



air master

# Chapter 5

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# Door grille with single frame

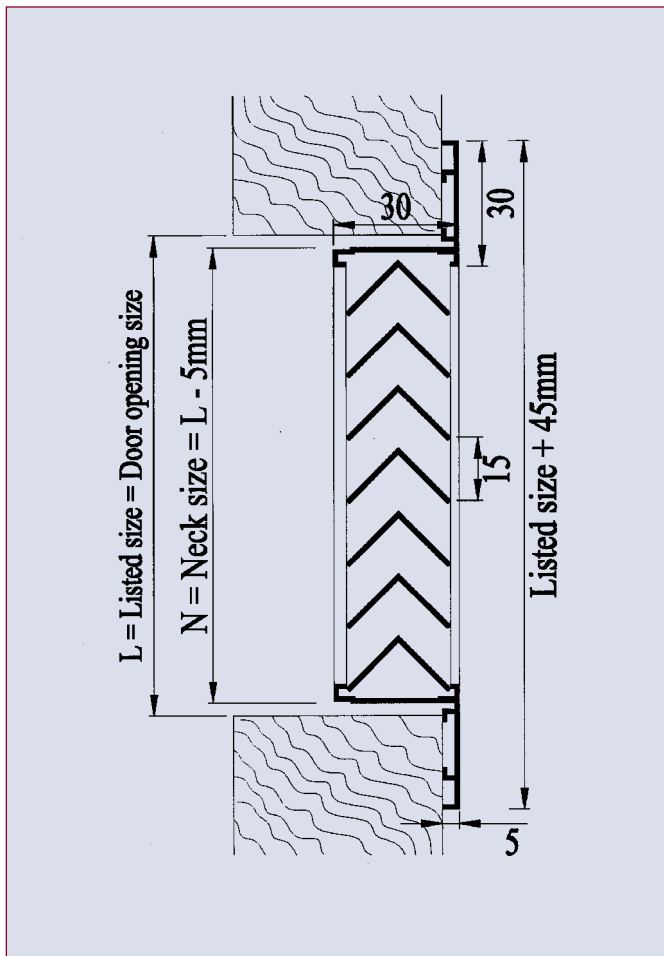
Model: ADG-1

## Construction:

- **Frame:** High quality extruded aluminium profiles with 30 mm flange width as standard. 12, 16, 24 mm flange widths are optional.
- **Blades:** High quality extruded aluminium profiles.
- **Blade pitch:** 15mm

## Description:

- Frame and blades are of high quality extruded aluminium profiled construction with the advantages of corrosion resistance and rigidity.
- Inverted "V" type horizontal blades are fixed rigidly to the frame.
- Blades are spaced at a distance of 15 mm.



- Grilles are made to with stand heavy use to which door grilles are subjected.
- Frame is fabricated to suit door thickness of 30 mm to 60 mm.
- Structure provides around 55% free area for air transmission.
- Used in facilities such as offices, hospitals, schools and toilets for transfer of air from one room to another room.
- Fire rated door grilles are available with 1/2 and 1 hour fire rating with additional cost.

## Standard finishes:

- Natural aluminium anodized finish.
- Powder coated colour finish as per RAL colour codes.
- Flexibility of finish is available.



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# Door grille with double frame

