

SOUND BARRIERS PANACOR AC100

SPECIALLY DESIGNED **TO REDUCE NOISE** GENERATED BY RAIL AND ROAD TRAFFIC.

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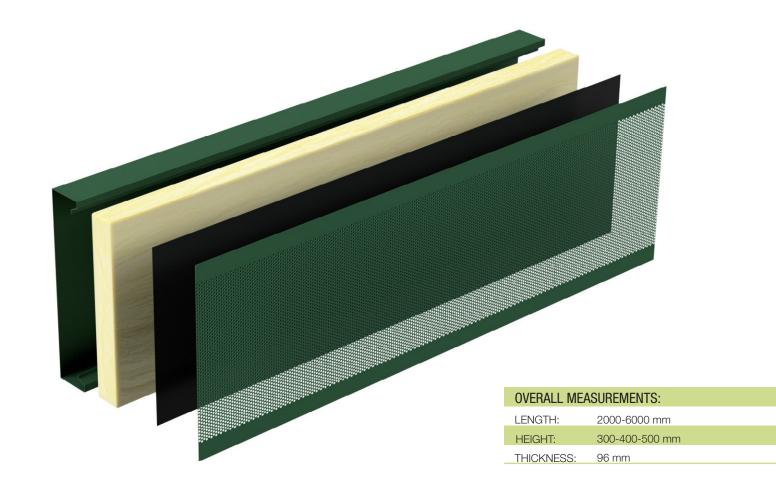


TECHNICAL DESCRIPTION OF PRODUCT

The Panacor AC100 noise barrier is a product specially designed to reduce the noise generated by road and rail traffic.

Its design criteria use the noise signature of road and rail traffic as a reference, subsequently adapting the barrier's noise abatement properties to optimise its overall efficiency. Likewise, the design seeks to optimise the panel's mechanical performance by fitting it with two deep guiderails to improve its mechanical ability to withstand wind pressure.





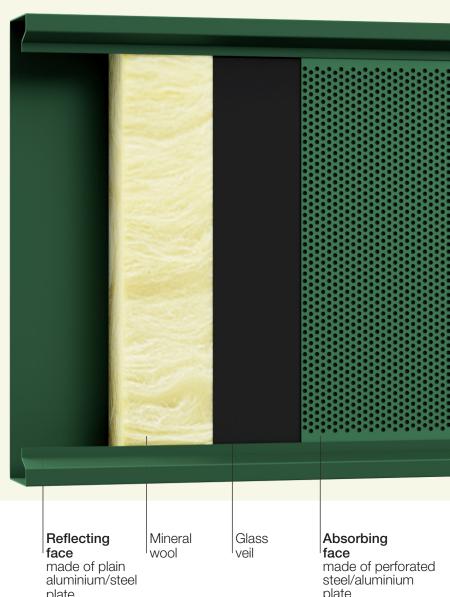


BARRIER COMPOSITION

The noise barrier can be made of grade DX51D+Z200/275-NA galvanised steel plating in accordance with standard . UNE EN 10142, or with AA 3105 H24 aluminium sheet, either of which has a powder coating finish, customised as required in any shade on the RAL colour chart.

The inside of the composite panel is made up of sound-absorbing mineral wool of various densities and thickness depending on the precise noise-abatement properties required.

Thus, panels comprise four metal parts. The inner face (directed at the noise source) has holes over 36% of the surface area to provide for noise absorption, while the outer face is a plain, reflective panel. Barrier panels are installed between vertically arranged HEB/HEA profiles to achieve the desired overall height, in 300, 400 or 500 mm modules, and the distance between posts can be varied.



plate

plate

ACOUSTIC AND MECHANICAL **FEATURES**

REFERENCE STANDARDS

UNE EN-EN 1794-1:2003; UNE EN-EN 1794-2:2003; UNE EN 1793-1:1998; UNE EN 1793-2:1998





STRUCTURAL COMPONENTS

The barrier support structure is made up of HEA/HEB metal profiles with a welded baseplate, both grade S275JR according to standard EN 10025. Baseplates and profiles are galvanised and powder coated in accordance with the requirements of standards EN 1461 and EN 15773.

The profile posts are anchored to the foundations by means of anchor bolts of varying diameters, lengths and grades depending on the specific requirements of each individual project.



BARRIER ASSEMBLY

The barrier panel is designed to be mounted without any need for rivets or bolts and thus can easily be installed manually by two people without any need for electricity.

This rivet- and bolt-free solution is highly suited to situations where fatigue problems may appear, for example in hi-speed railway construction projects.





SURFACE FINISH

Anti-rust treatment.
The powder coating treatment that PANACOR AC100 noise barriers are given makes them extraordinarily resistant to adverse weather effects, to heat and deterioration due to exposure to the sun, and provides excellent anti-corrosion properties, all of which makes for an end product that requires practically no maintenance.

STAGE 1

PRE-TREATMENT

Automated screen preparation process in which the panels are coated with electrostatic powder paint.

Dip 1

Tank capacity: 5600 I
Bath temperature: 35 to 45°C
Bath fluid components:
Degreasing agent, passivator, and water

Daily monitoring of pre-treatment bath liquid concentration levels in tank 1 in accordance with documented specification.

Dip 2

Tank capacity: 2300 l Bath temperature: ambient Bath fluid components: water

Dip 3

Tank capacity: 2300 l Bath temperature: ambient Bath fluid components: water

STAGE 2 DRYING

The metal parts are run through a drying line to eliminate any moisture at an oven temperature of between 80 and 100°C to prepare them for the next powder coating stage.

STAGE 3 PAINT BOOTH

Automated process using robots and spray guns that ensure an even and uniform coat of paint is applied to the entire panel to give it an excellent finish.

STAGE 4

POLYMERISATION KILN

Topcoat heat painting process for at least 10 minutes at an average temperature of 200°C Kiln temperature: 165 to 230°C.



QUALITY ASSURANCE CERTIFICATION













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