

NOISE BARRIERS





GUERRASIO



The philosophy of Guerrasio, the company that has been putting its experience at the service of architecture for over 50 years, was born from the meeting of history, craft tradition and advanced technology. A philosophy summarised in the company vision: **technology & ideas for architecture**.

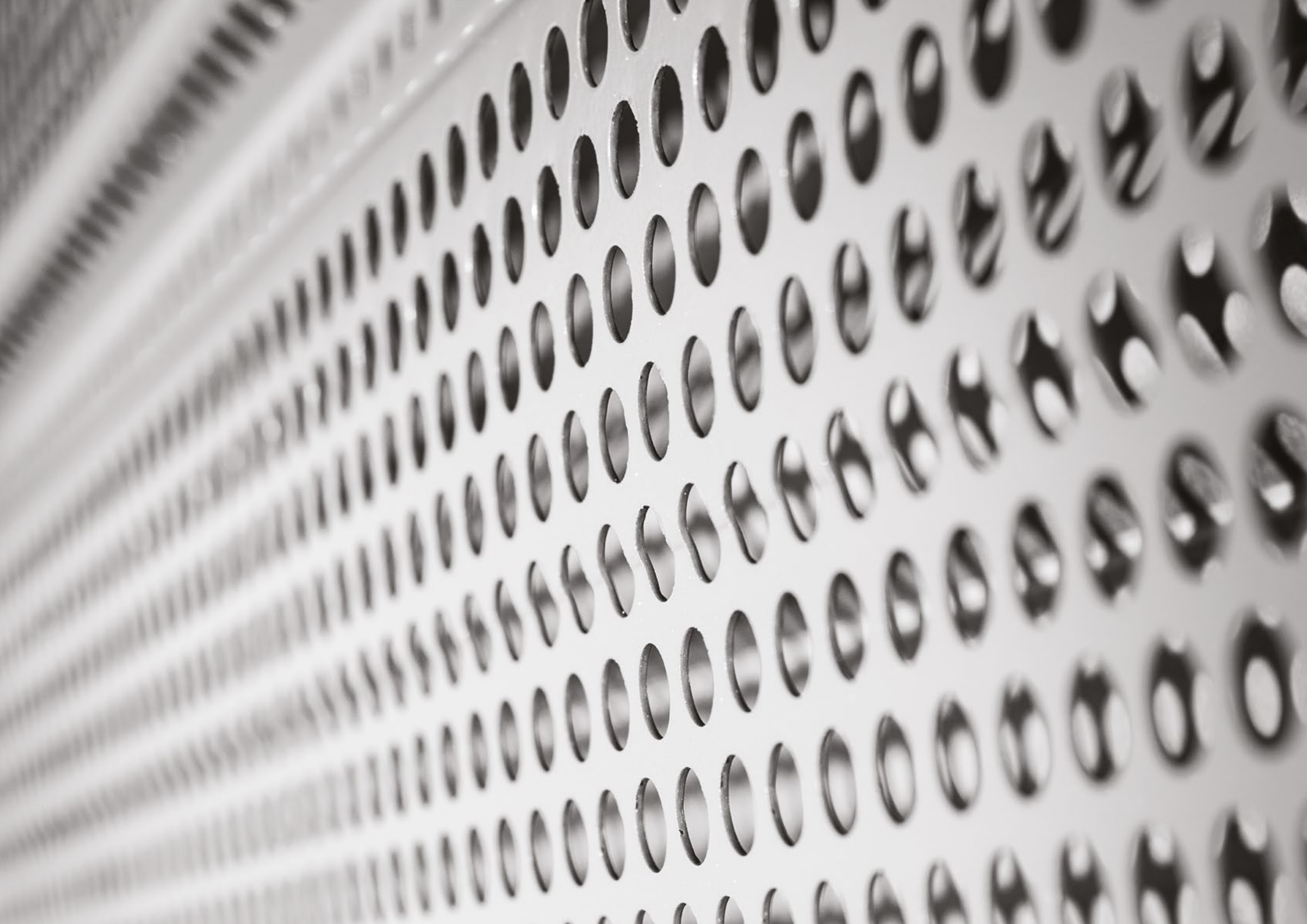
With three production sites, strategically located in northern, central and southern Italy, the production includes, starting from sheet metal coils, cold working of the sheet by master carpenters, with the support of systems and numerical control machines for bending, pressing, laser cutting and powder coating.

