NOISE ABSORBENT iNFRA A500

The noise absorbing iNFRA A500 is optimised to reduce noise generated by road and rail traffic. The design, featuring steel post bases and posts with deep guide channels, makes the barrier strong enough to withstand high wind loads and pressure waves. The system has been tested and certified for high-speed rail applications at heights of up to 5 metres.

The sound-absorbing mineral wool/rock wool infill is adapted to meet the required noise reduction performance. The surface facing the noise source consists of perforated steel sheet, allowing sound to be absorbed, while the outward-facing side of the absorber is covered with a smooth, reflective steel sheet.

The A500 is installed between vertically positioned HEA/HEB sections to achieve the required overall height. The spacing between the posts can be varied.

- Highly adaptable and blends into most environments.
- Can be combined with transparent sections and supports for climbing vegetation.
- Time- and cost-efficient installation. Multiple cassettes can be connected and lifted into position as a single unit. Can be installed manually by two people.
- Tested and certified for high-speed rail applications.

We offer design support

Bring us into your discussions at the idea stage. Our designers will provide drawings and design proposals. We will be happy to tender for complete projects, including structural design, cut-to-size panels, steelwork, fixing systems and installation.

Draft regulatory text

"Noise barrier shall be CE marked and certified for high-speed rail applications at heights of up to 5 metres and shall be constructed from zinc-magnesium-treated perforated steel sheet with a noise-absorbing mineral wool/rock wool infill, in accordance with the HMG iNFRA A500 system."

TECHNICAL SPECIFICATIONS iNFRA A500		
Width cassette	1900 - 6000 mm	
Height standard cassette	500 mm	
Maximum barrier height	5000 mm	
Thickness	96 mm	
Sound-absorbing infill	Mineral wool/rock wool	
Surface (EN 10142)	Galvanised steel sheet (DX51D+Z200/275-NA)	
Surface treatment, perforated steel sheet	Zinc-magnesium + powder coating (RAL colour of choice)	
ACOUSTIC PROPERTIES		
Noise absorption road	(EN 1793-1)	20 dB DL_{α} (A3)
Noise reduction road	(EN 1793-2)	28 dB R_W
Noise absorption railway	(EN 16272-1)	20 dB DL_{α} (A5)
Noise reduction railway	(EN 16272-2)	33 dB DL_R (B3)
Air sound insulation in-situ railway	(EN 16272-6)	34 dB $DL_{SL,P}$
MECHANICAL PROPERTIES		
Design load at 4 m span	(EN 1794-1)	300 kg/m^2
Test load at 4 m span	(EN 1794-1)	450 kg/m^2