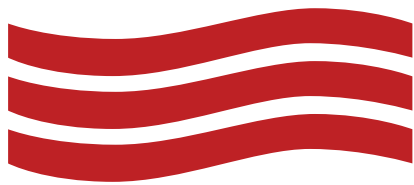


# AIRFOIL



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DUCT  
FITTINGS

*making it happen sooner...*



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**DOOR GRILLE**  
**DG**



## DOOR GRILLE DG

### PRODUCT DESCRIPTION AND APPLICATION

Airfoil's Australian Made Door Grilles (DG) exemplify superior craftsmanship and functionality. Constructed with the highest quality, lightweight, corrosion-free anodised aluminium extrusion, these grilles are built to last. The grille features extruded aluminium inverted "V" type blades fixed at 22mm centers, providing a free area of approximately 50% for maximum airflow at minimal sound levels.

The Door Grille (DG) is designed for ease of installation and versatility. It comes complete with a user-friendly and adjustable telescopic backframe equipped with spring clips that seamlessly clip into the rear of the door insert, ensuring a flush appearance. Suitable for door thickness ranging from 30mm to 45mm, the DG offers a universal solution for various applications.

Available in multiple stock sizes or customisable to any size upon request, the Door Grille (DG) offers flexibility to suit diverse requirements. While it comes standard in Airfoil's Natural Anodised aluminium finish, it can be powder-coated to any specific colour upon request, allowing for seamless integration into any design scheme.

The DG is recommended for use in doors, walls, or partitions where a discreet return, relief, or air transfer application is needed. Suitable for both commercial and domestic use, Airfoil's Door Grilles (DG) combine functionality, durability, and aesthetic appeal, making them an ideal choice for any space.

## DOOR GRILLE DG

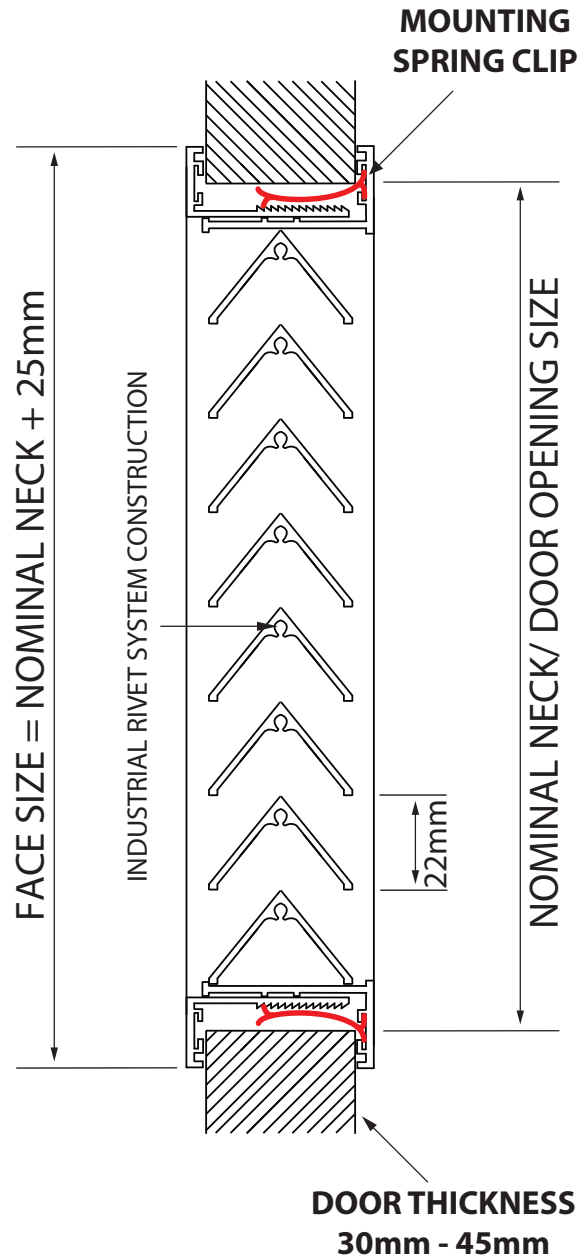
### PRODUCT SPECIFICATIONS AND INFORMATION

