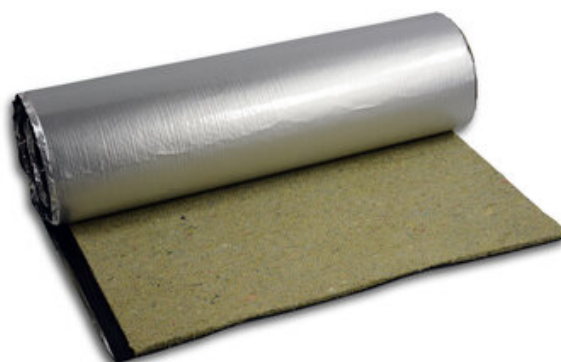


ACUSTIDAN PRO

Multilayer panel with high fire resistance for high-performance acoustic insulation.



ACUSTIDAN PRO is a three-layer compound made up of a high-density elastomeric sheet, a mat composed of cotton fibers and recycled textiles bound with phenolic resin, finished with an aluminized film. Acoustically, ACUSTIDAN works as a membrane resonator (low-frequency insulator) with porous material on one side (medium and high-frequency insulator) and excellent fire resistance.

Presentation

- Length (cm): 600
- Width (cm): 100
- Thickness (mm): 15
- Membrane thickness (mm): 3
- Total blanket thickness (mm): 12
- Surface (m²): 6
- Product code: 610087

Technical Data

Concept	Value	Standard
Mass per unit area (nominal) (kg/m ²)	5.5	EN 1849-1
Thermal conductivity of the insulation blanket 10 °C (W/mK)	0.040	EN 12667 EN 12939
Membrane density (kg/m ³)	1800 ± 5%	EN 845
Nominal membrane mass (kg / m ²) (+/- 5%)	5	EN 1849-1
Nominal mass of the membrane; the two layers (kg/m ²)	5	EN 1849-1
Insertion loss (downpipes) (dBA)	20	-

Concept	Value	Standard
Reaction to fire	Bs1d0	EN 13501-1
Longitudinal tensile strength (N / 5cm)	809	EN 12311-1
Transverse tensile strength (N / 5cm)	408	EN 12311-1
Thickness tolerance (%)	5	EN 823
Tolerance Length and Width (%)	< 5	EN 822

Environmental Information

Concept	Value	Standard
Volatile organic compounds (COV's) ($\mu\text{g}/\text{m}^3$)	< 100	ISO 16000-6:2006
Content of recycled raw material (%)	32	-
Post-consumer recycled content (%)	100	-
Manufactured in	Fontanar - Guadalajara (España)	-

Standards and Certification

- The sound certifications are the result of tests in an approved laboratory.
- *For any questions about information on the tests, please consult our Technical Department.

Scope

- Sound insulation of partition walls between different users in public or private residential buildings.
- Insulation of downspouts in commercial premises.
- Insulation within the airtight chambers of wall linings and floating ceilings for low, medium and high frequencies in low-noise commercial premises.
- Renovation of partition walls between different users in residential buildings.
- Direct insulation in the elevator shaft.
- Insulation in the accessible or perforated ceiling cavity.

Advantages & Benefits

- Sound insulation for noisy premises with night-time $\text{DnTA} > 65$ dBA.
- By increasing the mass of lightweight walls, a higher acoustic performance is achieved.
- High flexibility, allows for continuity of insulation in difficult junctions, such as corners.
- High tensile strength and nail-tear strength, can be installed mechanically.
- As a resonator membrane, it provides isolation at low frequencies.
- For downspouts, it prevents noise from entering the pipe.
- Low thickness with high acoustic performance.

Instruction for Use

Preliminary operations

Vertical and horizontal surfaces must be plastered with at least 1.5 cm of plaster. Before applying the product, the surface must be completely dry.

If, due to work speed, it is not possible to wait for the plaster to dry, it is recommended to use a direct plasterboard lining as a sealant for the surface, made of N15 boards.

For installations that pass through the building elements, once sealed and insulated, a base frame will be made before the wall insulation. **ACUSTIDAN Installation:**

1. On walls

Start by cutting full pieces of ACUSTIDAN to the exact height of the partition. Offcuts will be used for smaller sections or finishing edges.

Once the piece is placed squarely with the surfaces, one person will hold the panel at the top while another person makes the first two mechanical fixings. Then, one person can release and the other continues applying fixings. For this, use a hammer drill and diamond drill bit to perforate both the panel and the partition, then insert the plug and present the spike. Finally, the spike is tapped with a hammer, embedding it into the material.

