



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 patens!



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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Authorized Retailer

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



Technical Specifications

1 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), Ivory 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

2 Core of the panel

Exterior insulating core

Extruded polystyrene, without CFC

Interior insulating core

In Neopor composed of elasticized polystyrene

Declared thermal conductivity (λ) :

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

3 Assembling

Filling range

Tight by a profil system

Self-supporting range

. Tight by junction keys on a PVC side lining, with 2 double draining channels of flow and 7 water-resistive barriers

. Tight by aluminium junction keys into the groove in the extruded polystyrene

4 Gluing

Polyurethane two-component adhesive

5 Thickness of finished panels

Filling range: 61, 87mm

Self-supporting range: 61, 98mm

6 Panels specifications

Thermal loss coefficient

$U = K = 0,47 (61) - 0,32 (87) - 0,29 (98) \text{ W/K.m}^2$

Thermal Resistance R

$R = 2,11 (61) - 3,07 (87) - 3,42 (98) \text{ K.m}^2 / \text{W}$

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

Improvement of 5000Hz for a XAQA61 or 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/m²

Fire resistance

M1 Quality,
according to LNE N° P107497 certification

7 Dimensions - Weights

Width 1195 mm

Length 2500 à 7500 with steps of 250mm

Weight 8,84 (61) - 9,70 (87) - 10.03 (98) kg/m²

8 Warranty

Company Civil Insurance N° 2/700062



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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 guaranteed in time. The advice and technical data refer to real informations 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.