

TECHNICAL DATA SHEET

Acoustic Enclosure Quiet Leaf™

Description

The Quiet Leaf™ acoustic enclosures, developed with the patented technology of the same name, are high-performance, versatile, and lightweight with a compact footprint. They deliver effective performance for most outdoor applications, as well as for the acoustic insulation of equipment in manufacturing departments.

Intended use

Quiet Leaf™ soundproofed enclosures can be installed:

- To limit the noise emissions from individual units or clusters of outdoor installations.
- On air handling systems, water-cooled chillers and heat pumps to ensure compliance with noise emission thresholds established by acoustic regulations.
- On machine tools to attenuate environmental noise emissions without interfering with operating regime.

Features

- Panel Thickness: 50 mm
- Load-bearing Frame: 50×50×3 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): 0.85 – 0.90 (with 95% exposed surface)
- Fire Reaction Class – Internal Absorber Side: self-extinguishing [UNI ISO 3795]

Dimensions

- Modular units: 1250 mm in length and width – 1050 mm in height
- Custom sizes available upon request

Fields of application

- Water-cooled chillers and water-cooled heat pumps
- Boiler rooms, power stations, technical rooms
- Filtration systems, AHUs (Air Handling Units)
- Machine tools, compressors, cooling units

Accessories

- Integrated silent ventilation systems
- Access doors, gates, or hatches
- Inspection windows and transparent panels
- Reinforced internal shock-resistant lining
- Lighting or air conditioning systems
- Soundproofed cable routing
- Silenced tunnels for material handling

Enhanced aesthetic finish

All panels are made of steel (galvanised for outdoor use).

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

Acoustic Performance

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

→ **$R_w = 34 \text{ dB(A)}$**

Frequency performance profile of the individual panel

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

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 enclosure 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.

