

PROTECTIVE SHIELD for railways

In collaboration with the Swedish Transport Administration, Hammerglass AB has produced a modern, electrical protective roof structure to cover overhead contact lines. The construction conforms to the electrical safety guidelines for electrical protective roof structures for installation on bridges over railway tracks. The design blends in with the surroundings, and at the same time it forms a solid barrier against live conductors.

Design and installation

The protective roof construction consists of 12 mm Hammerglass mounted on a system of angled posts bolted to the side of the bridge edge girder. On bridge renovation or in newbuild projects the angled post is installed with base plate beneath the balustrade upright. The roof structure is fatigue-calculated by simulation of the snow- and wind load and the wind load from passing trains, and furthermore satisfies the requirements for noise barriers laid down in the CE standard EN-14388. The solution is watertight and tamper-proof and can be manufactured in execution class EXC2 or EXC3.

Hammerglass AB will undertake complete contracts from dismantling of existing protective structures to the installation of a new electrical protective roof in Hammerglass. Our designers provide finished drawings with fixing solutions in the form of dwg-files.

Draft regulatory text

“Protective shields shall be designed in accordance with current electrical protection standards and strength- calculated on the basis of wind and snow load and of current wind load from trains, and shall be constructed in 12 mm chemical-resistant (must withstand acetone), Hammerglass-type hard-coated polycarbonate offering at least 99.96% UV protection, mounted on angled posts in execution class... [EXC2 or EXC3]... of surface coating class C5-M, type Hammerglass Bridge-3.”



Technical specifications

Max Hammerglass width	2000 mm
Max Hammerglass height	2000 mm
Product dimensions HFRHS	120 x 120 x 8 mm
Product dimensions U profile	44 x 26 x 4 mm
Hammerglass thickness	12 mm
Road barrier working width	1000 mm
Fixing method	Based on preconditions