GIACOMAZZO AGOSTINO SRL

SOUND-ABSRBING AND SOUND-INSULATING BARRIERS

INNOVATIVE AND BIOCOMPATIBLE SOLUTIONS FOR THE ENVIRONMENT SOUND-INSULATION

GIACOMAZZO AGOSTINO S.R.L.
Costruzione Impiantistica Industriale

Giacomazzo Agostino Srl begins its activity in 1964 as a structural carpentry and pressure vessel fabricator, dedicating principally to special equipments fabrication.

In the last 10 years the company has grown in the design and fabrication of industrial plants, specially for air treatment (fumes, odours and dust abatment) and water treatment (wastewater treatment, desalination plants, potable water treatment for bottling).

Quality certified

The quality politics, that has guided since nowadays Giacomazzo Agostino Srl, permits to guarantee the Customer an affordable, flexible and reliable operating system.

The continuous updating in the designing and fabrication aspects, is achieved by qualified technicians that ensure the compliance to the world's best qualification and guarantee to the Customer plants and services proportioned to the requests, with qualitative top manifacture, granted safety and respectous of the international standards (PED verification, ATEX protocols, etc.).

BARRIERS

Sound-absorbing and sound-insulating noise barrels for road and rail traffic are designed by Giacomazzo Agostino Ltd to drastically reduce the noise with panels of high performance. They guarantee the result through the choice of materials that ensures the complete recycling of the product, the least environmental impact and, combined with photovoltaic technology, the production of clean energy.

THE BARRIERS – Main Features

- Provides for noise abatement to guarantee respect for the values of the maximum sound level set by the Ministerial Decree no. 447 of 26/10/95 and Technical Standards;
- Is designed to withstand the stresses of the wind provided by the Decree of 14/01/2008 and related Technical Standards;
- Is CE marked according to UNI EN 1793 for absorption and/or isolation.

THE STRUCTURE – minimum requirements

- Steel uprights with HEA S275 profiles, placed at intervals of 2.0 – 2.5 – 3.0 m;
- Anchor of the posts to foundation structures in reinforced concrete by steel plates fixed with steel anchor bolts or expansion plugs;
- High-strength bolts 8.8 class high-strength, treated to resist the aggressive agents atmospheric pollutants and required for the assembly of each component of the barrier, including anti-locj braking systems;
- All the metal elements in steel are protected with hop dip galvanization with a minimum thickness of 85 microns and painted to ensure the strength and durability to chemicals and pollutants.

BS 01 - CLASSIC

Aluminum or steel cased sound-absorbing and sound-insulating panel

The panel is made up of modular elements of standard dimensions, composed of two outer casings coupled in aluminum sheet or galvanized steel, 1.5 mm thick, coated with the possibility of tamper-proof treatment.
The sound absorption is achieved thanks to the 40% drilling available on the sheet and by the internal stratification made from multilayer material composed of thermos linked polystyrene fibre or high density mineral wool. The overall performance depends on the thickness and density of the insulating material.

BS 02 - LIGHT

Transparent sound-insulating panel

The panel is made of modular slabs of thermoformed plastic called polymethylmethacrylate PMMA. It is transparent or coloured to allow the lowest possible environmental impact, with a thickness between 5-30 mm. it is assembled on metal frame with anti-vibration and sealing EPDM gasked with a “U” profile.

BS 03 - WOOD

Wooden sound-absorbing and sound-insulating panel

Made of 1st quality Pine modular panels as for UNI EN 350/1, resistant to organic deterioration and fungi formation caused by continuous exposure to atmospheric agents. The panels are made of a solid wood perimeter frame on which is applied a paneling boards rear part while the front part consists of wood strips, with aesthetic function and breakage of the sound waves that can arise in different ways (vertical, horizontal and herringbone) because the aesthetic customization of the panels. Appropriately sized and spaced layers of soundproofing and sound absorbing material are laid inside the panels.

BS 04 - SAND

Sand filled sound-absorbing and sound-insulating panel

It is made up of standard dimensions modular elements which are stackable and consist of two coupled outer casings in aluminum sheet or galvanized steel.
The sound absorption is provided by the drilling present on the sheet, on the side facing the source of noise, and the sand filling which, besides sound absorption, ensures complete recyclability of the product.

