





# AIRFOIL





## **PRODUCT DESCRIPTION AND APPLICATION**

Airfoil's CD400 is an Australian Made Circular Diffuser crafted from high-grade lightweight spun aluminium material. With its sleek and sophisticated design, this Circular Diffuser is ideal for ceiling-mounted or exposed ductwork applications.

The CD400 features multiple adjustable center cones, making it versatile for heating, cooling, and ventilation purposes. Its adjustable center cones allow for various air patterns, providing flexibility in airflow direction.

For convenient installation, the CD400 can be fitted directly into Airfoil's Supply Air Cushion Box (ICB) using an accompanying matching Metal Spigot Collar.

Available in our standard white range or customisable with powder-coating in any specified colour upon request, the CD400 is suitable for a variety of commercial applications. From shopping centres and airports to cinemas, restaurants, food courts, and universities, this product is perfect for environments where variable air patterns are needed.





#### **PRODUCT SPECIFICATIONS AND INFORMATION**

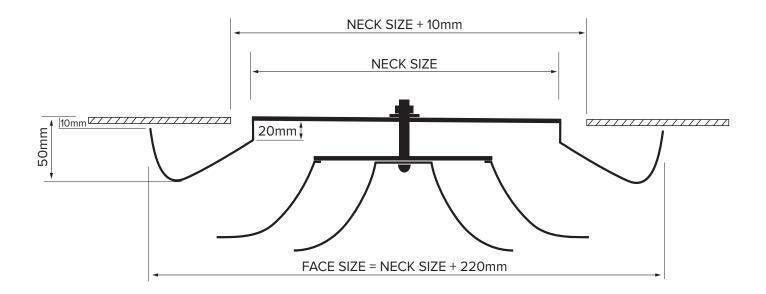
- Product ordering code CD400
- Australian Made and Designed
- Constructed from high-grade light weight spun aluminium
- Neck size 400mm
- Face Size 620mm
- Frame depth 50mm
- Used for supply air heating, cooling and ventilation applications
- Ideal for ceiling mounted or exposed duct work applications
- 3 coned adjustable center allowing for variable air patterns
- Available in our standard white powder-coated range
- Special powder-coated colours available on request
- Optional Supply Air Cushion Box (ICB) to suit CD400 diffuser
- Product suitable for a variety of commercial applications such as shopping centres, airports, cinemas, restaurants, food courts, universities or in any commercial application where variable air patterns are required.
- Airfoil tested information available
- The following metric performance data has been derived from exhaustive testing in elaborate laboratories of acoustic and vibrational engineers Louis A. Challis and Associates Proprietary Limited. Darling Street, Sydney 2000







**CROSS SECTIONAL DIAGRAM** 





#### **DISCLAIMER:**

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## **PERFORMANCE DATA**

Size dia	Neck Vel. m/s	2	2.5	3	3.5	4	4.5	5	6
CD400	Lit/sec	260	330	400	460	520	580	640	720
	NR	10	21	26	31	35	39	43	49
	Tot. Press (Pa)	10	17	24	33	41	52	63	89
	Rad. Of diffusion/m	1.4 - 3.2	1.7 - 4.2	2.1 - 5.1	2.4 - 5.9	2.7 - 6.8	3.2 - 7.5	3.6 - 8.2	3.9 - 9.8

## **CIRCULAR DIFFUSER - OPTIONAL SIZES**

Size dia	Neck Vel. m/s	2	2.5	3	3.5	4	4.5	5	6
CD200	Lit/sec	66	83	99	110	130	150	160	190
	NR	-	-	16	24	29	34	37	40
	Tot. Press (Pa)								
	Rad. Of diffusion/m	0.6 - 1.8	0.8 - 2	1.2 - 2.6	1.2 - 3	1.4 - 3.4	1.4 - 4	1.8 - 4.2	2 - 5.2

Size dia	Neck Vel. m/s	2	2.5	3	3.5	4	4.5	5	6
CD250	Lit/sec	100	120	150	170	200	230	250	300
	NR	-	14	20	24	29	33	36	41
	Tot. Press (Pa)	7	11	16	21	27	35	43	60
	Rad. Of diffusion/m	0.8 - 2	0.8 - 2.4	1.2 - 3	1.4 - 3.4	1.4 - 4	1.8 - 4.6	2 - 5	2.4 - 6

Size dia	Neck Vel. m/s	2	2.5	3	3.5	4	4.5	5	6
CD300	Lit/sec	140	180	220	260	290	330	370	440
	NR	-	14	20	25	29	33	36	42
	Tot. Press (Pa)	7	11	15	21	27	34	42	58
	Rad. Of diffusion/m	0.8 - 2.4	1.2 - 3	1.4 - 3.6	1.8 - 4	1.8 - 4.6	2 - 5.2	2.4 - 5.8	3 - 7

Size dia	Neck Vel. m/s	2	2.5	3	3.5	4	4.5	5	6
CD350	Lit/sec	200	250	300	350	400	450	500	600
	NR	14	21	26	31	35	39	43	49
	Tot. Press (Pa)	10	16	22	30	38	48	59	85
	Rad. Of diffusion/m	1.2 - 3	1.4 - 3.6	1.8 - 4.6	2 - 5.2	2.4 - 6	2.6 - 6.6	3 - 7.2	3.6 - 8.8

Size dia	Neck Vel. m/s	2	2.5	3	3.5	4	4.5	5	6
CD400	Lit/sec	260	330	400	460	520	580	640	720
	NR	10	21	26	31	35	39	43	49
	Tot. Press (Pa)	10	17	24	33	41	52	63	89
	Rad. Of diffusion/m	1.4 - 3.2	1.7 - 4.2	2.1 - 5.1	2.4 - 5.9	2.7 - 6.8	3.2 - 7.5	3.6 - 8.2	3.9 - 9.8