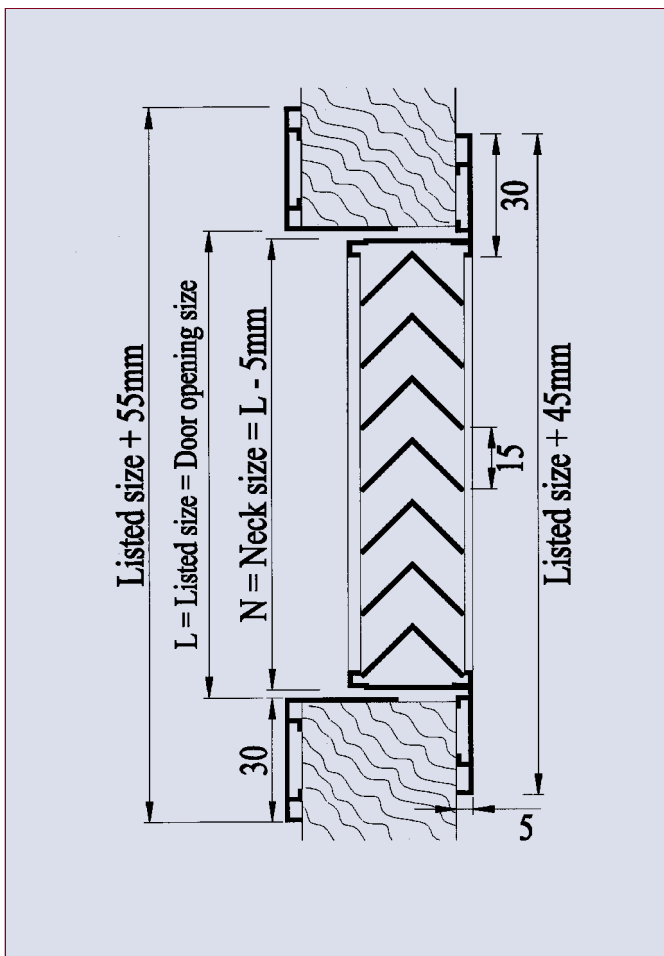
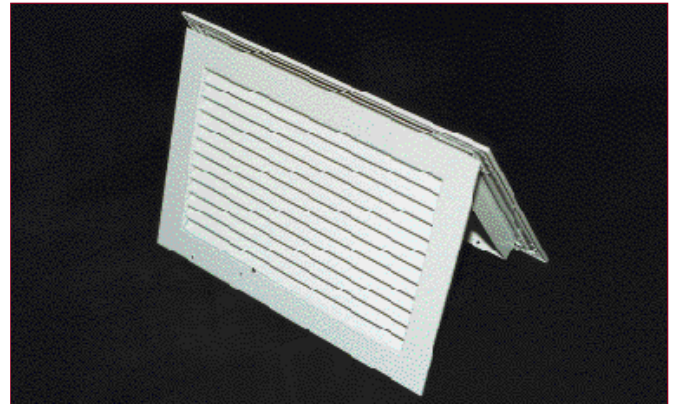
→ Model: ADG-2

## Construction:

- **Frame:** High quality extruded aluminium profiles with 30 mm flange width as standard. 12, 16, 24 mm flange widths are optional.
- **Blades:** High quality extruded aluminium profiles.
- **Blade pitch:** 15mm.

## Description:

- Frame and blades are of high quality extruded aluminium profiled construction with the advantages of corrosion resistance and rigidity.
- Inverted "V" type horizontal blades are fixed rigidly to the frame to avoid vibration and corrosion.
- Blades are spaced at a distance of 15 mm.
- Provided with a counter frame for fixing on both sides of the door.



- Made to with stand heavy use to which door grilles are subjected.
- Frame is fabricated to suit door thickness of 30 mm to 60 mm.
- Structure provides around 55% free area for air transmission.
- Used in facilities such as offices, hospitals, schools and toilets for transfer of air from one room to another room.
- Fire rated door grilles are available with 1/2 and 1 hour fire rating with additional cost.

## Standard finishes:

- Natural aluminium anodized finish.
- Powder coated colour finish as per RAL colour codes.
- Flexibility of finish is available.



