

# NOISE BARRIERS

## PAINTED STEEL panels



Where do I use this kind of panel?

WITH HE-PROFILES	WITH LATTICE STEEL STRUCTURE	WITH SPECIAL COLUMNS
✓	✓	✓

*the metal panel is a liner tray made of:*

Rear full half-shell sheet posterior full half-shell sheet in carbon steel, thickness 1,0 mm, pretreated according to Sendzimir industrial galvanising process; the metal sheet can be painted in all RAL chart colours.

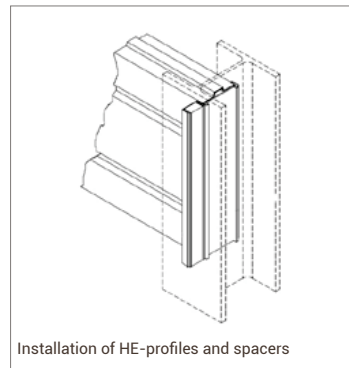
Rock-wool sound-absorbent slab, protected, on the side facing to the noise source, by a glass fibre veil or as alternative recyclable polyester fibre.



The ends will be closed off with patented and UV resistant plastic heads in polypropylene ensuring perfect sealing and having the function of acoustic gaskets and suitable for the installation of post groove spacers.

Front perforated half-shell sheet in carbon steel with minium perforation of 35%, 1,0 mm thick, pretreated according to Sendzimir industrial galvanising process; after profiling the metal sheet can be painted in all RAL chart colours.

UV resistant polypropylene spacers, if required, can be instantly installed on side panel heads and allow the same panel to be used on different HE profiles with different grooves, from HE140(3) or equivalent grooves



Installation of HE-profiles and spacers

<sup>(1)</sup> depending on the requirement it is possible to use metal sheets with different thicknesses (inferior or superior)  
<sup>(2)</sup> smallest profile for 100 mm thick panel, smallest profile for 120 mm thick panel is HE 160

*The panel can be mono-absorbing (perforated on one face) or double-absorbing (perforated on both its faces) to increase the acoustic performance.*

**DIMENSIONS OF PANEL**  
 length up to 5.000 mm  
 height 500 mm  
 thickness 100-120 mm

\*load-resistance to be evaluated on specific project

### MONO-ABSORBING GALVANIZED AND PAINTED STEEL PANEL

FEATURES	HARMONIZED NORMS	panel 100 mm thick metal sheet 1 mm thick rock wool, th. 65 mm; density: 100 kg/m3	CLASS	panel 100 mm thick metal sheet 1 mm thick rock wool, th. 65 mm; density: 100 kg/m3	CLASS	panel 100 mm thick metal sheet 1 mm thick polyester, thck. 65 mm, density 40 kg/m3	CLASS
Sound-absorption DLalfa	UNI EN 1793 - 1 and 3	DL alfa =20 dB	class A5	DL alfa =14 dB	cat. A4	DL alfa =14 dB	cat. A4
Sound-insulation DLR	UNI EN 1793- 2 and 3 - UNI EN ISO 717-1	DLr =26 dB RW=31 dB	cat. B3	DLr =25 dB RW=31 dB	cat. B3	DLr=25 dB RW=30 dB	cat. B3
Self weight resistance: dry weight and reduced wet weight	UNI EN 1794	dry weight: 36,8 kg/m2, reduced wet weight: NPD	-	dry weight: 0,34 kg/m2, reduced wet weight: NPD	-	dry weight: 0,34 kg/m2, reduced wet weight: NPD	-
Wind load resistance	UNI EN 1794 App. A	2,3 kN/m2	-	2,3 kN/m2	-	2,3 kN/m2	-
load resistance due to snow clearance	UNI EN 1794 App. E	10 kN / 2mx2m	-	10 kN / 2mx2m	-	10 kN / 2mx2m	-
risk of falling fragments	UNI EN 1794 - 2 App. B	no fragment	3	no fragment	3	no fragment	3
Fire resistance	UNI EN 1794-2 App. A	no structural damage on sides	3	no structural damage on sides	3	no structural damage on sides	3
Stone impact resistance	UNI EN 1794 App. C	satisfying performance	-	satisfying performance	-	satisfying performance	-
Anchoring of mineral wool	Technical drawing FS Ed.1998	positive result - no evidence of anchor alterations or displacements of mineral wool	-	positive result - no evidence of anchor alterations or displacements of mineral wool	-	positive result - no evidence of anchor alterations or displacements of mineral wool	-
Compressive strength elements in polypropylene after bright ageing		positive result - up to 4,5 GJ/m2	-	positive result - up to 4,5 GJ/m2	-	positive result - up to 4,5 GJ/m2	-
Accelerated ageing resistance of applied painting cycles	UNI EN ISO 9227 - UNI EN ISO 6270-1 - UNI EN ISO 2409 - UNI EN ISO 2808 - UNI EN ISO 6272-2	humidity resistance: 1.500 h, corrosion resistance during exposure in spray cabinet: 1500 h - impact test: resistance after falling 1 kg mallet from 1 m - cohesion: grade 0 (maximum)	-	humidity resistance: 1.500 h, corrosion resistance during exposure in spray cabinet: 1500 h - impact test: resistance after falling 1 kg mallet from 1 m high - cohesion: grade 0 (maximum)	-	humidity resistance: 1.500 h, corrosion resistance during exposure in fog/salt neutral: 1500 h - impact test: resistance after falling 1 kg mallet from 1 m high - cohesion: grade 0 (maximum)	-

### FINISHING

Possibility of completing the product with additional patented accessories to personalize the panels of the barriers, like:

- terracotta cladding
- wood-like effect or anti-graffiti painting treatments
- possibility to reproduce architectural motifs on metal sheet
- photocatalytic properties

