HMG iNFRA

AUTHORIZED PARTNER of

Hammerglass®

UNBREAKABLE.

UNBREAKABLE GLASS SOLUTIONS

CE-MARKED NOISE BARRIERS FOR ROAD, BRIDGE & RAILWAY

COMPLETE PROJECTS • HAMMERGLASS • POSTS • MOUNTING SYSTEMS • INSTALLATION

CE

UNBREAKABLE GLASS SOLUTIONS

TRANSPARENT NOISE BARRIERS

CE-marked noise attenuation solutions for roads, bridges and railways. Both the low weight and the hard surface of Hammerglass makes it a popular choice not only for new projects but also for glass replacement.

POSTS AND FITTING SYSTEM

Our noise barrier systems with Hammerglass fit most of the market's existing posts and fittings. We also provide custom systems in galvanised steel. The posts can be attached to railings terminals or onto walls. The Hammerglass panels are clamped between an HFRHS post and a robust clamping profile, and then secured with wire or bolt mountings. Before the panels are cut, each compartment is individually measured, allowing the production of screens that follow the ground level (trapezoid). Consequently, the noise reduction barrier does not need to be stepped when there are changes in ground level.

NOISE REDUCTION

Hammerglass	12 mm	34 dB R_w, 30 DL_r
Hammerglass	15 mm	35 dB R_w
Hammerglass	17 mm	36 dB R_w

BENT GLASS PANELS

In order to increase dimensional stability in high wind action, it is possible to bend the top of the Hammerglass panels at a sharp angle. The inverted bent top of the screen also contributes to effective reduction of low frequency noise from trains etc. Additionally: Along railways, U-profiles in steel cannot be used as supporting elements, as in case they are struck by a power line, the whole barrier can become an electrical conductor.

SCREEN PRINTING

The panels can be screen printed before they are coated with silicon oxide. The printing usually consists of patterns to prevent birds from flying into the screens. The technology also allows for printing in 4 colours for artistic decorations. The Hammerglass sheets may also be supplied in opal, or fully coloured.

SOUND SIMULATION ON THE WEBSITE

How high should a noise screen be? The effect of a noise screen depends on:

- Screen height
- Speed of passing vehicles
- How far from the road the listener is situated

Chalmers University of Technology has based their noise reduction simulator at different screen heights on the Harmonoise model, simulating different distances from the road and varying vehicle speeds. The simulator is used to provide a preview of the final solution. You can try out the sound simulation at www.hmginfra.com

SYSTEM GROUND-2

A complete CE-marked system using bolt groups for installation in the ground or onto walls, along roads or railways. When installed with bolt groups in the ground it is advisable to bury the panels to a depth of about 20 cm in order to prevent the transmission of noise beneath the barrier. Can be supplied up to a height of 6 metres.

SYSTEM BRIDGE-2

A complete system for mounting onto bridge posts along roads or railways. Installation is carried out from the inside of the bridge.

SYSTEM BRIDGE-3

A complete CE-marked system for mounting onto bridge to the side of the bridge edge girder along roads or railways. Normally the screen is angled outwards to maintain the working width of the road barrier. Can be supplied up to a height of 6 metres.

HAMMERFOAM NOISE ABSORBENT

A complete CE-marked system for installing on bridges or walls along roads or railways. The system is based on a fully assembled Hammerglass Ground or Bridge solution and is supplemented by a highly absorbent mat which is fitted on that side facing the railway track or the carriageway. The Hammerglass panel supplies a noise reduction of 34 dBRw. Hammerfoam Noise Absorbent adds another 10,1 dB LA_{eq}.

ADVICE DURING CONSTRUCTION

Bring us into the dialogue already at the idea stage. Our engineers can assist with design suggestions, 3D models, strength calculations and finished dwg drawings. We are happy to tender on complete projects: Hammerglass cut to measure, posts, mounting systems and installation.

DRAFT REGULATORY TEXT

"The noise reducing screen shall be made from... (CE-marked)... 12 mm chemically resistant (withstand acetone) hard-coated and at least 99.96% UV resistant polycarbonate, type Hammerglass, mounted in galvanised posts, type HMG iNFRA system... /Ground-2... /Bridge-2... / Bridge-3... /."

- 300 times stronger than glass - No glass breakage
- Half the glass weight
- Clear view of the surroundings
- Minimal maintenance - Estimated service life >40 years