Through constant research and development, Guerrasio produces metal profiles and systems for the sector of technical interior finishes, metal ceiling systems integrated in panels, strips or gratings for civil and religious buildings, for naval furnishings, for the hospital and penitentiary sectors; it also produces ceiling lights and airtight diffusers, patented flexible metal profiles (with the VERTEBRA® brand), road noise barriers and a wide range of completing accessories.

Besides the standardized productions, what makes Guerrasio unique is the ability to respond to the particular needs of professionals and companies with ad hoc solutions designed for the individual construction site, being able to engineer any architectural proposal thanks to the team of specialized technicians who work in synergy with the designers.

Thanks to the new patents and the prizes won over time, today the solid reputation acquired over the years ensures the presence of Guerrasio products in the most important architectural works, such as in the Guggenheim Museum in Bilbao of architect Frank O. Gehry, symbol of contemporary architecture.

Technology and ideas for architecture





NOISE BARRIERS

During the last decades, the noise generated by continuous urban traffic caused by the increase in population, has produced an ever-increasing demand for works to contain noise emissions.

Guerrasio company proposes the G-FON line, which responds to every requirement to protect and safeguard against noise generated by the environment. The products range is suitable for all types of sound absorption and insulation in road, residential or production environments.

\ G-FON METAL

\ G-FON GLASS/PMMA

\ G-FON METAL DOOR

\ G-FON GLASS/PMMA DOOR



APPLICATION FIELDS



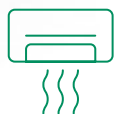
ROAD AND RAIL
TRAFFIC



PRODUCTION
FACILITIES



LEISURE AND
ENTERTAINMENT ACTIVITIES



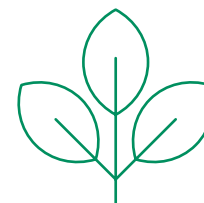
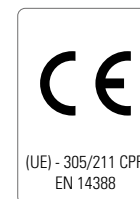
AIR TREATMENT AND
CONDITIONING UNITS



CERTIFICATIONS

Guerrasio designs, manufactures and puts on the market exclusively CE marked products, in compliance with the European regulation CPR n. 305/2011. Product performance is assessed and declared for the essential characteristics specified in Regulation EN 14388:2015 and smi.

G-FON noise barriers have been acoustically and mechanically tested according to the tests proposed by the regulation at specialised institutes and have obtained all the certifications necessary for placing the product on the market.



RESPECT FOR THE ENVIRONMENT

Our G-FON products are made from highly recyclable materials, meeting all required environmental criteria.



Motorway A8 Milan-Varese

From km 33+600 to km 42+400
Macroadinterventions 35-36
Municipalities of Jerago Con Orago, Solbiate Arno,
Albizzate, Caronno Varesino, Castronno, Brunello,
Gazzada Schianno

