





**ACOUSTIC PANELS** 



### **Our Product Ranges**

# **Dampers**

- 1 Fire Dampers
- 2 Fire / Smoke Dampers
- **3 Volume Control Dampers**
- 4 Motorized Control Dampers
- 5 Pressure Relief Dampers / Non Return Dampers

# Variable Air Volumes

- 6 Pressure Independent VAV
- 7 Constant Air Volume VAV
- 8 By Pass VAV

### Louvers

- 9 Sand Trap Louvers
- 10 Acoustic Louvers
- 11 Stationery Louvers / Architectural Louvers
- 12 Storm Louvers
- 13 Weather Louvers

### Sound Attenuators

- 14 Rectangular Sound Attenuators
- 15 Circular Sound Attenuators
- 16 Crosstalk Attenuators

# Electric Duct Heaters

- 17 Flange & Slip 'n' Type
- 18 Modulating & On/Off Type

# Air Outlets

- 19 Registers & Grilles
- 20 Diffusers (Linear Diffusers, Sq. & Rect. Ceiling Diffusers, Round Diffusers, Jetflow Diffusers
- 21 Swirl Diffusers & Disc Valves
- 22 Drum Louvers



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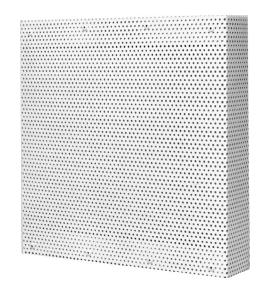


# **ACOUSTIC PANELS**

### Airwellcare Acoustic Panels

are excellent sound absorbers over a wide frequency range. Their acoustic properties combined with their appearance and rugged durability make them a perfect choice for controlling reverberant noise problems. These Panels are suitable for Outdoor & Indoor use and are ideal for installation over existing barrier walls and are excellent in resisting damage from impacts, abrasion, or moisture.

**Airwellcare** APG-100 Panel Absorbers are functional and aesthetically pleasing Galvanized perforated panels, which are used to control reverberant noise problems for major applications such as Factories, waste water treatment facilities, pump rooms, equipment yard barrier walls, Auditoriums, Indoor stadiums, Recording studios, Schools, Offices, Theaters, Conference halls etc. Although primarily intended as an absorber, the panels will act as a barrier when a solid back is added. APG-100 panels are also useful as additions to existing metal or concrete barriers to reduce reverberation time and to lower reflected sound.



### **Major Applications**



**Recording Studios** 



**Auditoriums & Assembly Halls** 



**Schools & Class Rooms** 



Office Environments



**Theaters & Conference Hall** 



### **CONSTRUCTION DETAILS**

### Construction

22 Gauge Galvanized Perforated Steel sheet Or Optional: 22 Gauge Aluminium Perforation. Rear Side: 22 Gauge Galvanized Or Aluminium Sheet.

Acoustic Infill property of 32 - 68 Kg. /  $M^{\rm 3}$  Density Fiberglass material, covering black vinyl tissue.

#### FIRE TEST DATA

Class A per ASTM E84

#### **MAXIMUM SIZES**

Standard sizes up to 48" wide x 90" high Custom Size can be made as per requirement.

#### **MOUNTING**

#### Finish & Colour

Standard Powder Coated finish as per approved RAL Colour Codes.

The following custom based optional coatings / finish are also available on request.

- Super-Durable Polyester Powder Coating (SDF)
- Hyper-Durable Flurocarbon Polymer Coating (HDF)
- Polyvinylidene fluoride coating/KYNAR Coating (PVDF/KYNAR)

The above finishes complies to AAMA 2603 / 2604 / 2605 requirements with 20-year limited warranty against failure or excessive fading.