CLASSIC - BS 01

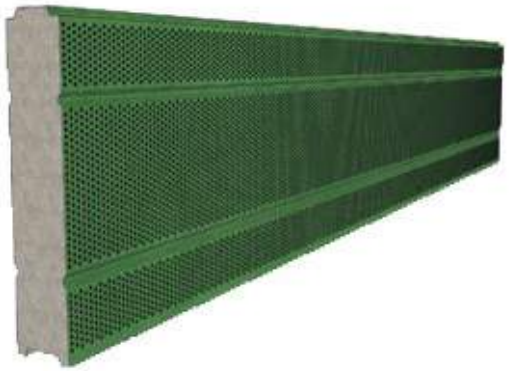
ALUMINUM OR STEEL CASE WITH ROCK WOOL OR POLYESTER FIBER SOUND-ABSORBING AND SOUND-INSULATING PANEL

The panel is composed of standard size modular elements, 500 mm high tongue and groove overlapped, 100 mm thick and 2.00 to 2.50-3.00 m long. Made of two coupled casings in aluminium sheet or galvanized steel, 1.5 mm thick. Couplings with aluminum rivets or steel-headed self-drilling screws.

The surface treatment of the sheet is made of powder coating with a minimum thickness of 60 µm, with subsequent fixing in a high temperature oven with the possibility of tamperproof treatment.

The sound absorption is given by:

- Drilling present on the sheet, on the side facing the source of the noise, consisting of a 40% in 10 mm diameter holes;
- Internal stratification made from multilayer material composed of fibres of thermos-related polystyrene or high density mineral wool: the overall performance depends of the thickness and density of the sound absorbing material.



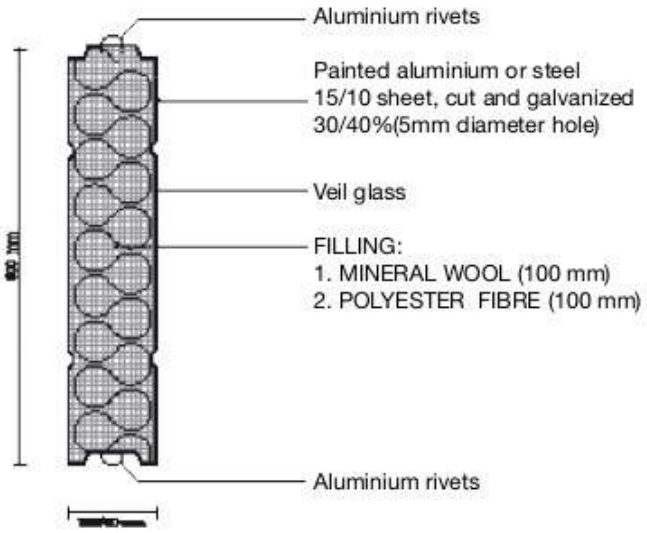
The side exposed to the noise presenting the holes on the sheet is protected from the atmospheric agents by a layer of glass fibre in order to prevent deterioration.

The product is CE marked according to UNI EN 1793 for absorption and isolation.

TECHNICAL LAYOUT

housing material	aluminum / galvanized steel
Thick shell	15/10 mm
Treatment sheet	powder coating 60 µm
Module length	2,00 / 2,50 / 3,00 m
Module height	500 mm
Sound-absorbing material	fibers of polystyrene/mineral wool
Category of sound absorption	UNI EN 1793-3 A4 (> 11 dB)
Category sound-insulating	UNI EN 1793-2 B3 (da 15 24 dB)

SCHEME



TRANSPARENT SOUND-INSULATION PANEL IN POLYMETHYLMETHACRYLATE PMMA

The panel is composed of modular plates of thermoformed plastic called polymethylmethacrylate PMMA, transparent or coloured, to allow the lowest possible environmental impact. Thick between 5 – 30 mm.

The panels made of PMMA are fixed on a metal frame made of four cold formed profiles in S235JR type galvanized steel sheet, assembled by TE M10 screws.

Between the profile to the frame and the plates of PMMA a sealing anti-vibrating EPDM damping with “U” profile is interposed.

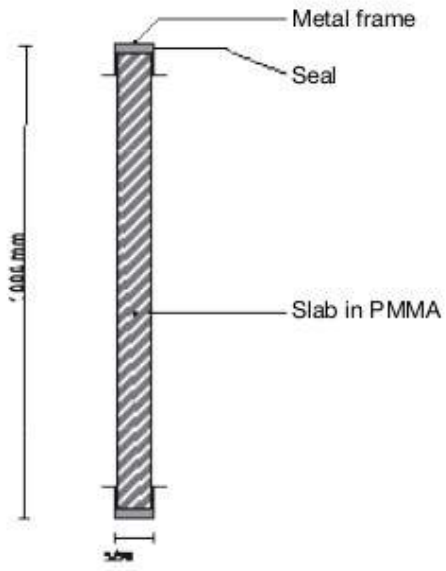
The metal sheet frame is protected from the atmospheric agents by a surface coating made of powder, with a minimum thickness of 60 microns, with subsequent fixing in high temperature oven.

