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Product Information
 Computer Floor Grille
 Type AFG

PI M1.1/5/EN/1

Computer Floor Grille

Type AFG

Description

The AFG Type floor grille is developed to be mounted on raised floor systems to match typical 600 mm by 600 mm floor tiles, to supply cooling to computer rooms or data centers where cooling load is high. Two different types of sub-frame are available to suit different raised floor systems typically available in the market – refer to detail A and B on the right.

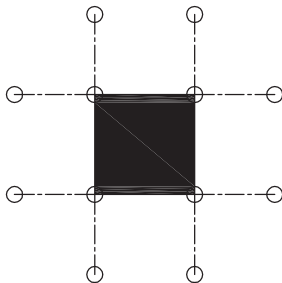
This is heavy duty floor grille capable of taking high static load and is robust in construction.

The floor grille was tested independently for:

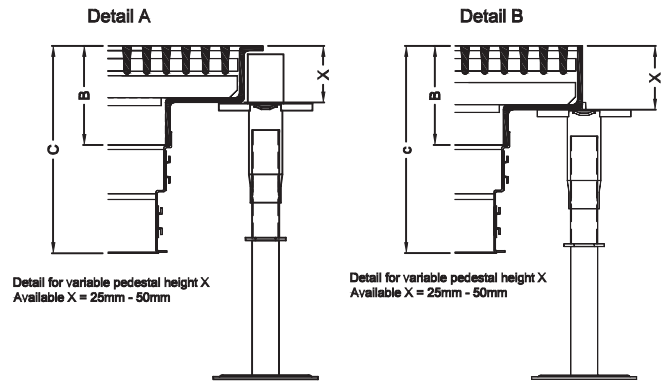
- Uniform distributed load test at 12 kN/m²
- Static load (Concentrated Load): Tested at 4.5 kN over an area of 25 mm x 25 mm.
- Safety load: The sample was successfully tested at 13.5 kN at the centre of the grille over an area of 25 mm x 25 mm.
- Soft Body Impact Test: The grille did not collapse.

The above tests were conducted in accordance with UK's standard MOB PF2 PS/SPU: 1992. The core of the floor grille is in mill finish. The grille can be supplied with either 0° or 15° deflection blade profile. The steel sub-frame below the grille core is painted matt black in RAL 9005 as standard supply.

Typical Floor Plan View



Grille Replacing Floor Tile



Type AFG - A/AG construction

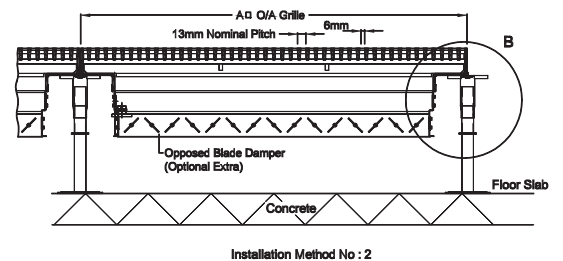
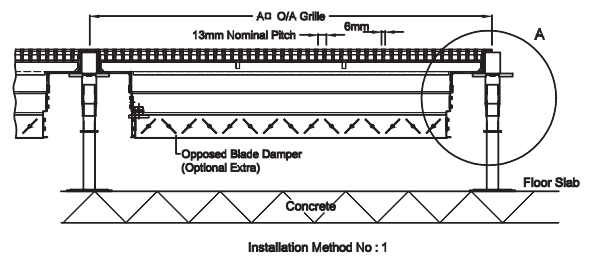


Table No. 1: AFG-A (without OBD).

Static Press., ΔP (Pa)	Air Flow Rate (l/s)	Effective velocity (m/s)	NC
5	470	2.65	24
10	595	3.36	30
15	660	3.73	33
20	710	4.01	35
25	750	4.24	37

Table No. 2: Terminal air velocities

Air Flow Rate (l/s)	Air velocity at height (m) above FFL		
	0.1 m	1.1 m	1.8 m
111	0.43	0.11	< 0.05
200	0.82	0.54	< 0.05
300	1.16	1.00	0.05
350	1.42	1.30	0.10
400	1.55	1.40	0.17
425	1.77	1.60	0.22

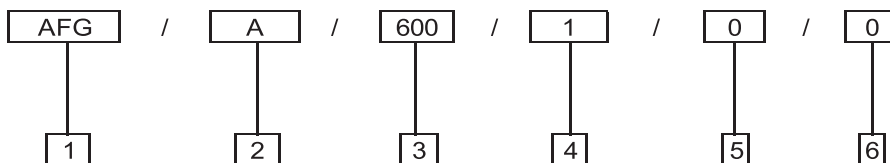
Table No. 3: AFG-AG

Static Press., ΔP (Pa)	OBD 100% open		OBD 75% open		OBD 50% open		OBD 25% open	
	Air Flow (l/s)	LpNC	Air Flow (l/s)	LpNC	Air Flow (l/s)	LpNC	Air Flow (l/s)	LpNC
5	250	<20	195	20	140	21	65	< 20
10	345	20	270	24	200	25	90	20
15	430	24	345	27	260	28	115	22
20	480	26	380	30	270	32	130	25
25	525	30	420	33	310	34	145	27
30	545	32	425	36	330	36	165	29



Installation Example for Detail B

Order Code



1 Product Type

2 Construction

3 Size

600 – For 600 mm x 600 mm tile

4 Type of sub-frame

- 1 – Detail A with flange
- 2 – Detail B without flange

5 Blade deflection profile

- 0 – 0° deflection
- 15 – 15° deflection

6 Finish

- Grille core in mill finish
- Sub-frame in matt black to RAL 9005