HAMMERGLASS

POST-FREE

THE TRANSPARENT, POST-FREE NOISE REDUCTION SYSTEM - DESIGNED FOR THE FUTURE.

Hammerglass®

300 TIMES STRONGER THAN GLASS AND DESIGNED FOR THE DEMANDS OF THE FUTURE.

HAMMERGLASS POST-FREE

– EVEN MORE DURABLE.

It began with a request that few others would dare to tackle. It ended with a piece of innovative infrastructure history with the potential to change the future.

The development process that would allow for the production of safety screens for this innovative design was made possible by the 20-year history of Hammerglass. Two decades of experience in designing and manufacturing customer-specific, high-performance glazing solutions.

Introducing POST-FREE – a unique design that redraws the map of noise reduction. All manufactured and delivered for Bypass Stockholm, the Swedish Transport Administration's largest infrastructure project ever. Designed by architects Mats Broman and Richard Rotstein.

WHAT DOES THE POST-FREE SYSTEM STAND FOR?

The screen solution consists of a transparent noise reducing structure with up to 5.60 metres high Hammerglass panels, free from bearing steel posts. The transparency of the screen is in line with our Hammerglass philosophy of creating infrastructure that contributes to both security and well-being. POST-FREE is stabilised by a vertical 90-degree bending, which is then connected to the next panel using Fixpoints. The bent part of each section is mounted in a rigid steel angle which in turn is bolted to its foundation. For installation on a bridge, on a retaining wall or in the ground by both roads and railways.

FUNCTION & DESIGN

The most common Hammerglass thickness for noise screens is 12 mm, and this dimension provides noise reduction of 34 dBR_w. This is the same reduction as conventional glazing, but with the great advantage that Hammerglass weighs about half its equivalent in glass – and is almost unbreakable. The low weight means both reduced stress and much easier assembly.

The overall noise experience is affected by the design. The wide, vertical bending of 50 cm on each section is directed towards the traffic and becomes a very effective sound blocker, traffic noise is reflected back to the traffic environment where the sound waves are broken and reduced.

SCAN THE CODE TO READ MORE AND WATCH THE VIDEO ABOUT POST-FREE!

MODERN, DURABLE AND EFFICIENT.

KEY BENEFITS OF POST-FREE.

A SMALLER CARBON FOOTPRINT

Steel production contributes to higher CO_2 emissions than polycarbonate. The POST-FREE structure has steel feet that anchor it to the ground, but the amount of steel used for these is much smaller than in a barrier with whole posts. The carbon footprint is only 57% compared to a traditional screen.

CHEAPER MANUFACTURING

Since steel is more expensive than polycarbonate, POST-FREE comes with a lower price tag.

VISIBLE TO BIRDS

POST-FREE has a screen print with black, narrow stripes that, in extensive field trials, proved to be the best protection against bird collisions.

PERFECT FIT FOR THE FUTURE

Future infrastructure must be innovative, smart, economical, and durable. You want the smallest possible carbon footprint in manufacturing and the highest possible durability – so that the product does the work it is supposed to for as long as possible without unnecessary and expensive repairs. With POST-FREE we have come a long way! We also have an Environmental Product Declaration (EPD) for the Hammerglass material, which facilitates your environmental reporting work.

HEALTHY OPERATING ECONOMY

All Hammerglass products contribute to a healthy operating economy, as they are virtually unbreakable and therefore do not need to be replaced. The hard-coated surface has a layer of silica that makes it very easy to remove graffiti and dirt that come with time – maintenance costs are reduced to a minimum.

NO FIRE RISK

Hammerglass is self-extinguishing and therefore does not contribute to the spread of fire, unlike other plastic materials. In Finland, for example, acrylic is banned in state-owned and state-financed bridges and roads precisely because of the risk of fire.

BOTH STRONG AND LIGHT-WEIGHT!

Hammerglass is 300 times stronger than ordinary glass – but weighs only half the ordinary glass weight. The low weight makes all installation more efficient.

CE MARKING

All Hammerglass noise barrier systems are CE marked according to the twelve requirements specifications of standard EN 14388. Load calculations and dimensions are reported for each screen depending on its height, the current wind load zone and other project-specific conditions.

HIGHEST UV PROTECTION

Hammerglass surface treatment provides 99.96% UV protection. The material will not cloud, discolour or undergo any other optical quality changes over time. Its estimated service life is more than 40 years.

WOULD YOU LIKE TO FIND OUT MORE ABOUT HAMMERGLASS INFRASTRUCTURE?

SCAN THE QR CODE BELOW.

WHAT IS HAMMERGLASS®?

Hammerglass is the new generation of high performance glass in nano surface-treated polycarbonate. A durable and wear-resistant polycarbonate sheet, 300 times stronger than glass – and virtually unbreakable. Hammerglass screens are coated with a thin film of silicon oxide, which protects against scratches and wear and tear. Nanotechnological surface treatment renders Hammerglass resistant to most chemicals, which makes it easy to remove graffiti from the surface – and helps to prevent pollutants from exhaust fumes, oil and asphalt from adhering to Hammerglass as easily as to ordinary glass. The surface treatment also provides 99.96% UV protection, which means the material will not cloud, discolour or undergo any other change in optical quality over time. Estimated service life is more than 40 years. Hammerglass does not contribute to the spreading of flames in the event of fire. With its array of positive features, and half the weight of conventional glass, Hammerglass is an excellent choice both for new installation and glass replacement.

Hammerglass AB
Åkagårdsvägen 9
SE-269 71 Förslöv, SWEDEN

infra@hammerglass.se
+46 (0) 431-25 000
www.hammerglass.com

Hammerglass®

2023-03