PRO ACOUSTIC SOLUTIONS

POLYESTER COMPOSITE PANEL

PRO-ACOUSTIC designs and manufactures acoustic and decorative panels for walls, ceilings and furniture in auditoriums, theatres, restaurants, hotels and all kind of interior projects which require technical designed requirements.

Polyester Composite panels are supplied in the form of modular panels with special sound absorption characteristics and excel absorption results. Polyester Composite Wall panel system has technical and aesthetic qualities. At the technical level it has a absorption coefficient. Aesthetically it has an engineered design, which is elegant and discreet, very suitable for acoustic requires a high level. Acoustic correction with high aesthetic level. Applicable to walls and ceilings.

PRO-ACOUSTIC products have a reputation for reliability as we are dedicated to researching and testing every product from certified laboratories for STC and NRC ratings to suggest best product as per site needs. In order to achieve a high acoustic absorption coefficient and a beautiful aesthetics

GENERAL FEATURES

Color	20+ colors
Total Thickness	18 / 21 / 25 mm Backed with Perforated MDF Edge Tapered
Available Size	600 x 600 / 2420 x 575 mm
Acoustic Backing	Black Acoustic Fleece
Fixing	Dowel system
Wall Panel Fixing	Z' Clamp
Ceiling Panel Fixing	Hanging Grid System

Pro Acoustics Solutions also customized Panels as per Customer's requirements.

Installation: Easy to be Installed by Z Clip System or Dowel System for wall and on Frid System for ceiling

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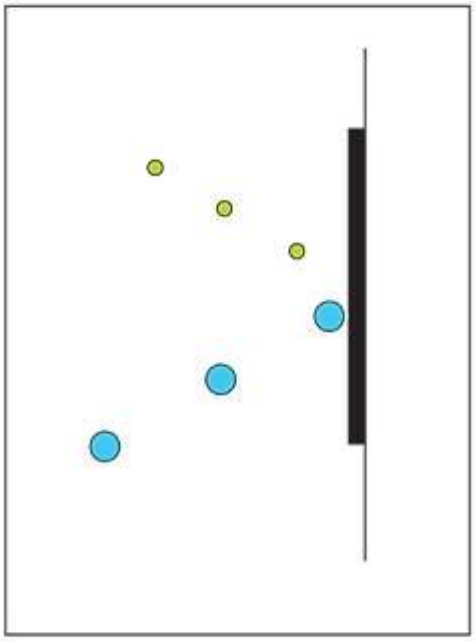
NRC – Noise Reduction Coefficients

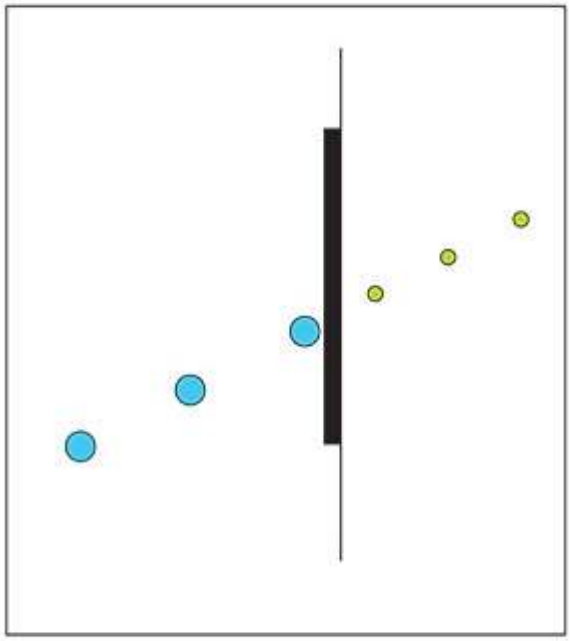
The Noise Reduction Coefficient (NRC) is a scalar representation of the amount of sound energy absorbed upon striking a particular surface. An NRC of 0 indicates perfect reflection; an NRC of 1 indicates perfect absorption. In particular, it is the average of four sound absorption coefficients of the particular surface at frequencies of 250 Hz, 500 Hz, 1000 Hz, and 8000 Hz. These frequencies encompass the fundamental frequencies and first few overtones of typical human speech, and, therefore, the NRC provides a decent and simple quantification of how well the particular surface will absorb the human voice. A more broad frequency range should be considered for applications such as music or controlling mechanical noise.

Specifications for materials used in sound absorption commonly include an NRC

Acoustical materials manufacturers often report NRC values higher than 1.0 due to the way the number is calculated in a laboratory. A test material's area does not include the sides of the panel (which are exposed to the test chamber) which vary due to its thickness. A certain percentage of the sound will be absorbed by the side of the panel due to diffraction effects.



VISUAL DEPICTION OF NRC
(Sound Reflection)



VISUAL DEPICTION OF STC
(Sound Transmission)

PRO ACOUSTIC SOLUTIONS

TECHNICAL SPECIFICATIONS OF POLYSETER COMPOSITE PANELS

A) WALL PANELING

Compressed Polyester fibre acoustical panels are 9 mm thick acoustic polyester fibre pad pasted on 16 mm thick perforated wooden panels by rubber based adhesive for rigid fixation. The Polyester fibre acoustic panels to be backed with black acoustic fleece. Total thickness of the Composite Acoustic panel will be 25 mm. All joints of Polyester fibre acoustic panel should have dowel connection to avoid any sagging /unevenness. All Polyester fibre acoustic panels should be should be fixed on GI 'Z' clamp made out of 1 mm thick GI sheet of size 30 mm x 30 mm collar and 50 mm high to match with the installed GI frame. The edges of the polyester fibre pad to be taper cut by special purpose machine to produce a 'V' joint at all four ends. The Polyester fibre acoustic panel of size 600 mm x 600 mm / 600 x 1200 mm, with a perforated pattern of dia. 08/10 mm or as per acoustic design / Architects approval for better absorption. The polyester fibre to be chemically treated for fire retardancy. NRC of the said product shall be more then 0.85. The Panels color Pattern shall be as per Interior / Architect's design.

B) CEILING PANELING

Compressed Polyester fibre acoustical panels, 9 mm thick acoustic polyester fibre pad pasted on 16 mm thick perforated wooden panels by rubber based adhesive for rigid fixation. The Polyester fibre acoustic panels to be backed with black acoustic fleece. Total thickness of the Composite Acoustic panel will be 25 mm. All joints of Polyester fibre acoustic panel should have dowel connection to avoid any sagging /unevenness. The polyester composite acoustic panels to be backed with black acoustic fleece. All polyester acoustic panels should be should be fixed on MS Pipe Grid with self drilling screw. The edges of the polyester fibre pad to be taper cut by special purpose machine to produce a 'V' joint at all four ends. The Polyester fibre acoustic panel of size 600 mm x 600 mm with a perforated pattern of dia. 08/10 mm or as per acoustic design / Architects approval for better absorption. The polyester fibre to be chemically treated for fire retardancy. NRC of the said product shall be more then 0.85. The Panels color Pattern shall be as per Interior / Architect's design.

Note: All specifications are subject to change due to continuous improvements.