



Torre dell'Orologio: when the building site advertises

The idea for advertising was developed by Oliviero Toscani: during the restoration of the Torre dell'Orologio in Venice the rhythms of the site were marked externally by the change of the tarpaulins installed to protect the scaffolding, that paid homage to the great towers in the world. In this way, Venetians and tourists were able to experience the tower even in the months that the monument was not open to the public and to follow its restoration with particular interest.

Attention to advertising is an element that is common to all the sites of the Dottor Group, that as rule, creates a wide range of information tools: photographs, video and DVD footage, Internet sites and webcam connections, site logs and guided tours for school groups.

Location

- **location.** Torre dell'Orologio, Venice.
- **history of the building.** The tower that stands alongside St. Mark's Cathedral was built at the end of the Fifteenth Century to accommodate Venice's new clock in the square. Commissioned in all likelihood from the famous architect Mauro Codussi, it was erected between 1496 and 1499. In 1506 two wings were added to it and then it was raised a floor during the restorations in the middle of the Eighteenth century.
- **state of affairs.** During the inspection in order to draw up plans for the morphological inspection, it was noted that the pendulum had shifted in its diagonal motion between the two uprights, between the cables of the Moor, Time and the automatic number weights and it brushed against one side of the housing slot touching a wooden frame and thereby causing a certain abrasion.
Static instabilities were also visible in the corners and the lintels of the windows, that were split in various points on the different storeys in the oldest part and in the Eighteenth century additions.

Intervention

- **type of intervention.** Structural, artistic and architectural restoration.
- **duration of the intervention.** October 2004 – May 2006.
- **customer.** Venice City Council.
- **designer.** Giorgio Gianighian, architect.
- **implementing firm.** Dottor Group.
- **purposes.** Returning the Tower to its former splendour, in respect of a city that is overall an artistic and architectural heritage to preserve.
- **logistics.** In St Mark's square, one of the "lowest" areas of Venice, it was necessary to resolve the problem of high water: special technical solutions were studied to protect the areas of operations.
- **site.** Particular difficulty was seen in the preparation of the site in an area that was very critical from a logistics and safety point of view. All the site preparation operations were conducted at night, while behind San Mark's bell tower the material depot was set up. The site offices were housed in an overhead structure to limit the space taken up on the ground and to reduce inconvenience in the square. Materials necessary for outfitting the site were transported by small wheeled vehicles (dumpers) from St. Mark's Basin to the Torre, after establishing a protective lane made of a layer of non-woven fabric placed in direct contact with the *masegni* (blocks of Euganean trachyte used for paving, often marked off by bands of Istrian stone) and by a double cross-over layer of nailed plywood panels.
- **historical investigations and laboratory analyses.** It was difficult to understand whether the causes that gave rise to the static instabilities of the tower still existed. When measurements were taken one of the tasks was to show up the deformed shapes. Also the drawings, print outs and canvas (e.g. a view of the Torre, a work by Canaletto) and the Nineteenth Century photographs have been scanned, straightened and superimposed on the photographic relief to discover whether the sagging was already evident two hundred, one hundred or fifty years ago. To assist the general verification of the equilibrium of the Torre a large number of non-destructive tests were conducted: magnetometrics of all the facades and large portions of the floors, ceilings and walls, endoscopies, sonic and ultrasonic tests.