

TECHNICAL DATA SHEET

Acoustic Barrier Elements Quiet Leaf™

Description

Self-supporting panels for noise barriers and high-performance acoustic enclosures, based on the innovative Quiet Leaf™ technology. This technology enables a significant reduction in footprint, optimising thickness and allowing for slimmer structures without the need of heavy structural work, ensuring greater versatility and enhanced performance.

Intended use

Quiet Leaf™ acoustic barrier elements can be installed:

- To limit the noise emissions from individual units or clusters of outdoor installations.
- On air handling systems and refrigeration units to ensure compliance with noise emission thresholds established by acoustic regulations.
- On machine tools to attenuate environmental noise emissions, offering protection for operators and sensitive areas, they can be used as safety partitions.

Features

- Panel Thickness: 50 mm
- Self-supporting Frame: 50×50×2 mm
- Internal Sound Absorber: Noise Layer™ 10 Black – 918 gr/m².
- Shear Damping Mass: Damping Bulk™ 7 Mag. – 5,1 kg/m²
- Operating Temperature Range: from -20°C to +70°C
- Sound Absorption Coefficient (α_w): 0,84 – 0,90 (with 95% exposed surface)
- Fire Reaction Class - Internal Absorber Side: self-extinguishing [UNI ISO 3795]

Dimensions

- Standard panel width: 1270 mm.

Applications

- Cooling units, evaporative towers, AHUs, chillers, heat pumps;
- Thermal power plants, power plants, technical rooms;
- Filtration plants;
- Machine tools, compressors, cooling units;
- Residential buildings and commercial facilities;

Variants

- QL 100 panel, height 1060 mm
- QL 150 panel, height 1485 mm
- QL 200 panel, height 2100 mm
- QL 250 panel, height 2520 mm
- QL 300 panel, height 3000 mm



Pannello porta



Pannello deco



Pannello con quattro
griglie afoniche



Pannello con griglie
afoniche inferiori



Pannellon con griglie
afoniche superiori

Accessories

A range of accessories has been designed to seamlessly integrate with standard panels, ensuring complete acoustic protection for any application.

Access door panel

- Blank panel
- Panel with four aphonetic grilles,
- Panel with bottom-mounted aphonetic grilles
- Panel with top-mounted aphonetic grilles

Custom sizes available upon request

Acoustic Performance

Individual panels (standard size 1250×1050 mm) were tested in our in-house R&D laboratories.

→ **R_w = 34 dB(A).**

Performance detail by frequency spectrum

| Octave Band Frequencies (Hz) | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
|------------------------------|------|------|------|------|------|------|------|------|
| Measured Attenuation (dB) | 12,6 | 18,6 | 24,8 | 31,2 | 33,6 | 36,5 | 37,1 | 38,4 |

Enhanced aesthetic finish

All panels are made in steel.

Coating available in 3 finishes (gloss, matte, and textured), customised in any colour from the full RAL chart.

To ensure optimal results, the product must be installed following a thorough technical/acoustic assessment of the noise source. Any technical or functional penetration along the barrier containment perimeter must be equipped with adequate silencers to guarantee consistent acoustic sealing. To achieve uniform and reliable soundproofing, it is essential to ensure that no spaces, discontinuities, or gaps are present between adjacent panels. For maximum effectiveness, installation by specialised personnel is strongly recommended.

The user is solely responsible for ensuring compliance with applicable laws and for obtaining necessary permits and authorisations.

