

REFERENCE

M24 TENSION ROD SYSTEM

PROJECT DATA

Brief description

Tension rod systems in cross-braced design, galvanised, with special connection nodes

Details of the system elements

Tension rod systems – system size M24

Cross-wise bracing fields

Tension rod system lengths 4250 mm

Special connection plate

Technical parameters

Use of tension rod system as bracing system to stabilise reinforced concrete skeleton structure

Country, Year

Germany, 2019

PROJECT DESCRIPTION

Restoration of the wall mosaic “Man’s Relationship to Nature and Technology” by the Spanish artist Renau. The mosaic was torn down in 2008. Extensive restoration work then took place. It was recently restored to the same location. The elements of the facade were secured to a new reinforced concrete supporting structure.

SOLUTION

Following careful conservation and restoration work, the 70,000 glass tiles were applied to special reinforced concrete elements in 252 sub-sections. During the restoration work, the sub-sections were thinned down to the mortar. This was followed by cleaning work and the mapping of damage. Broken pieces of mosaic were fixed put back together. It was then positioned into the framework and the gaps between the tiles were filled with sand. Mortar was used to accurately position the stones of the mosaic; the mortar was grouted after the fixing process. Once the mortar had cured, the glass surfaces were cleaned. The concrete facade elements were secured to a new reinforced concrete skeleton structure; m-connect tension rod systems were used to brace the reinforced concrete structure.

Renau wall mosaic in Erfurt



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