- **Product ordering code – DG**
- Product ordered nominal neck size minus 10mm for door opening size
- Australian Made
- Aluminium Natural Anodised Construction
- 25mm frame
- 22mm spaced center “V” type blades
- 50% free area
- User friendly adjustable telescopic back frame
- Suitable for 30mm to 45mm door thickness
- Easy installation via spring clips
- Available in multiple stock sizes for immediate delivery
- Can be manufactured to any size upon request
- Comes standard in our Natural Anodised silver finish
- Special powder-coating colours available upon request
- Suitable for any commercial or domestic application
- 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**



## DOOR GRILLE DG

### CROSS SECTIONAL DIAGRAM



#### DISCLAIMER:

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## DOOR GRILLE DG

### DOOR GRILLE - STOCKED SIZES / ORDERING CODES

Product Code	Nominal Neck (mm)	Exact Neck (mm)	Face Size (mm)
DG-300x150	300 x 150	290 x 140	325 x 175
DG-450x150	450 x 150	440 x 140	475 x 175
DG-600x100	600 x 100	590 x 90	625 x 125
DG-600x150	600 x 150	590 x 140	625 x 175
DG-300x200	300 x 200	290 x 190	325 x 225
DG-400x200	400 x 200	390 x 190	425 x 225
DG-600x200	600 x 200	590 x 190	625 x 225
DG-600x250	600 x 250	590 x 240	625 x 275
DG-300x300	300 x 300	290 x 290	325 x 325
DG-500x300	500 x 300	490 x 290	525 x 325
DG-600x300	600 x 300	590 x 290	625 x 325
DG-600x400	600 x 400	590 x 390	625 x 425
DG-450x450	450 x 450	440 x 440	475 x 475
DG-600x450	600 x 450	590 x 440	625 x 475
DG-600x600	600 x 600	590 x 590	625 x 625

