



Every restoration has a different story

The in-depth research into the situation of the building and an accurate analysis of the materials are the premises for an intervention that is never just a job but a unique set of experience, art and passion.

San Giorgio Maggiore: technology and science applied to the restoration

Every restoration is different because every work of art has its own irreplaceable history and unmistakable characteristics.

Every intervention carried out by the Dottor Group is thus preceded, in addition to meticulous historical studies, also by careful laboratory analyses tailored to identifying, amongst other things, the chemical and mineralogical characteristics of the materials, implementation techniques and the state of conservation of the buildings in order to determine the best operating decisions as the case may warrant. In the restoration of San Giorgio Maggiore in Venice, for example, chemical analyses were also carried out on wooden and metal fragments of the main doorway and microscopic studies were performed.

Location

- **location.** Basilica di San Giorgio Maggiore, Venice.
- **history of the building.** The Basilica is one of the most important works by Andrea Palladio in Venice. The solution that Palladio invented for the Istrian stone facade is imaginative, an original contribution for one of the most keenly-felt problems among architects of the Renaissance period: giving a tripartite building such as a Christian church with three naves a prospect inspired by the classical temple.
- **state of affairs.** Before work began, the interior and the facade were undermined by rainwater, joints coming apart, detachments and loss of stone parts, splintering and pitting of the surfaces, black encrustations and stains.
In particular, the marble of the statues of the Doges Tribuno Memmo and Sebastiano Ziani were in a state of such decay that compresses and micro sandblasting was impossible.

Intervention

- **type of intervention.** Conservative restoration.
- **duration of the intervention.** A total of nine months.
- **customer.** Superintendence for the Architectural Assets, Landscape and Historical, Artistic and Demographic-ethno-anthropological heritage of Venice.
- **Designer.** Architect Patrizia Giacone.
- **general contractor.** Dottor Group.
- **purposes.** To eliminate the ways through which rainwater could seep into the masonry; clean, consolidate and protect the facade and the stone elements; restore the Basilica and the doges to their ancient glory.
- **Historical examinations and laboratory analyses.** Photogrammetric detection constituted the graphic basis for the definition of maps of the decay and the methods of intervention to activate. To support the design choices, petrographic, thermomagnetic and endoscopic examinations were made. Through a thorough preliminary diagnostic campaign less aggressive procedures were decided upon to safeguard the patina of time.
- **structural/artistic and architectural intervention.** The lead-plated covering that initially protected the top frames of the facade was completely restored using techniques of the time. The cracks and the detachments were rectified and the wooden parts and copper plates in the door were restored. The stone parts were cleaned using various types of intervention depending on the type of decay.
- **technologies applied to the restoration.** For the statues of the Dukes Tribuno Memmo and Sebastiano Ziani the need was seen to use latest-generation laser equipment that make it possible to clean particularly uneven and crumbling parts with extreme precision.
- **documentation.** During the restoration a webcam connection was set with the site for the first time in Italy. This made it possible not only for the technicians and workers but also the tourists to follow all the phases of the restoration live on the Internet.

The end of the Basilica restoration, an event of international resonance was reviewed by the American Herald Tribune newspaper and the leading media in Italy.