Supply of noise barriers G-FON METAL,
G-FON GLASS TRAPEZOIDAL and G-FON DOOR



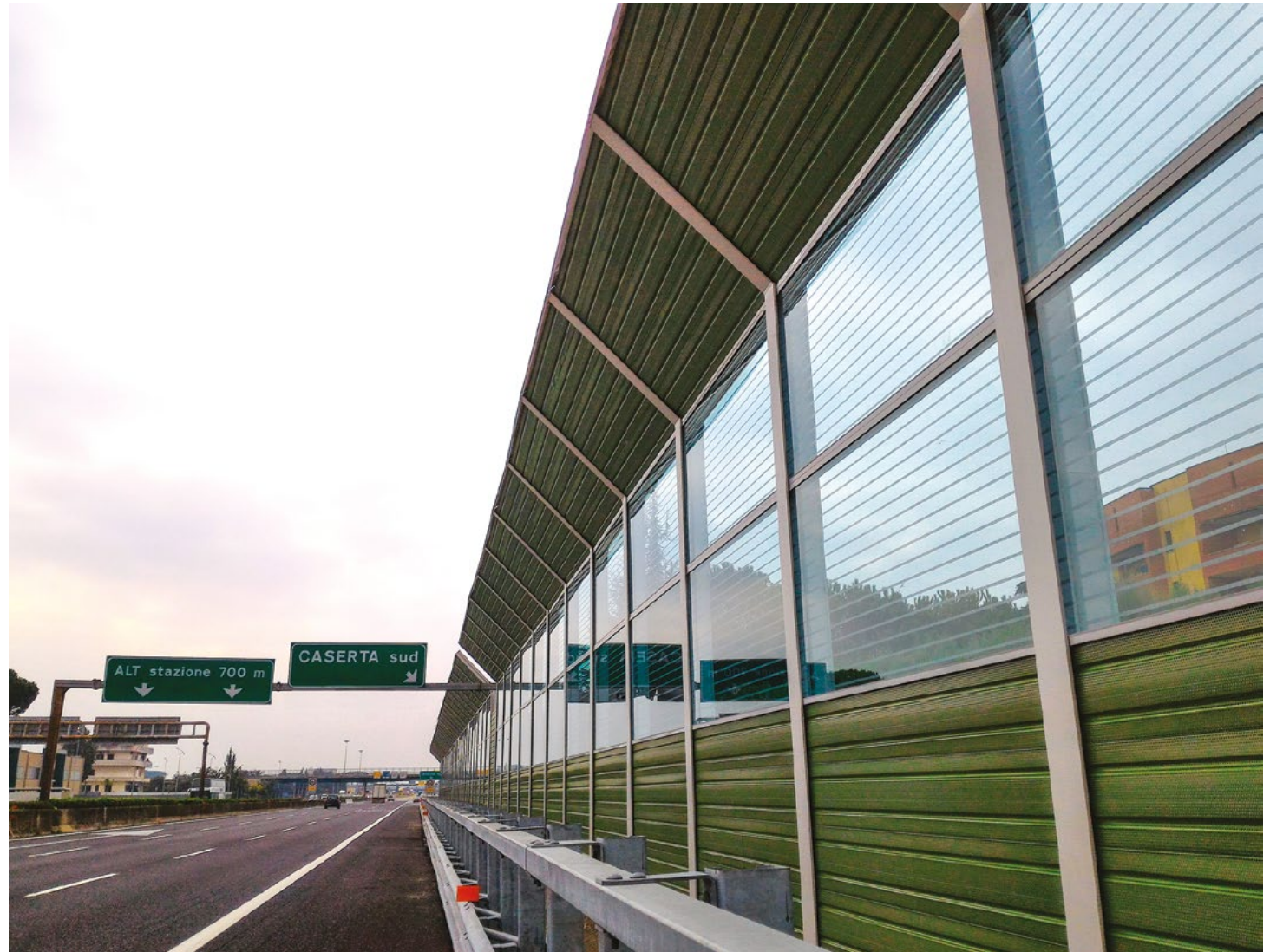
Motorway A8 Milan-Varese



Motorway A1 Milan-Naples

From prog. km 738+300 to km 757+850
Macro-intervention 165-166-167
Municipalities of Naples, Casoria, Afragola,
San Marco Evangelista, Caivano, Marcanise,
Casagiove

Supply of noise barriers G-FON METAL,
G-FON GLASS and G-FON DOOR





Brenner Motorway

Northern Carriageway

From km 192 - northern carriageway
Municipality of Rivalta (VR)

Design, supply and installation of G-FON METAL sound absorbing panels, extension of HEB beams and closing flashing to increase the sound absorbing surface of the barrier built to protect the town of Rivalta (VR)



Brenner Motorway - Northern Carriageway



Brenner Motorway

Southern Carriageway

From km 155+020, km 156+300 and km 156+500 in the southern carriageway

Design, supply, installation of G-FON GLASS and HEB beams for the repair interventions of noise barriers damaged due to accidents





Motorway A11 Florence-Pisa North

From km 54+300 to km 81+700
Macro-interventions 204-205-206-207
Municipalities of Porcari, Capannori, Lucca,
Vecchiano

Supply of noise barriers G-FON METAL,
G-FON PMMA and G-FON DOOR



Motorway A11 Florence-Pisa North



Macro-intervention 149-150-151

Frosinone-Ceccano

Macro-interventions 152-153 (Pofi Ceprano)

Interventions:

