SIZE    |  |  |  |
| BD21 375x375 | 2 way opposite blow diffuser 375mm x 375mm NECK SIZE  |  |  |  |
| BD11 375x375 | 1 way blow diffuser 375mm x 375mm NECK SIZE           |  |  |  |
| BD41 300x300 | 4 way blow diffuser 300mm x 300mm NECK SIZE           |  |  |  |
| BD31 300x300 | 3 way blow diffuser 300mm x 300mm NECK SIZE           |  |  |  |
| BD25 300x300 | 2 way corner blow diffuser 300mm x 300mm NECK SIZE    |  |  |  |
| BD21 300x300 | 2 way opposite blow diffuser 300mm x 300mm NECK SIZE  |  |  |  |
| BD11 300x300 | 1 way blow diffuser 300mm x 300mm NECK SIZE           |  |  |  |
| BD41 225x225 | 4 way blow diffuser 225mm x 225mm NECK SIZE           |  |  |  |
| BD31 225x225 | 3 way blow diffuser 225mm x 225mm NECK SIZE           |  |  |  |
| BD25 225x225 | 2 way opposite blow diffuser 225mm x 225mm NECK SIZE  |  |  |  |
| BD21 225x225 | 2 way opposite blow diffuser 225mm x 225mm NECK SIZE  |  |  |  |
| BD11 225x225 | 1 way blow diffuser 225mm x 225mm NECK SIZE           |  |  |  |