## DOOR GRILLE DG

### PERFORMANCE DATA

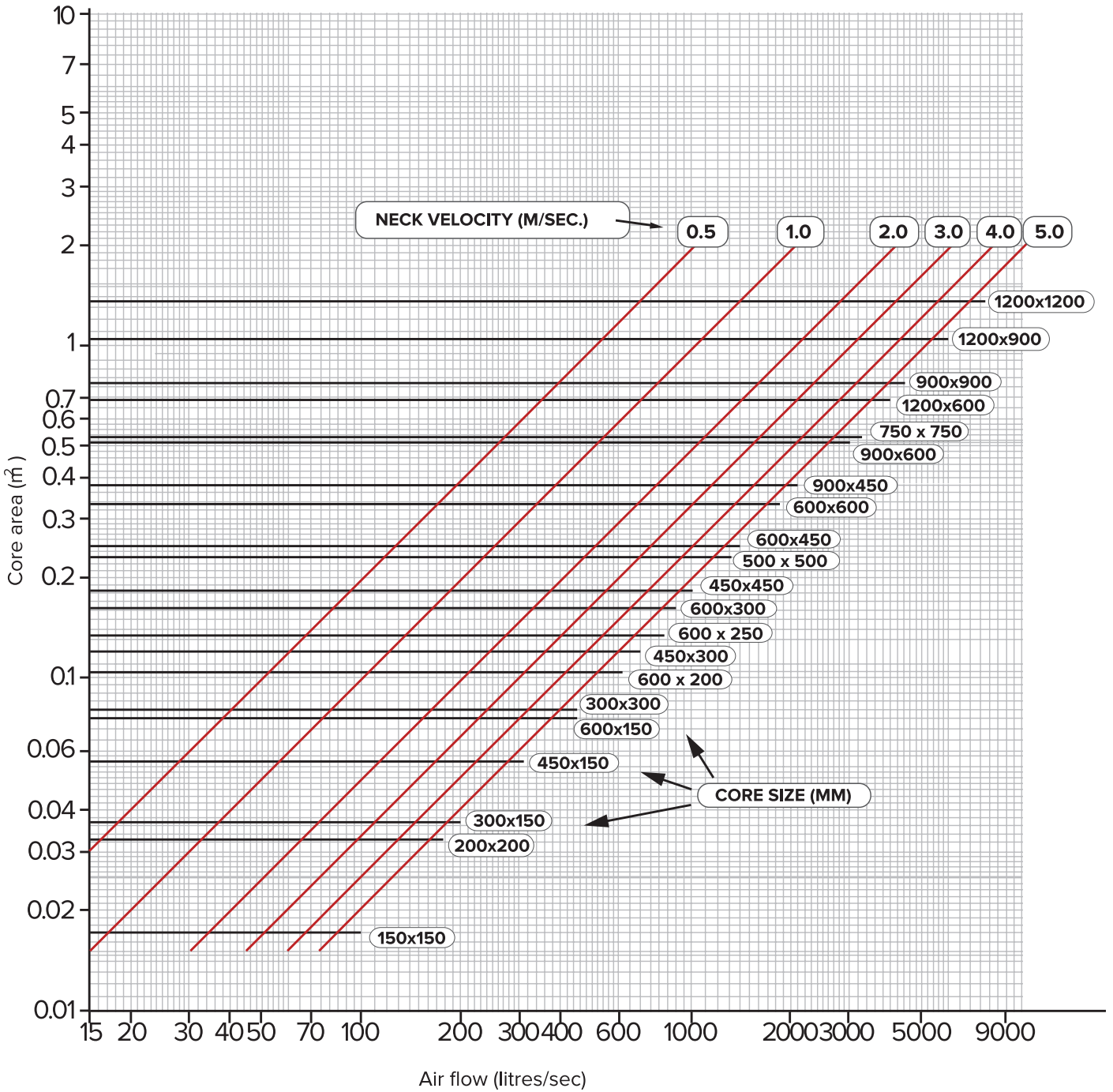
#### STATIC PRESSURE (PA) AT VARIOUS AIR QUANTITIES & NECK AREAS

Typical Neck Sizes:	300 x 150	450 x 150	600 x 150	600 x 200	450 x 300	600 x 250	600 x 300	450 x 450	600 x 450	600 x 600
Neck Area M2:	0.045	.068	0.090	0.120	0.135	0.150	0.180	0.203	0.270	0.360
L/s 30										
L/s 50	13									
L/s 75	35	15	9							
L/s 100	90	40	22	12	8	6				
L/s 150		62	35	18	14	12	8	5		
L/s 200			82	40	30	25	17	13	8	
L/s 250				75	55	45	30	24	13	8
L/s 300					85	70	45	37	20	12
L/s 400						100	68	52	28	17
L/s 500								90	50	30
L/s 600									808	45

## DOOR GRILLE DG

### PERFORMANCE DATA

#### STATIC PRESSURE VS AIRFLOW FOR VARIOUS CORE SIZES



## DOOR GRILLE DG

### PERFORMANCE DATA

#### VARIOUS NECK VELOCITIES GIVEN AIRFLOW V NECK AREA

Typical Sizes	300 x 150	450 x 150	600 x 150	600 x 200	450 x 300	600 x 250	600 x 300
Neck Area M <sup>2</sup> L/S	0.045	0.068	0.090	0.120	0.135	0.150	0.180
30	0.75	0.5					
50	1.5		0.6	0.5			
75	2.25	1.5	1.0		0.6	0.5	
100	2.75	2.0	1.5	1.0			0.6
150	4.0	2.75	2.0	1.5	1.25	1.1	0.9
200	5.5	3.75	2.75	2.0	1.75	1.5	1.25
250		4.5	3.0	2.75	2.0	1.75	1.5
300		5.5	4.0	3.5	2.5	2.25	1.9
400			5.0	4.0	3.5	3.0	2.5
500				5.0	4.0	3.75	3.0
600					5.0	4.75	3.75
750							5.0
1000							
1500							
2000							
3000							
4000							

Typical Sizes	450 x 450	600 x 450	600 x 600	900 x 600	1200 x 600	900 x 900	1200 x 900	1200 x 1200
Neck Area M <sup>2</sup> L/S	0.203	0.270	0.360	0.540	0.720	0.810	1.080	1.440
30								
50								
75								
100	0.5							
150								
200	1.1	0.5						
250	1.4	1.0	0.75	0.5				
300	1.75	1.25			0.5			
400	2.25	1.75	1.25			0.5		
500	2.75	2.0	1.5	1.0			0.5	
600	3.25	2.5	1.75		0.75			0.5
750	4.5	3.0	2.5	1.5				
1000		4.0	3.0	2.0	1.5	1.0	1.0	
1500			4.5	3.0	2.25	2.0	1.5	1.0
2000				4.0	3.0	3.5	2.0	
3000				6.0	4.5	4.0	3.0	2.0
4000					6.0	5.0	4.0	3.0

NECK VELOCITY – METRES PER SECOND