## **ECOPLAN™**





# **ECOPLAN™** Polyester sound-absorbing panels

Ecoplan™ sound-absorbing panels represent the ideal solution to realize economic acoustic treatments, performing and easy to install.

Even if this panel line is extremely simple in its technological concept, Ecoplan™ modules don't forget the attention to the aesthetic features, typical of all the installations by Acustico®. For this reason, Acustico® has created a wide variety of shapes, formats and dimensions, suitable for any architectural context.

The new Ecoplan™ product line concept is simple and efficient at the same time, because it eliminates any unnecessary element that can generate some production extra costs and that is not useful to achieve the desired acoustic results. For this reason, Ecoplan™ sound absorbers are made of medium/high density thermo-smoothed polyester and shaped through a mechanical cutting system into the various formats.

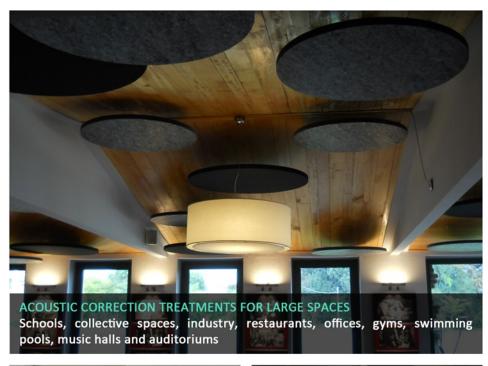
Ecoplan™ acoustic panels are totally made of high eco-compatible PET polyester fibre (deriving from the recycling, and recyclable at the same time), so no polyurethane or melamine-based materials, nor materials containing formaldehyde and capable of dispersing inhalable micro-dust (vitreous fibres, rock wool and glass wool) are adopted.

Ecoplan™ panels are the ideal solution for the acoustic treatment of large spaces, such as auditoriums, multifunctional centers, school spaces, gyms, swimming pools and industries, being also valid for little spaces and installations with a low economic budget, granting acoustic and aesthetic results at the same time.















### ■ CONSTRUCTION SYSTEM

Ecoplan™ is a very innovative acoustic system in the sound-absorbing market, and represents an excellent operative tool to realize effective, low-cost and easy to install interventions of acoustic correction. At the same time, Ecoplan™ ensures high quality standards in terms of healthiness, eco-compatibility and certified safeness, without excluding the typical Acustico®'s design-oriented approach.

Ecoplan™ panels are made of PET polyester fibre, thermo-smoothed, heat-bound and totally fire resistant, and shaped with a mechanic cutting system into the required forms and dimensions.



The total absence of coverings and rigid elements (such as frames and other structural components) permits to this panel to be directly exposed to sound waves, with a considerable improvement of sound absorbing coefficients. Ecoplan™ panels' corners may be supplied with rounded shaping, making them suitable for elegant installations. In this way, it is possible to obtain a pleasing visual effect.

On request, Ecoplan™ panels may also be realized in the sharp edges version.

## OPERATING PRINCIPLES

The acoustic operating principle of Ecoplan™ panels is based on the concept of the "sound absorption by porosity", associated to the concept of the "vibrating membrane".

This particular feature of Ecoplan™ sound absorbers, obtained thanks to a process of surface thermo-smoothing of the polyester fibre, extends the panel's performances even at low frequencies, where common sound-absorbing panels cannot be so much efficient.

Ecoplan™ sound-absorbing panels can give important acoustic benefits to spaces thanks to the capacity of the polyester fibre to dissipate the sound energy, through the vibrations and the rubbing of its filaments.

## ■ SHAPES, DIMENSIONS AND COLOURS

Ecoplan™ sound-absorbing panels are available in many standard dimensions and shapes (or may be customized) and in the three alternative colours black, white and grey.









Standard thickness: 40 mm (others on request)

Approximate weight: 2 Kg/mq

Standard dimensions in mm:

600 x 600 | 800 x 800 | 1000 x 1000 | 400 x 1200 600 x 1200 | Ø 700 | Ø 1000 | ▲ side 800 | ● side 350 Other forms and dimensions available on request.

#### ■ TECHNICAL SPECIFICATIONS AND CERTIFICATIONS

Ecoplan™ panels are fireproof certificated Euroclass B-s2,d0 (UNI 13501-1:2009) and meet the requirements of fire resistance and atoxicity.

## PET POLYESTER FIBRE

#### Composition:

100% Polyester fibre Non-hazardous substance D.M. 12/02/93.

#### General features:

Resistant to chemical agents (acids, salts, hydrocarbons), microorganisms and bacteria, odour-free, water repellent, does not decay or absorb fumes and smells.

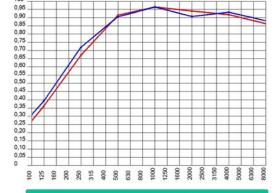
## Fire resistance:

UNI EN 13501-1:2009 Euroclass B-s2,d0 Emits no opaque or toxic fumes (ANFOR F1 16-101).

#### Sustainability:

Product compliant to the requirements of USGBC - LEED® v4 for Building Design and Construction and of UNI EN ISO 14021:2016 Environmental labels and declarations.

Sound absorption values Ecoplan™ panel thickness 40 mm density 45 Kg/mc thickness 40 mm density 50 Kg/mc



Ecoplan™ panels don't contain vitreous fibres, glass wool or rock wool, nor folmaldehyde. Moreover, there is no possibility to disperse any fibre or inhalable dust in the environment.

#### INSTALLATION

Ecoplan™ panels may be installed on wall or to the ceiling, with the following fixing systems.

## Ceiling installation



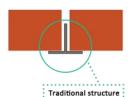
ADHERENT TO THE CEILING WITH MAGNETIC



As an alternative option, it is possible to install Ecoplan™ panels to the ceiling using common quick-setting glues (not included in the supply).



INSTALLED IN A CONTAINMENT FALSE CEILING STRUCTURE



(T15, T24 or similars) Ecoplan™ are adopted for the realization of modular sound-absorbing false ceilings in the format 595 x 595 mm with sharp edges: modules can be installed in traditional

for false ceilings



T24 profiles, and similars.

SUSPENDED CEILING WITH CABLES IN FLAT MODE



As an alternative option to the regular ceiling installation, Ecoplan™ panels may be installed with different inclinations, adjusting the cable lenght according to the desired installation height, thus obtaining a particular visual effect.

containment structures made with T15 or

## Wall installation



BRACKETS



As an alternative option, it is possible to install Ecoplan™ panels on the wall using common quick-setting glues (not included in the supply).