



**Three-layer silence ultra acoustic panels with outer membrane**

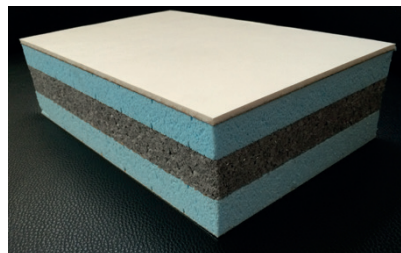
The **aluminium three-layer silence phonic panels** are part of the **CONSERVATORY** product range. They are used to improve houses' thermal and acoustic insulation.

The panels are composed with an insulating foam in extruded polystyrene, an elastomeric mass that provide and an outer membrane.

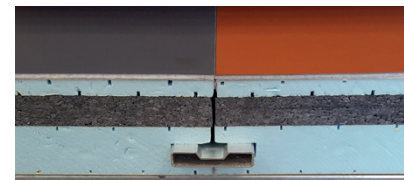
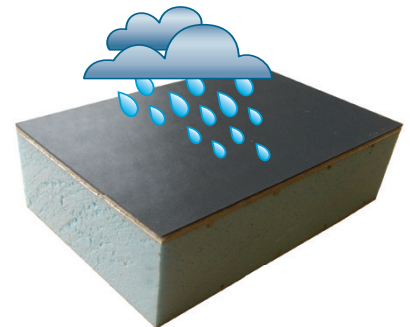
They ensure an optimal double improvement of the acoustic insulation:  
- mitigation of the impact noise thanks to an outer membrane which prevents the exterior aluminium cladding from vibrating  
- mitigation of the trasmission noise thanks to the mass-spring-mass constitution of the panel and the density difference of the materials inside

They also ensure the **reduction of the bi-lame effect** thanks to the elastification of the insulating center foam and to the protection of the exterior aluminium cladding.

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



Filling range: thickness of 61 & 98mm  
References: XTA61S, XTA98S



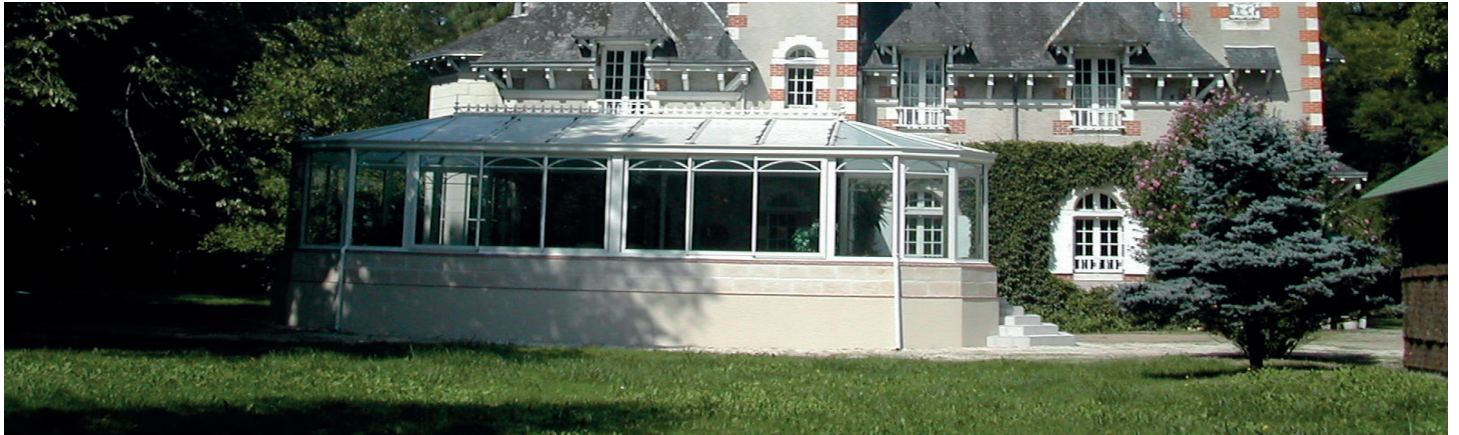
Self-supporting range: thickness of 61 & 98 mm  
References: AXTA61S, XTA98SR16



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## Technical Specifications

**1 Covering**  
**External and internal facing**  
 Aluminium sheet (thickness 8/10th)  
 Interior facing: lacquered with a polyester  
 White 9010 resin and a UV resistant film  
**Acoustic membrane:** complex of a non-woven  
 associated with an acoustic membrane in PVC

### Color chart of the acoustic membrane

White 9016, Copper brown 8004,  
 Grey 7016, Nut Brown 8011

### Color chart inside options

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 ( $\lambda$ ) :

- 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, 98mm

Self-supporting range: 61,98mm

**6 Panels specifications**

### Thermal loss coefficient

$U = K = 0,46 (61) - 0,29 (98) \text{ W/K.m}^2$

### Thermal Resistance R

$R = 2,16 (61) - 3,45 (98) \text{ K.m}^2 / \text{W}$

### Acoustic attenuation of the impact noise

55mm : -34dB

Improvement of 5000Hz for a XTA61S or AXTA61S  
 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: 4000 (AXTA61S),  
 4700 (XTA98S R16)

### Admissible load for an 1/50 bending:

35 (AXTA61S), 110 (XTA98S R16) daN/m<sup>2</sup>

### Fire resistance

M1 Quality,  
 according to LNE N° P107497 certification

**7 Dimensions - Poids**

Largeur 1195 mm

Longueur 2500 à 7500 par pas de 250mm

Poids 8,73 (61) - 9,92 (98) kg/m<sup>2</sup>

**8 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 guaranteed 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.