Decho® Acustico® means sound-absorbing panel: it is one of the most popular acoustic panels in the international market today and it was the first sound-absorbing panel ever, entirely realized in synthetic materials.

Because of its simple and elegant design Decho® is suitable for any environment, preserving the architectural and stylistic features of the building, or, if integrated into the design process, it can provide additional aesthetic value to the final result.

Decho® is a versatile line of acoustic panels, with a wide assortment of sizes and colors, which allows to realize any composite solutions such as suspended islands, wall or ceiling installations.
Decho® panel consists of an internal support slab of fireproof polyester fiber PET (UNI EN 13501-1:2009 Class 1 – Euroclass B-s2-d0) with a pvc frame or an aluminium structure for the big format. The panel covering is realized with a strong fireproof polyester fabric, that provides high stability and durability (long service life): it is available in a wide range of texture and colors, or with any kind of photographic digital printing chosen by the client.

**ACOUSTIC PRINCIPLES**

Decho® panels are designed according to the acoustic principles of sound absorption by porosity and vibrating damping sheet.

This specific feature is realized through a thermo-smoothing treatment of the polyester surface (vibrating damping sheet), that improve the absorbing performance at low frequencies, where the common absorbing panels are not particularly effective.

The acoustic benefit is further increased by the capacity of the polyester fiber to produce dissipation from the incident sound energy, using the vibration and rubbing of the filaments that compose it.

**DIMENSIONS E COLORS**

Standard sizes and dimensions (measures in mm):
- 400 x 1200 - 600x600 - 600x1200 - 600 x 1800 - 600 x 2000 - 800x800 - 900x900 - 1000x1000 - 1200x1200 - 1000 x 2000 - 1200x2000 - 1200 x 2400;
- Other dimensions available on request (minimum amount 20 m2).

Standard thickness (measures in mm): 45 – 85;
- Other thickness available on request.

Colors and texture: 200 colors and 8 kind of textures;
- Approximate weight: 4 Kg/ m2

**TECHNICAL DETAILS**

**INTERNAL POLYESTER FIBER (PET):**
Composition: 100% polyester fiber – no toxic substance according to D.M. 12/02/93;
General features: resistance to chemical agents (hydrocarbons, acids, salts), unfolding, antifungal, antibacterial, waterproof, odorless, no fibers dispersion;
- Reaction to fire: UNI 9177 Class 1 - UNI EN 13501-1:2009 Euroclass B-s2-d0;
- No toxic fumes emission (ANFOR F1 16-101).

**STRUCTURALE FRAME:**
Aluminium frame or PVC fire proof frame UNI 9177 Class 1;
FABRIC COVERING:
- Reaction to fire: UNI 9177 Class 1 - UNI EN 13501-1:2009 Euroclass B-s2-d0;
- Abrasion (Martindale) UNI EN ISO 12947:2000 100.000 cycle ≥ 20%;
- Lightfastness (Xenotest): UNI EN ISO 105 B02 5 ± 1.

Decho® panels are produced without using FAV (artificial vitreous fiber such as rock wool and glass wool) and formaldehyde, therefore there is not inhalable dusts dispersion in the environment.