The product is CE marked according to UNI EN 1793 for insulation.

TECHNICAL LAYOUT

Material slab	PMMA
Slab thickness	5-30 mm
Module length	2,00 / 2,50 / 3,00 m
Module height	500/1000 mm
Sound-insulating material	fibres of polystyrene/ mineral wool
Sound-insulation category	UNI EN 1793-2 B3 (da 15 24 dB)

SCHEME



WOOD - BS 03

WOODEN SOUND-ABSORBING AND SOUND-INSULATING PANEL

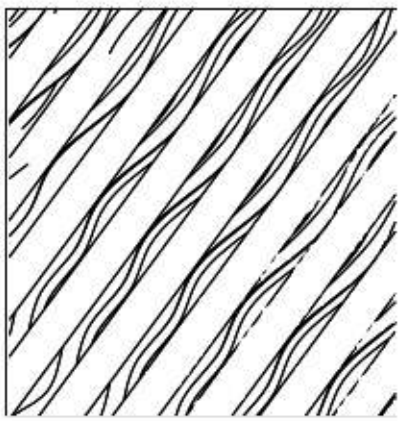
Noise barriers made of 1st quality Pine modular panels as according to UNI EN 350/1 impregnated in vacuum pressure autoclave as required to DIN 68800/3, resistant to organic deterioration and fungi formation caused by continuous exposure to atmospheric agents.

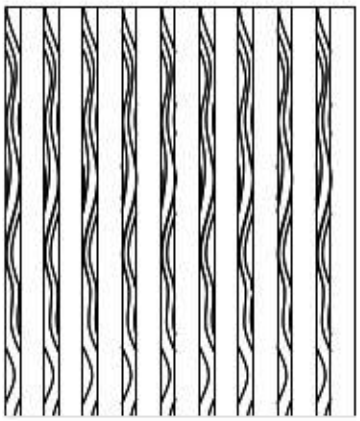
The panels consist of a perimeter frame made of solid wood to which is applied a rear part consisting of planks of minimum thickness of 20 mm coupled with interlocking type paneling and a front part (the side of the noise source) consists of strips of wood, of dimensions 25 x 50 mm, with aesthetic and sound waves breaking function that can be provided in various configurations (vertical, horizontal and herringbone) for the aesthetics customization of the panels. Layers of sound insulation are provided within the panels and sound absorbing material is appropriately spaced and sized according of the attenuation characteristics required.

To protect the insulating material, on the side of the attenuation characteristics required.

To protect the insulating material, on the side of the sound-absorbing panel, a siliconized polyethylene HDPE fabric net is fixed, with degree of darkening ≥ 90%, of various colours, weather and UV rays resistant.

The product is CE marked according to UNI EN 1793 for insulation and absorption.

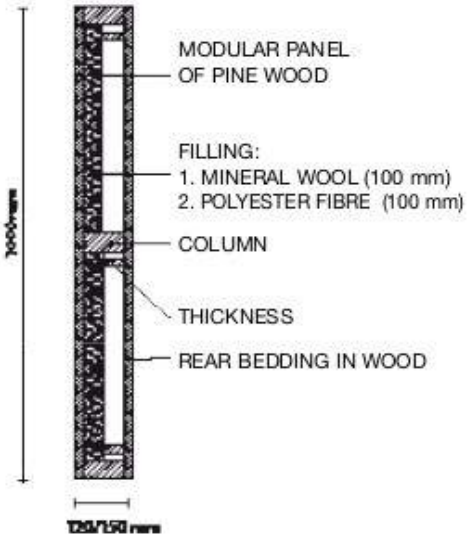




TECHNICAL LAYOUT

Panel height	1000/1500/2000 mm
Panel thickness	120-150 mm
Panel length	2,00 / 2,50 / 3,00 m
Sound-absorbing material	fibres of polystyrene/mineral wood
Sound-absorption category	UNI EN 1793-3 A4 (> 11 dB)
Sound-Insulation category	UNI EN 1793-2 B3 (da 15 24 dB)

