

Historical Sireg

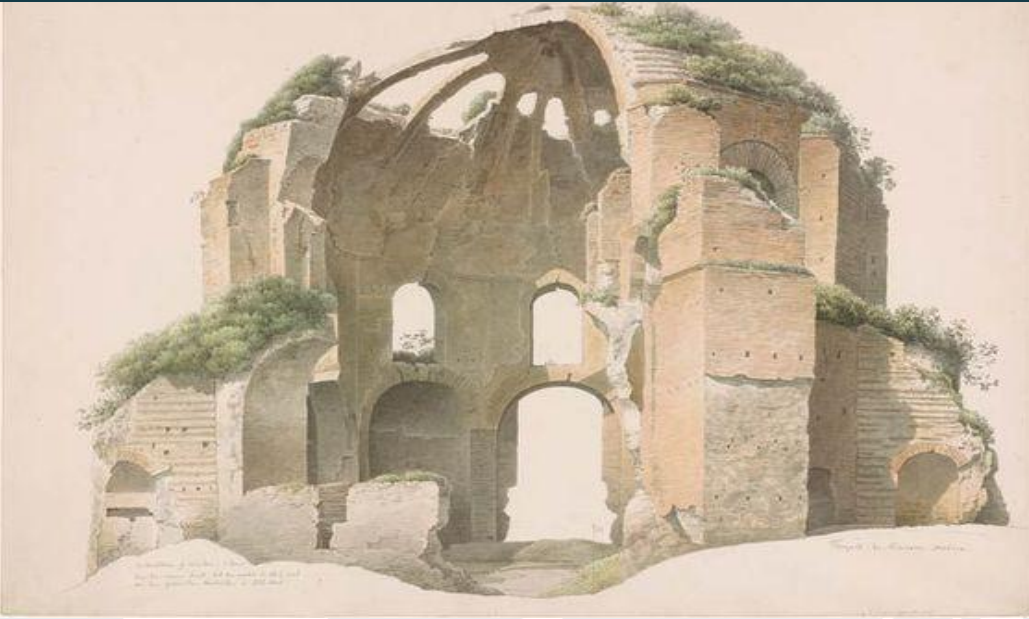
A Trip Back to Minerva Medicea - Rome, Italy

A review on world Historical Buildings and Great Civil Monuments strengthened by Sireg solutions



Historical Sireg

A Trip Back to Minerva Medicea



The Roman Complex **Minerva Medicea**
IVth Century A.D.

This precious masonry monument, located in Rome-Esquilino, was object of a **repair** and **strengthening** project during 2012-2013.



The primary targets of the works were: safety for a potential opening to visits and seismic improvement of the whole structural portions.



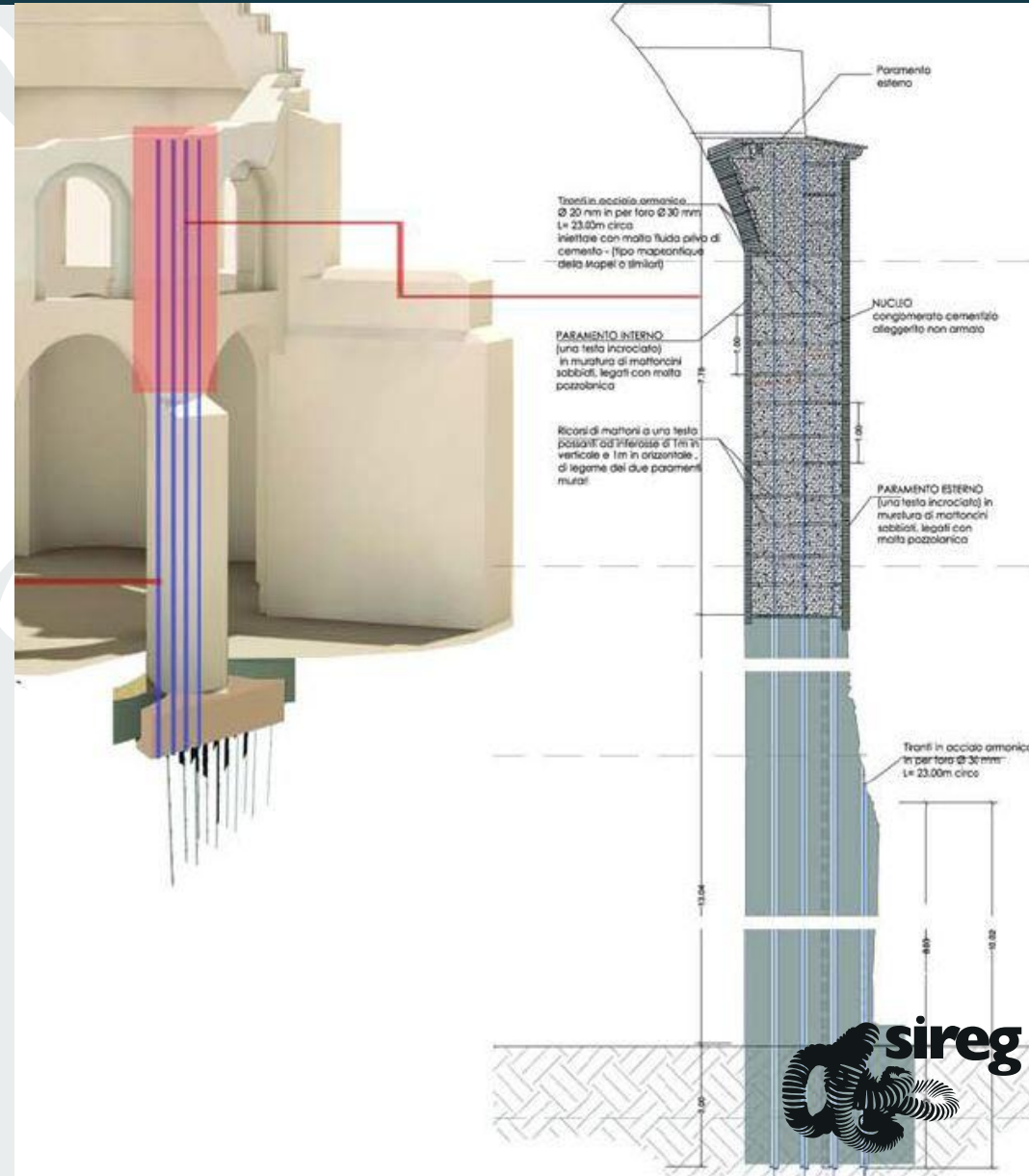
The monument was characterized by the presence of several lesions: they were localized at the interference point between the foundation and the walls of the Roman age.

Inside the foundation itself a number of **faulted joints** were detected: they are visible on the drawings and pictures here reported, for example between the niches 5th and 8th.



Among the intervention techniques chosen by the designers, it is possible to identify:

- Masonry structures consolidation by injecting binding materials into 20 mm diameter boreholes.
- Harmonic steel tie rods inside the development of the vertical columns.
- Structural improvement by applying, inside some of the holes, **Glasspree® permanent bars** (high tensile strength glass fiber rods). Such rods were injected and anchored by epoxy resins.



Important consolidation works also involved the structures which support the vault of the building. A series of FRP seams was made by applying 8 meter long bars. Such **Glasspre® round section rods** featured by a 12 mm diameter were inserted into 30 mm boreholes.

