



## Silence very acoustic panels with outer membrane

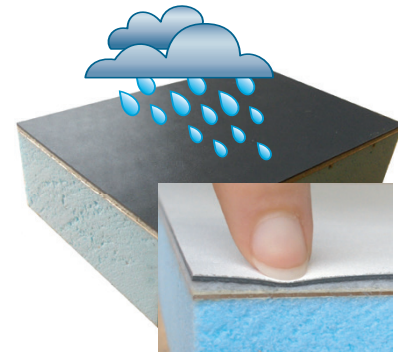
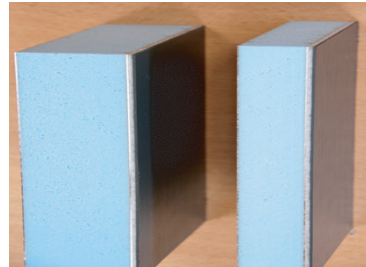
The **aluminium silence foam panels** are part of the **CONSERVATORY** product range. They are used to improve houses' thermal and acoustic insulation.

They ensure an optimal improvement of the acoustic insulation: mitigation of the impact noise thanks to the outer membrane which prevents the exterior aluminium cladding from vibrating.

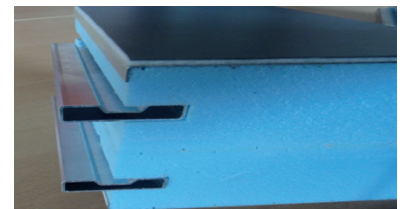
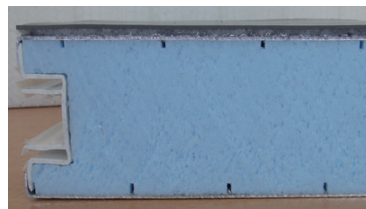
The panels are composed with an insulating foam in extruded polystyrene and an outer membrane that provide:

- High acoustic absorption thanks to the mitigation of the impact noise
- **Reduction of the bi-lame effect** thanks to the protection on the exterior aluminium cladding
- Excellent mechanical properties

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



Filling range: thickness of 32, 55, 60, 66, 85, 105 and 168mm  
References: X32S, X55S, X60S, X66S, X85S, X105S, X168S



Self-supporting range: thickness of 55, 85, 105 and 168mm  
References: AX55S, X55SR16, X60SR16, X66SR16, X85SR16, X105SR16, X168SR16



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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, Brown 8004, Grey 7016, Brown 8011

#### Color chart inside options

White 9010 (grainy) Novastripe®, Primary

### 2 Core of the panel

#### Exterior insulating core

Extruded polystyrene, without CFC

#### Declared thermal conductivity :

$\lambda = 0.028 \text{ W/m.K} - \text{EN } 12667 - 12939$

### 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: 32, 55, 60, 66, 85, 105, 168mm

Self-supporting range: 55, 85, 105, 168mm

### 6 Panels specifications

#### Thermal loss coefficient

$U = K = 0,82 \text{ (32)} - 0,49 \text{ (55)} - 0,45 \text{ (60)} - 0,41 \text{ (66)}$   
 $0,31 \text{ (85)} - 0,26 \text{ (105)} - 0,16 \text{ (168)} \text{ W/K.m}^2$

#### Thermal Resistance R

$R = 1,20 \text{ (32)} - 2,03 \text{ (55)} - 2,18 \text{ (60)} - 2,39 \text{ (66)}$   
 $3,14 \text{ (85)} - 3,81 \text{ (105)} - 6,04 \text{ (168)} \text{ K.m}^2 / \text{W}$

#### Acoustic attenuation of the impact noise

55mm : -32dB

Improvement of 5000Hz for a X55S or an AX55S  
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 (AX55S, X60SR16 &  
X66SR16), 5000 (X85SR16), 5500 (X105SR16),  
6000 (X168SR16)\*

\* Caution: in case of a flat roof installation, the  
slope steepness must be of 2 % = maximal scope  
of 4500 mm

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

93 (AX55S), 113 (X60SR16 & X66SR16),  
153 (X85SR16), 175 (X105SR16) -  
258 (X168SR16) daN/m<sup>2</sup>

#### 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 7,82 (32) - 8,58 (55) - 8,86 (60) - 8,91 (66)  
9,61 (85) - 10,38 (105) - 12,44 (168) 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.