SCHEME



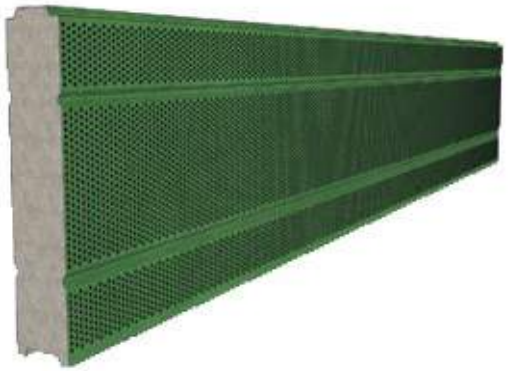
ALUMINUM OR STEEL CASE WITH SAND FILLING SOUND-ABSORBING AND SOUND-INSULATING PANEL

The panel consists of standard size modular elements, height 500 mm tongue and groove overlapped thickness 100 mm in length and 2.00 to 2.50 – 3.00 m, consisting of two coupled casings, aluminum or galvanized steel sheet, thickness 1.5 mm, coupling with self drilling aluminum rivets or steel head screws.

The surface treatment of the sheet is formed by a powder coating with a minimum thickness of 60 microns, with subsequent fixing in high temperature oven with the possibility of tamperproof treatment.

The sound absorption is given by:

- Drilling present on the sheet, on the side facing the source of the noise, consisting of 40% 10 mm diameter holes;
- A sand filling which, in addition to the sound absorption, ensures complete recyclability of the product.



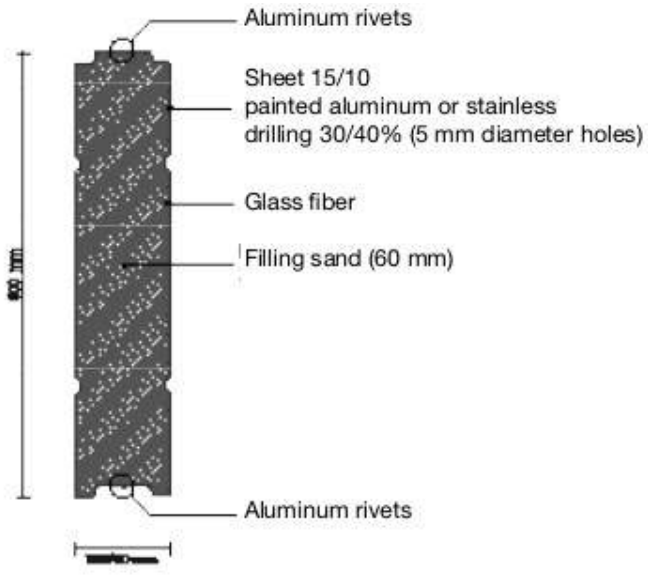
On the side exposed to the noise presenting the holes on the sheet it is applied a layer of glass fibre to prevent the leakage of the sand.

The product is CE marked according to UNI EN 1793 for absorption and isolation.

TECHNICAL LAYOUT

housing material	aluminum / galvanized steel
Thick shell	15/10 mm
Treatment sheet	powder coating 60 microm
Module length	2,00 / 2,50 / 3,00 m
Module height	500 mm
Sound-absorbing material	sand
Category of sound absorption	UNI EN 1793-3 A4 (> 11 dB)
Category sound-insulating	UNI EN 1793-2 B3 (da 15 24 dB)

SCHEME



INTEGRATE BARRIERS

ENERGY

SOUND-ABSORBING AND SOUND-INSULATING PANEL PAIRING WITH SOLAR PANEL

Acoustic barrier, consisting of modular panels made of PMMA and aluminum or steel sheet, painted and placed with the sound absorbing material. Combined with the solar panel in polycrystalline silicon technology at high efficiency, up to 14%. High strength and 4 mm glass, excellent performance with low radiation. The performance is guaranteed 25 years.

SAFETY

SOUND-ABSORBING AND SOUND-INSULATING PANEL MATCHING WITH ROAD SAFETY BARRIER

Acoustic barrier, consisting of painted modular panels made of aluminum or steel sheet, with the sound absorbing material interposed, combined with safety barrier road of double or triple wave classes h1, h2, h3 HEA 160 support posts, placed at intervals of 1500/2000 mm.

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Giacomazzo Agostino Srl will be pleased to receive Your requests and will be glad to offer its services. Our staff will be at Your complete disposal at the following contacts.

WHERE WE ARE

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