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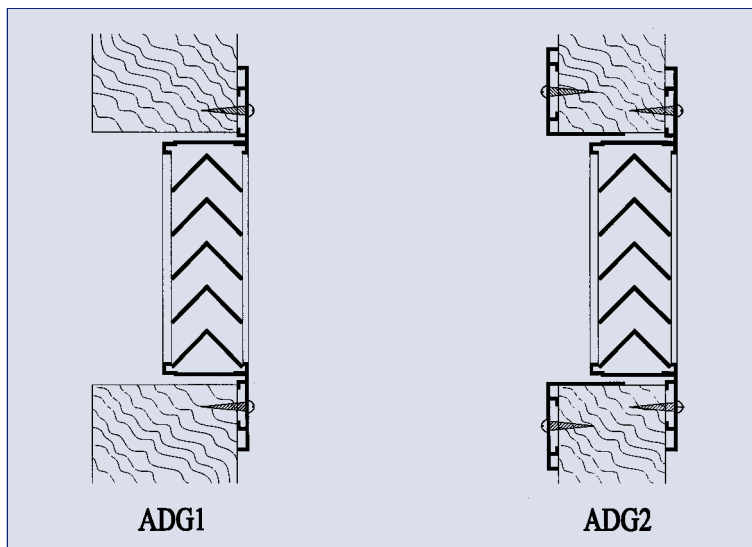
**Standard Sizes:**

- Available in square and rectangular sizes.
- Non standard sizes are available as option.

Width in mm	150	200	250	300	350	400	450	500
Height in mm	150	200	250	300	350	400	450	500

**Fixing details:**

- Screw fixing from flange to door.



**How to order:**

Model	Size	Quantity	Finish
ADG1	Specify door opening size Width x height In mm x mm	Specify in numbers	A = Natural aluminium anodized finish.
ADG2			B = RAL 9010.
			C = Other RAL colours

**Ordering example:**

1. To select door grille with double frame of size 400 x 400 of quantity 75 nos. with natural aluminium anodized finish.

**Order as :** ADG2-400 x 400 – 75 – A.



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**Door grilles**

Model: ADG1 / ADG2

**Table 5.1 Air flow data**

Listed sizes In mm x mm	Area factor in m <sup>2</sup> .	Face velocity in m/sec.							
		1.5	1.75	2	2.25	2.5	3	3.5	4
		Static pressure loss in mm of H2O.							
		0.609	0.81	1.07	1.35	1.65	2.39	3.25	4.27
Air flow in m <sup>3</sup> / sec.									
300 x 150	0.026	0.039	0.046	0.052	0.059	0.065	0.078	0.091	0.104
400 x 150 / 300 x 200	0.0344	0.052	0.06	0.069	0.077	0.086	0.103	0.12	0.138
500 x 150	0.0428	0.064	0.075	0.086	0.096	0.107	0.128	0.15	0.171
300 x 250 / 400 x 200 600 x 150	0.0455	0.068	0.08	0.091	0.102	0.114	0.137	0.159	0.182
400 x 250 / 750 x 150 500 x 200 / 300 x 300	0.049	0.074	0.086	0.098	0.110	0.123	0.147	0.172	0.196
350 x 350 / 600 x 200 400 x 300 / 500 x 250	0.067	0.1	0.117	0.134	0.151	0.168	0.201	0.235	0.268
450 x 350 / 600 x 250 500 x 300 / 750 x 200	0.0837	0.126	0.146	0.167	0.188	0.209	0.251	0.293	0.335
500 x 350 / 750 x 250 600 x 300	0.10	0.15	0.175	0.2	0.225	0.25	0.3	0.35	0.4
500 x 400 / 450 x 450	0.11	0.165	0.193	0.22	0.248	0.275	0.33	0.385	0.44
600 x 350	0.115	0.173	0.201	0.23	0.259	0.288	0.345	0.403	0.46
500 x 450 / 750 x 300 600 x 400	0.125	0.188	0.219	0.25	0.281	0.313	0.375	0.438	0.50
750 x 350 / 600 x 450	0.149	0.224	0.261	0.298	0.335	0.373	0.447	0.522	0.596
750 x 450	0.175	0.263	0.306	0.35	0.394	0.438	0.525	0.613	0.7
600 x 600	0.199	0.299	0.348	0.398	0.448	0.498	0.597	0.697	0.796
700 x 600 / 750 x 550	0.23	0.345	0.403	0.46	0.518	0.575	0.69	0.805	0.92