The fixings for Danosa insulation will be placed 3 or 4 at the top and then every 1 meter at the overlap between two panels of material. These fixings should be recessed, providing a performance of 3-4 fixings/m². The next piece is placed to ensure the overlap of the material matches perfectly.

2. On the ceiling

Start by cutting 2-meter pieces with a cutting machine or utility knife for easier handling. Offcuts will be used for smaller sections or finishing edges.

Once the panel is placed squarely with the surfaces, one person will hold the panel at one end while another makes the first three mechanical fixings. Then repeat the operation in the center of the panel and the opposite end.

The next piece should be placed to ensure the longitudinal overlap of the material matches perfectly. Transversely, the product should be mounted at least 3-4 cm.

The performance of the fixings for Danosa insulation on the ceiling is 5-6 units/m².

3. On downpipes

Start by cutting pieces 1 meter wide from the roll, making longitudinal cuts every $3.14f+3$ cm (where f is the diameter of the downpipe in cm). Offcuts will be used for smaller sections or finishing edges.

Once the piece is placed over the pipe, wrap the ACUSTIDAN around the downpipe so that it is fully covered.

The installation should be fixed with steel ties.

An adhesive packaging tape should be applied at the overlaps to achieve the necessary sealing.

Indications and Important Recommendations

- The facade cladding in a building must end at the dividing wall between different users. See SPD 2.1
- Partition walls must be plastered with at least 1 cm. See SPD 3.
- Partition walls should not be anchored to structural elements (except for roofs in dwellings) such as pillars and facades. In order to maintain the stability of the system, the tiling element must be bonded to the internal floating partition walls.
- To ensure proper compliance with acoustic solutions, perforating installations will be avoided. In the case of decorative or accessible ceilings, ACUSTIDAN PRO can be directly fixed to the supporting element.
- In order to improve the performance of the roofing system, it is possible to place a screed perpendicular to the joists every 40 cm prior to the installation of the product. The product is then fixed with a sheet metal screw and washer.
- For cutting, a MAKITA 4191 DW water-cooled low speed radial cutting machine or similar shall be

used, with a MAKITA 85 - 6 asphalt cutting disc. ELYWOOD SAW BLADE 3-3 / 8 "x 15 mm.

- It can be installed in the same solutions as the ACUSTIDAN constructive solutions, considering that this product is part of a Sound Insulation system, so the Danosa Building Solutions Catalogue, Sheets AA23, AA31 and AA51, should be taken into account. The Danosa "Implementation of Sound Insulation Details of Singular Points" (SPD), as well as the rest of the Danosa documentation.
- In the case of central heating or water intake installations, decoupling by means of a cross-linked polyethylene shell. See SPD 1.2
- If a battery-powered drilling machine is used (never with a mains power cable), the drill bit can be soaked in water to prevent the drill bit from becoming embedded in the asphalt.

Handling, storage and preservation

- The product itself is not classified as hazardous and is not toxic to the environment.
- The product demonstrates excellent fire resistance through official laboratory testing.
- Store in covered and ventilated places that comply with current legislation regarding storage.
- Consult the product safety datasheet.
- The product may present a colour variation due to the mixture of fabrics, or the yellow colour may darken with the passage of time. This variation in appearance does not affect the acoustic conditions of the material.
- Stable at room temperature. Avoid being at temperatures above 80°C as that would alter the material's properties, accelerating its degradation.
- No personal protection is required during transportation and handling. During application, appropriate measures must be taken with regard to the handling of machinery (mechanical fixing) or the application of adhesives via solvents.
- Preferably transport on complete and packed pallets in order to avoid possible alterations to the product during transport.
- In all cases, the Occupational Safety and Hygiene standards, as well as the standards of good construction practice, must be taken into account.
- For further information, please contact our Technical Department.

Notice

- The information contained in this document and any other advice provided, are given in good faith, based on DANOSA's current knowledge and experience when products are properly stored, handled and applied, in normal situations and in accordance with the recommendations of DANOSA. The information applies only to the application (s) and the product (s) to which reference is expressly made. In case of changes in the parameters of the application, or in case of a different application, consult the DANOSA Technical Service before using the DANOSA products. The information contained herein does not exonerate the responsibility of the building agents to test the products for the application and intended use, as well as their correct application in accordance with current legal regulations. The product images used in our communications are indicative and may differ slightly in color and aesthetic appearance in relation to the final product. Orders are accepted in accordance with the terms of our current General Sales Conditions. DANOSA reserves the right to modify, without prior notice, the data reflected in this documentation. Website: **www.danosa.com** E-mail: **info@danosa.com** Telephone: **+34 949 88 82 10**