12S-13S-14S-15S.A-15S.B-16S-17S-18S.A-18S.B-19S-
20S.A-20S.C-20S.E-13N-14N.A-14N.C-15N-16N.A-17N-
18N-19N-20N-21N

G-FON METAL

G-FON GLASS



Macro-intervention 149-150-151 Frosinone-Ceccano



Cotugno Hospital, Naples

Insulation of refrigeration machines for the Domenico
Cotugno Hospital in Naples.
G-FON METAL

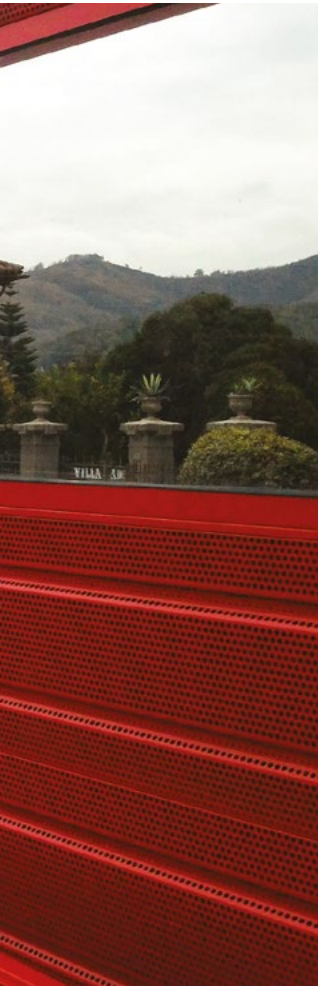




Acoustic insulation in canning company

Private Acoustic Insulation in a canning company
plant of Mercato San Severino - Salerno
G-FON METAL, G-FON PMMA





RFI - Italian National Railways Group

Railway station of Capua
Supply of noise barriers G-FON GLASS





G-FON METAL

THE SOUND-ABSORBING AND SOUND-INSULATING PANEL

Application for road, motorway and railway use

G-FON Metal panels are made up of two half-shells in corrugated metal sheet with the edges in a geometry that allows one half-shell to slide into the other. The coupling is carried out by seaming, without any fixing element. The front half-shell is fitted with 10 mm and 8 mm diameter holes arranged in a rhomboidal mesh - short diagonal 14 mm, long diagonal 26 mm - to obtain a void/full ratio of 37% of the surface.

The rear half-shell is unperforated. The sheets undergo pre-treatment with an immersion cycle and are then painted with polyester powders polymerised in oven at 200°C to give them the necessary resistance to atmospheric agents. A non-toxic and water-repellent thermo-bonded recycled polyester mat, resistant to atmospheric agents and ultraviolet rays, is inserted between the two sheets; as an alternative to polyester, rock wool with a glass veil layer is also used.



Insulation and sound absorption characteristics of G-FON METAL panels

Panel type	Half-shell perforated	Half shell unperforated	Sound absorbing material	Sound absorption category	Sound insulation category
G-FON Metal AZ	Aluminium 12/10 - 15/10	Galvanised steel 10/10	Rock wool	A5	B3
			Polyester	A5	B3
G-FON Metal A	Aluminium 12/10 - 15/10	Aluminium 12/10 - 15/10	Rock wool	A5	B3
			Polyester	A5	B3
G-FON Metal C	Corten steel 10/10	Corten steel 10/10	Rock wool	A5	B3
			Polyester	A5	B3
G-FON Metal X	Stainless steel 10/10 - 12/10	Stainless steel 10/10 - 12/10	Rock wool	A5	B3
			Polyester	A5	B3
G-FON Metal Z	Galvanised steel 10/10 - 12/10	Galvanised steel 10/10 - 12/10	Rock wool	A5	B3
			Polyester	A5	B3

