

Reference Project Name: Irapuato's Cathedral

Category: Church

Project Overview:

- The dome of the cathedral was damaged by its own weight due to the age of its construction. It needed structural reinforcement, it had to be confined to transfer loads correctly. The cathedral also required a flexible, waterproof coating to bridge visible surface cracks.
- For the first problem we offered our FRP (Fiber Reinforced Polymer) System applied on masonry materials using carbon fiber fabric, for the second problem we offered Mapelastic White in combination with Mapeband Easy for the joints.

Project Background:

The dome was so damaged that it was in danger of collapse, it was a big problem because this is the main church of that town and many people go to pray there, reinforcing and waterproofing this historical monument we are preserving the history and cultural heritage of the communities . The main challenge was the compatibility of the FRP system with the masonry structure.

Project information:

Period of construction: Unknown

Year of MAPEI involvement: 2019

MAPEI Coordinator: Eduardo Valencia

Project Owner: Irapuato's Government

MAPEI Distributors: EK4 Diseño y Construcción

Architect: Unknown

General Contractor: María del Carmen González Segovia

Surface preparation contractor: EK4 Diseño y Construcción

Tile and stone installers: None

Floorcovering installers: None

Project manager: Eduardo Valencia

Photographer: Eduardo Valencia

Project size: \$18,546.17 USD + VAT

MAPEI products used:

- *Planitop 12 SR*
- *MapeWrap Primer 1*
- *MapeWrap 31 T*
- *MapeWrap C Uni-Ax 600*

- *Mapelastic White*
- *Mapeband Easy*

MAPEI products at work on the jobsite:

- The FRP System needs a high-performance surface so the first step was to apply Planitop 12 SR, a repair mortar that was applied in a half-inch thick layer.
- The second step was to prime the surface to ensure complete addition of the FRP System, we used MapeWrap Primer 1 for this purpose.
- The third step was to apply the FRP System with the products MapeWrap 31 T and MapeWrap C Uni-Ax 600.
- The fourth step was to apply Mapelastic White combined with Mapeband Easy to protect the whole system from the weathering.