

# Four-layer Phonic Panel (Breveté)



#### Four-layer very acoustic panel

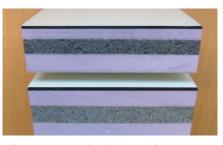
The aluminium four-layer phonic panels are part of the CONSERVATORY product range. They are used in order to improve the thermal and acoustic insulation of homes.

They ensure a double improvement of the acoustic insulation: mitigation of impact and transmission noises thanks to the mass-spring-mass constitution of the panel and the density difference of the materials inside.

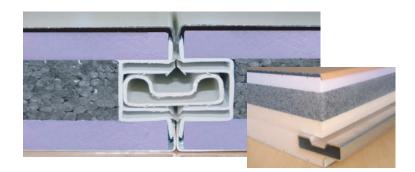
The panels are composed with an insulating foam in extruded polystyrene and an elastomeric mass that provide:

 High acoustic absorption thanks to a sound waves' vibration dampening due to the mass spring - mass composition of the panel
Reduction of the bi-lame effect thanks to the elastification of the insulating center foam
Excellent puncture resistance

AV Composites' panels, together with their junction systems are protected by numerous paterns!



Filling range: thickness of 61, 87 mm References: XAQA61, XAQA87



Self-supporting range: thickness of 61, 98 mm References: AXAQA61, XAQA98R16



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Prizewinner of the 2010 INPI Innovation Trophies Prizewinner of the 2010 DELOITTE Technology Fast 50 Authorized Retailer



# Four-layer Phonic Panel (Patented)



### Covering

**External and internal facing** Aluminium sheet (thickness 8/10th) lacquered with a polyester resin and a UV resistant film

#### Color chart

White 9010 (bright), lvory 1015 (bright), Roussillon (Terracotta), Brown 8004 (dull) Grey 7024 (dull), Nut Brown 8011 (dull)

## **Color chart inside options** White 9010 (bright), White 9010 (grainy) Novastripe®, Primary

#### **Core of the panel** 2

Exterior insulating core Extruded polystyrene, without CFC Interior insulating core In Neopor composed of elasticized polystyrene

### Declared thermal conductivity ( $\lambda$ ) :

- Extruded: 0.028W/m.K EN 12667 12939 - Neopor: 0.031 W/m.K - EN 12667 - 12939
- Assembling

**Filling range** Tight by a profil system

### Self-supporting range

Tight by junction keys on a PVC side linning, with 2 double draining channels of flow and 7 water-resistive barriers . Tight by aluminium junction keys into the groove in the extruded polystyrene

#### Gluing 4 Polyurethane two-component adhesive

5 Thickness of finished panels Filling range: 61, 87mm Self-supporting range: 61, 98mm

#### **Panels specifications** 6 Thermal loss coefficient

U = K = 0,47 (61) - 0,32 (87) - 0,29 (98) W/K.m<sup>2</sup>

Thermal Resistance R R= 2,11 (61) - 3,07 (87) - 3,42 (98) K.m<sup>2</sup> / W

#### Acoustic attenuation of the impact noise 61mm : -23dB

Improvement of 5000Hz for a XAQA61or a AXAQA61 panel compared to a standard X52 panel. Tested on a test bed at AV Composites' with a SVAN 953 sound level meter

Maximal scope of the self-supporting panels: 4500 (AXAQA61), 4700 (XAQA98 R16)

Admissible load for an 1/50 bending: 35 (AXAQA61), 110 (XAQA98 R16) daN/m<sup>2</sup>

### Fire resistance

M1 Quality, according to LNE N° P107497 certification

# **Dimensions - Weights**

Width 1195 mm Length 2500 à 7500 with steps of 250mm Weight 8,84 (61) - 9,70 (87) - 10.03 (98) kg/m<sup>2</sup>

## Warranty

Company Civil Insurance N° 2/700062



The installation of our systems must be made with the accessories of the AV Composites range. In case of dispute, the guarantees only apply if the user recommendations contained in our data sheets and Technical Notice, are met. Dark exterior color holding (such as: Slate) can not be guaranted in time. The advice and technical data refer to real information and practical experiences. They are offered in good faith but without guarantee since the conditions and methods of use are not under our control. We reserve the right to make change at any time without notice.