Serie AZ: perforated aluminium front half shell
smooth steel rear half-shell

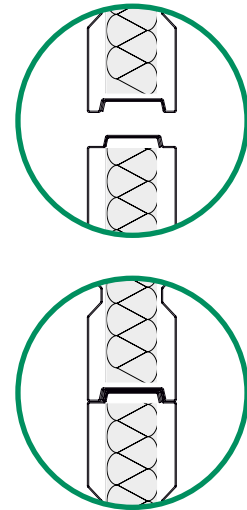
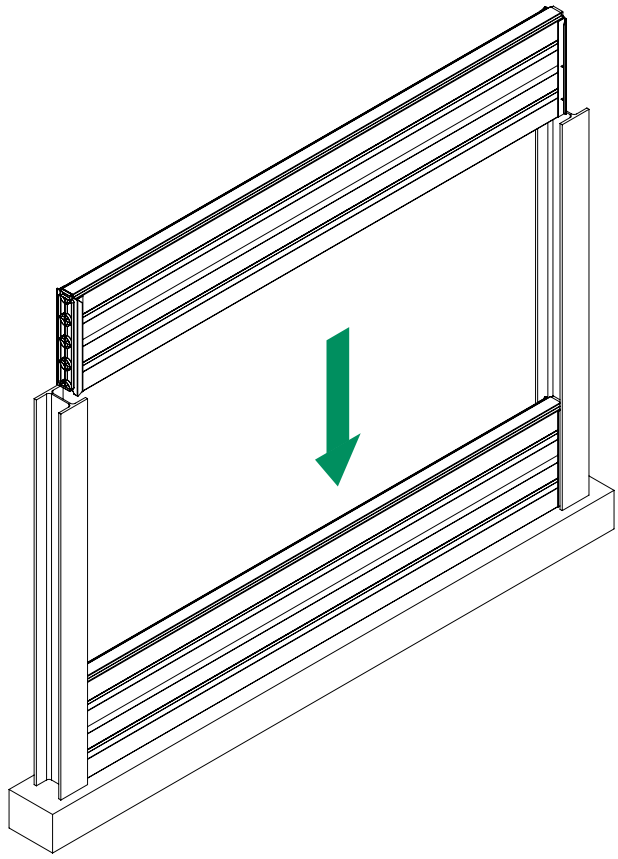
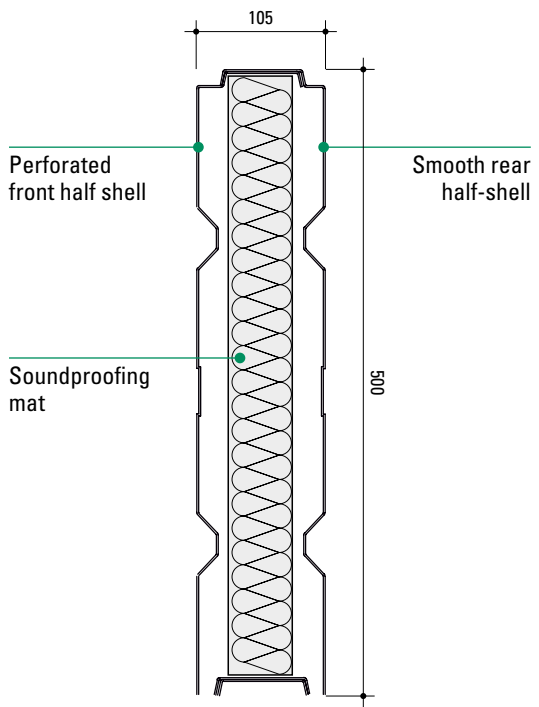
Serie A: aluminium half-shells

Serie Z: steel half-shells

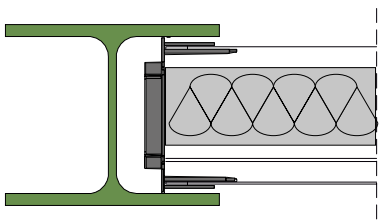
Serie C: corten steel half-shells

Serie X: stainless steel half-shells

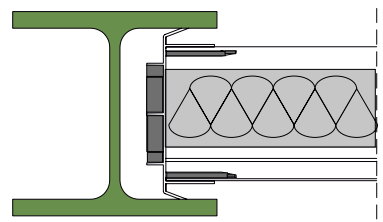
G-FON METAL



The perfect **vertical overlap between the panels** and the spring effect of the end caps on the studs ensure soundproofing of the system as a whole.