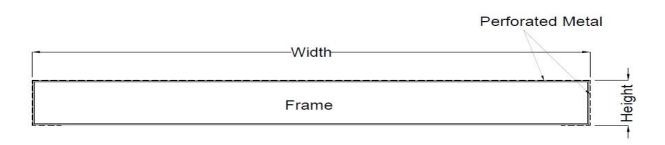
### **Acoustic Property**

- Thickness & density can be changed according to the Technical Calculations, to obtain the optimum performance of the Attenuators.
- Non combustible when tested in accordance with BS 476: Part 4: 1970, ASTM E-136, NFPA255 and UL 723 testing methods.
- Fill material is class-1 as tested in accordance with ASTM-84.
- Fiberglass shall be density calculated to provide the acoustic and aerodynamic performance.
- Tested for Temp. upto 750° C in accordance with DIN 52271.
- Meet the requirements of BS 2972 Sec.22 & ASTM C-871, ASTM-C-795, ASTM C-692. ASTM C-177/C-518 & DIN 52612 for low thermal conductivity.
- Sound absorption in accordance with BS 3638 & ISO 0354.
- Inert, vermin-proof, weather rated non combustible acoustic infill.
- The acoustic infill material complies with Class 'O' of the U.K.'s Building Regulations.





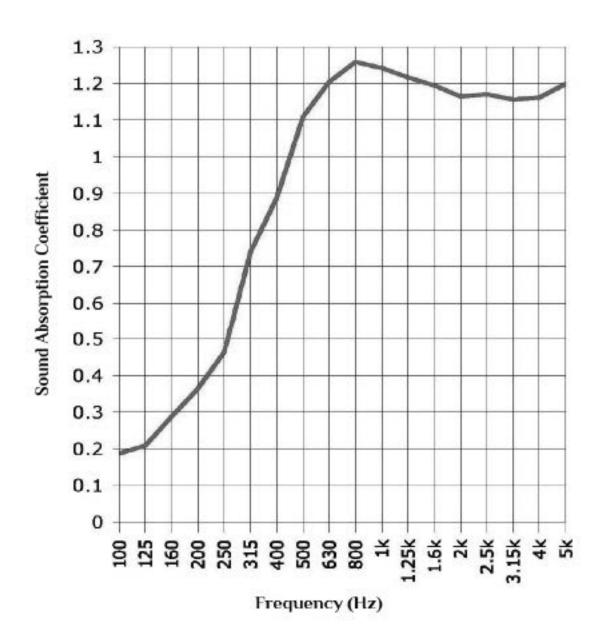
# CONSTRUCTION DETAILS



System	Standard Thickness	Standard Density	Standard Widths	Standard Length	Maximum Length
Acoustical Baffle Systems	1", 2", 3", 4", 6", 8" & 10	32 - 68 Kg/M³	18", 24", 36" & 48"	2' & 4'	7.5'
Acoustical Wall Panel System	1", 2", 3" & 4"	32 - 68 Kg/M³	18", 24", 36" & 48"	2' & 4'	7.5'



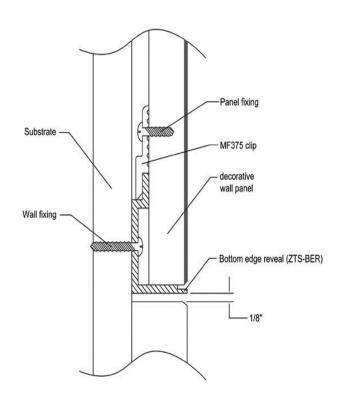
# **ENGINEERING GUIDELINES**



Frequency (Hz)	125	250	500	1000	2000	4000
Absorption Coefficient	0.20	0.45	0.20	1.10	1.18	1.17

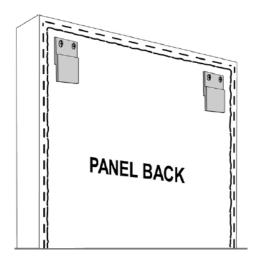


# **INSTALLATION DETAILS**



# Z - CLIP TO WALL INSTALLATION

- Attach Z-Clips to the wall following the same spacing as the clips installed onto the bak of the panel.
- Raised sides on Z-Clips going on the wall should all be facing up.
- Slide panel down on clips to attach to wall. Use bubble level to ensure proper alignment.



### INSTALLATION ON CONCRETE OR BLOCK WORKS

Directly power drive specialized concrete screws into the wall, or drill holes and use standard concrete screws and plastic expanders.









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