

BALDACHIN ON THE HIGH ALTAR OF ST. PETER'S BASILICA IN THE VATICAN

RESTORATION OF STONE SURFACES

The four tall bases of the columns are made of masonry and covered in different kinds of marble (white Carrara marble, black Aquitaine marble, Egyptian alabaster marble) and decorated with the large papal coats of arms of the Barberini. Over the centuries, they have undergone continuous maintenance and do not present major critical issues to be addressed. The surfaces need to be cleansed from layers of dust and especially from yellowed waxes that alter the crystalline whiteness of the Carrara marble. Special care should be given, if necessary, to re-adhere thin sheets of precious alabaster, serving as a background to the coats of arms, in case there any parts are detaching from the white marble support.

Operations to be carried out:

- Surveying the state of conservation, the signs of work and finishes on the stone surface providing a map of the site, to be executed on pre-existing surveys, divided by items.
- Removing non-coherent, stratified dust from the surface using soft brushes and small vacuum cleaners.
- Removing partially adherent deposits from the surface and superficial stains by using compresses of Kleenex tissue paper and deionized water.
- Checking all surfaces to highlight the presence of detached parts of the work, and any preventive removal.
- Surface cleaning including the removal of adherent deposits by using ion-exchange resins.

- Refining the cleanliness of the baldachin by removing wax, oil stains, or residues from old products used to protect the work by using solvents, to be selected after having conducted all appropriate solubility tests.
- Final finishing phase to remove residues of compact and adherent deposits with manual mechanical means and ultrasonic devices.
- Removing old plastering/ grouting/ fillings made of materials that, owing to their composition or to the alteration processes they have undergone, are not compatible with the stone or have lost their preservative or aesthetic function.
- Making sure to reattach chips, fragments, and small plates of limited weight and size to the work using epoxy resins.
- Applying coats of plaster by employing lime mortar and marble dust to repair cracks and deep gaps using targeted tests in order to choose the most suitable composition for colour and granularity.
- Protecting surfaces with microcrystalline waxes, applied with brushes and buffed using cloths.