Stud HE 140



Stud HE 160

G-FON GLASS/PMMA

THE TRANSPARENT SOUNDPROOFING PANEL

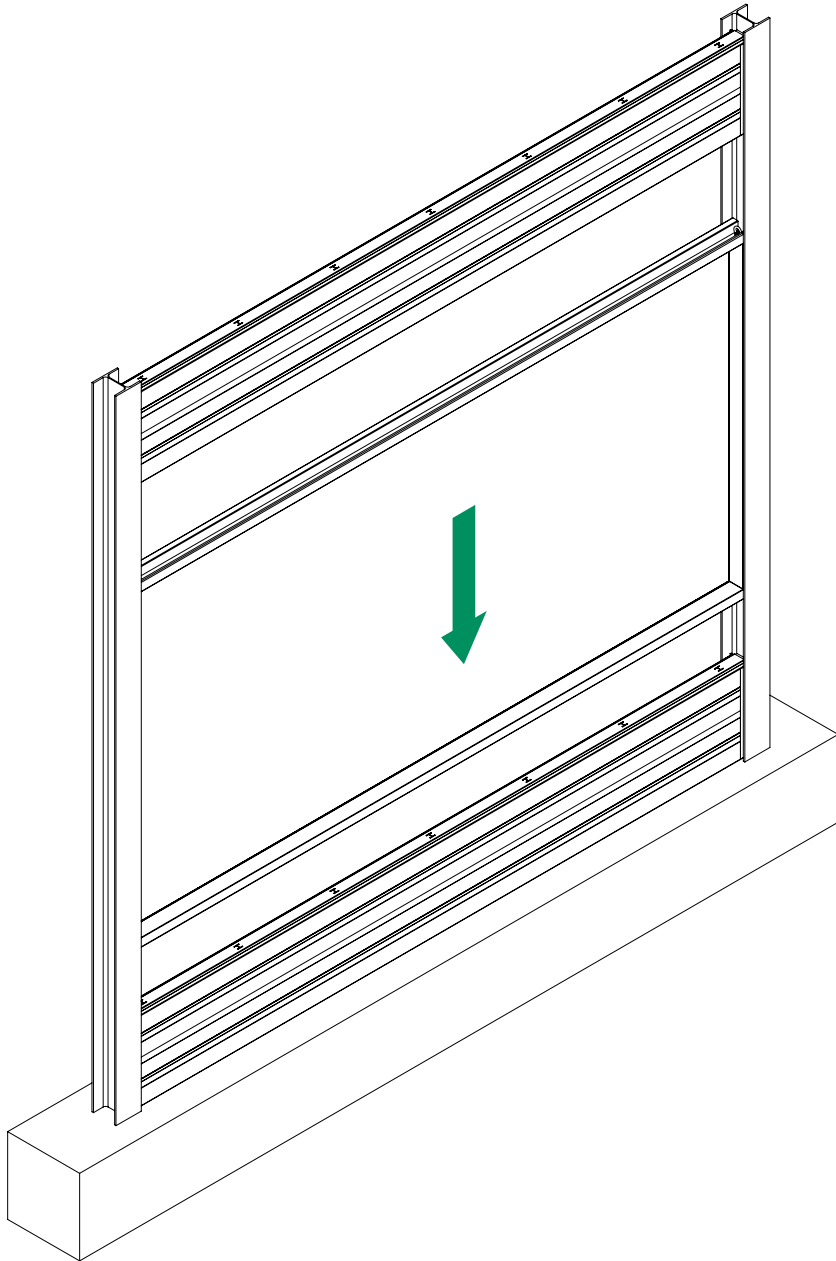
Application for road, motorway and railway use

Transparent sound barriers are made of laminated glass or PMMA (polymethylmethacrylate) complete with gaskets and perimeter frame. The glass consists of two layers, generally 8 mm thick, laminated together and joined by a transparent, colourless or tinted PVB film. The methacrylate panel, on the other hand, generally 15 mm thick, is made of non-regenerated material that can be either cast or extruded, also colourless or coloured. A rubber gasket (EPDM) is fitted to the sheets perimeter, followed by a galvanised and painted steel frame. As they are transparent, horizontal strips are normally applied to the glass and PMMA sheets to minimise bird strike. The frames of the version with railway approval, having to pass also the stress tests, are manufactured with specific gaskets mounted on all the joints between the frame and the HE.



