







CURVED BLADE DIFFUSER CBD2







PRODUCT DESCRIPTION AND APPLICATION

Airfoil's Australian Made Curved Blade Diffuser 2 Way Blow (CBD2) is perfect for ceiling applications requiring precise control over supply air direction for heating and cooling distribution. This aluminium diffuser offers the advantage of individual curved blades that can be easily adjusted to control airflow, allowing for targeted air movement in designated areas.

The CBD2 is typically mounted flush to a ceiling or can be installed into a fixed T-Bar grid application. With an outer frame size of 32mm and adjustable blades fixed at 20mm centres, this diffuser provides flexibility in airflow management.

The curved adjustable blades are securely attached to the outer frame using high-quality spring-loaded metal wires, tightened with metal star washers. Optional extras for this diffuser include Airfoil's Opposed Blade Damper (OBD) for air balancing, Airfoil's Fixing Clip Reducer Neck (FCRN), or Airfoil's Insulated Cushion Box (ICB) for commercial supply air installations.

This popular and visually appealing diffuser can be manufactured to any size and is available in our standard white range or Natural Anodised silver finish. Additionally, the diffuser can be powder-coated to any specific colour to suit aesthetic preferences. The CBD2 is well-suited for various applications, including airports, hospitals, office spaces, shopping centres, universities, or any commercial building where precise directional air control is essential.

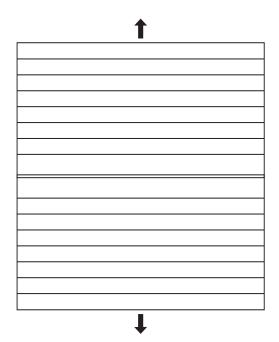




PRODUCT SPECIFICATIONS AND INFORMATION

- Product ordering code CBD2
- Australian Made
- Aluminium construction
- 2 Way Blow Curved Blade Supply Air pattern
- Frame size 32mm, blade centred at 20mm
- Overall frame depth 40mm
- Supply air directional control
- Available in any custom size
- Suited to surface mounted applications (plasterboard ceiling) or T-Bar ceiling patterns
- Suited to heating and cooling outcomes
- Available in standard white or Natural Anodised silver finish
- Special powder-coated colours available on request
- Available with Airfoil's Fixing Clip Square to Round Reducer Neck (FCRN)
- Available with Airfoil's Insulated Cushion Box (ICB) to suit CBD
- Available with Airfoil's optional Opposed Blade Damper (OBD) for air balancing
- Product suitable for airports, hospitals, office spaces, shopping centres, hotels, colleges, universities and most commercial or industrial buildings
- 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 Proprietary Limited. Darling Street, Sydney 2000

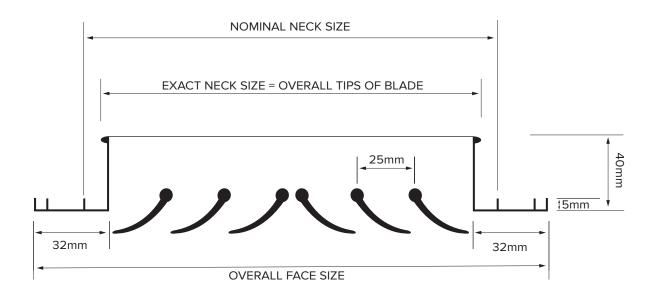








CROSS SECTIONAL DIAGRAM





DISCLAIMER:

All product designs, data sheets and specifications presented herein are the intellectual property of Airfoil Manufacturing Pty Ltd. These designs and specifications, including but not limited to diagrams, drawings, and performance data, are protected under Australian intellectual property laws. No part of these designs and specifications may be copied, reproduced, distributed, or transmitted in any form or by any means without the prior written permission of Airfoil Manufacturing Pty Ltd. Unauthorised use or reproduction of these materials may result in legal action under Australian copyright and intellectual property laws.





PERFORMANCE DATA

Face Velocity	1 m/s			1.5 m/s			2 m/s			2.5 m/s		
Neck Size	I/s	Throw m	Stat Pres (Pa)	I/s	Throw m	Stat Pres (Pa)	I/s	Throw m	Stat Pres (Pa)	I/s	Throw m	Stat Pres (Pa)
300x300	59	.9	1.25	83	1.9	2	112	1.5	3.5	130	2.1	4.25
400x400	105	.6	1.25	146	1.5	2.25	200	2.7	3.5	240	3.6	4.25
450x300	88	.9	1.25	133	1.2	2.25	162	1.8	3.5	205	3.4	4.25
450x450	137	1.2	1.25	195	1.8	2.25	251	2.4	3.5	310	3.7	4.25
600x300	118	.9	1.25	172	1.8	2.25	225	2.4	3.5	285	3.0	4.25
600x450	182	1.2	1.25	272	2.1	2.25	355	3.0	3.5	440	3.9	4.25
600x600	247	1.5	1.25	375	2.4	2.25	500	3.7	3.5	595	4.7	4.25

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

Face Velocity		3 m/s			3.5 m/s		4 m/s			
Neck Size	l/s	Throw m	Stat Pres (Pa)	l/s	Throw m	Stat Pres (Pa)	l/s	Throw m	Stat Pres (Pa)	
300x300	155	2.4	6.5	175	3	7	210	3.4	10	
400x400	290	4.7	6.5	330	5.2	7	380	5.9	10	
450x300	245	3.7	6.5	280	4	7	330	4.3	10	
450x450	380	4	6.5	430	4.7	7	500	5.4	10	
600x300	330	3.7	6.5	342	4.4	7	430	5.2	10	
600x450	540	4.6	6.5	625	5.5	7	700	6.1	10	
600x600	735	5.5	6.5	830	6.4	7	960	7.3	10	

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