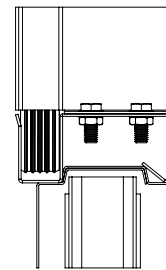
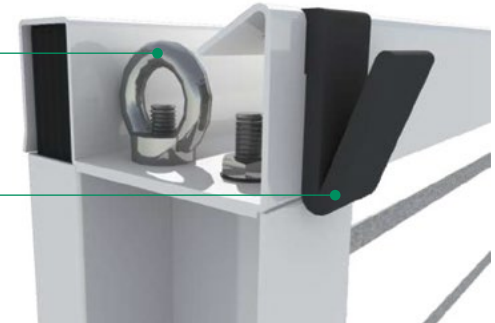
Insulation and sound absorption characteristics G-FON GLASS/PMMA panels

Panel type	Frame characteristics	GLASS/PMMA characteristics	Sound insulation category
G-FON GLASS	Steel 20/10	Laminated glass with colourless or tinted pvb thickness 8+8 +1.52	B3
G-FON PMMA	Steel 20/10	Extruded and cast PMMA thickness mm 15/20, colourless or coloured	B3

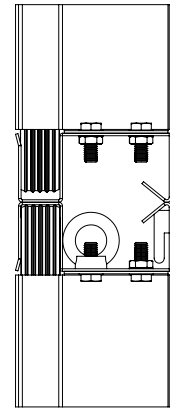


Eyebolt used for panels handling

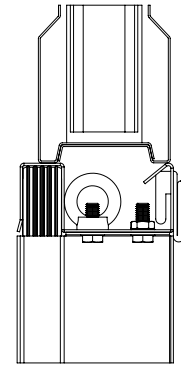
Panel locking heel between the studs



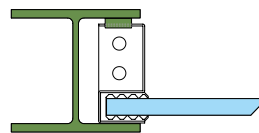
G-FON GLASS on G-FON METAL



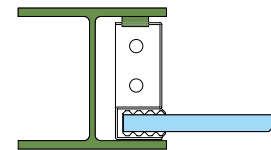
G-FON GLASS on G-FON GLASS



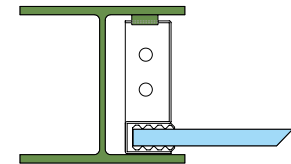
G-FON METAL on G-FON GLASS



Stud HE 140

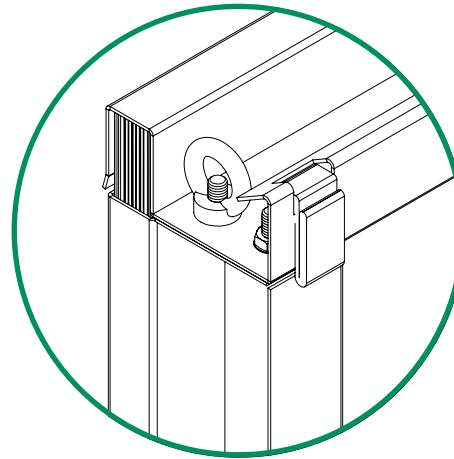


Stud HE 160



Stud HE 180

G-FON METAL DOOR



Eyebolt used for panels handling

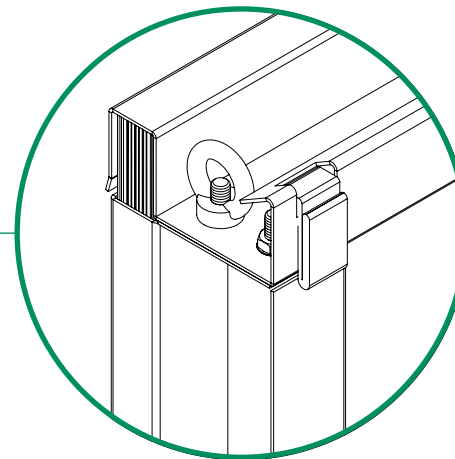
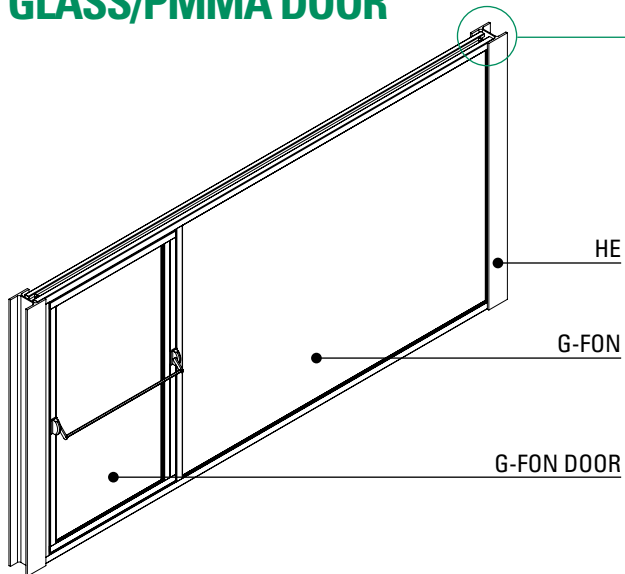
G-FON

G-FON DOOR

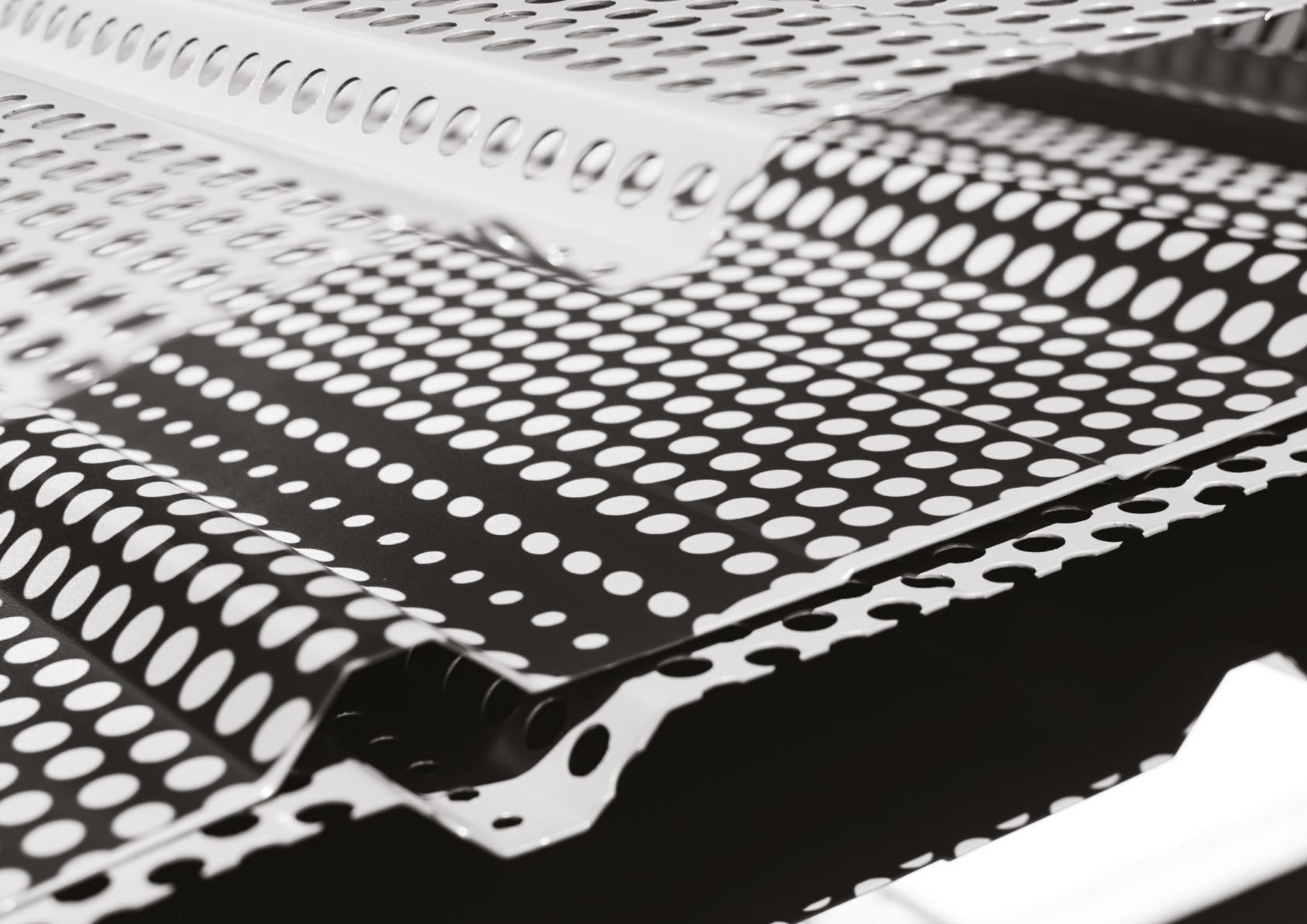
HE



G-FON GLASS/PMMA DOOR



Eyebolt used for panels handling





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