



TH15.20-02-03

SOL MELIA WHITE HOUSE, LONDON, NW1 3UP

METHOD STATEMENT

The faience to all four elevations is to be cleaned using façade gommage as per the information provided below.

Localised repairs will be carried out in line with the attached report and elevation drawings, these will be carried out in line with good conservation practice by a an experienced contractor.

Once the clean and repairs have been completed, the façade will be protected with Aquafend.

The property is a grade II listed building.

Façade Gommage is a dry process; the debris from the cleaning will be collected and disposed of in an appropriate site.

No alterations to the structure or access routes into the buildings are to be undertaken.

All works will be carried out from an enclosed cabin with extraction system. The system is described in detail below.



CLEANING OF EXTERNAL FACADES BY FAÇADE GOMMAGE

System

Façade gommage is a masonry cleaning system in which an operator working in a cabin fixed to a hydraulic boom, projects a non-abrasive, ultra-fine dry powder under low pressure against the masonry surface through a nozzle under low pressure. This powder is a recycled waste product. It rubs and lifts dirt from the masonry and powerful fans extract the spent cleaning powder and dirt send it to containers at ground level, ready for waste removal

No scaffold is required and no water is used in the cleaning process. Without scaffold, projects can be completed more quickly than traditional cleaning methods and without water there is none of the traditional 'builder's mess'

The system is entirely self-contained and all necessary services are supplied from the mobile platform.

Thomann-Hanry has a long history of cleaning national monuments and historic buildings worldwide. To ensure consistent quality control, the materials, equipment and on-site application processes are the same worldwide and are only operated by Thomann-Hanry employees, not subcontracted out.

Benefits

Speed As there is no scaffold to build and remove, projects durations are short. In addition work commences within two hours of arrival on site and up to 200 square metres can be cleaned in a single day.

Environmental The powder is a recycled waste product. Traditional masonry cleaning systems use large volumes of water but *façade gommage* uses no water to clean. The system is particularly sensitive and does not affect the epidermis of the stone. Thomann-Hanry has worked with English Heritage and other conservationists on a number of Listed Buildings and Scheduled Ancient Monuments. Around the world environmentalists have conducted trials before choosing *façade gommage* to clean buildings that have national and historic interest, including World Heritage sites.

Traditional water-based systems wash dirt and pollutants from building surfaces into the drainage system. The *façade gommage* system captures both the dirt and cleaning material.

No chemicals or detergent are used and therefore containment systems normally used to capture chemicals are not required.

No disruption There is no scaffold or sheeting to cover the building which therefore does not have the appearance of being under construction. In occupied buildings staff will be unaffected by the work and there is no need to protect visitors and pedestrians from water or steam and the cabin carries no loose equipment. Cash-generating operations such as retailers and hotels who would otherwise lose revenue from reduced footfall and room closures are therefore unaffected. This is also important for office premises with retail tenants at ground level. The benefits to historic buildings and tourist attractions are self-evident.



Quality The quality of clean exceeds traditional systems. The clean is non-abrasive.

Tidy The system is self-contained. All dirt is captured and removed from site in small containers. There is no water run-off.

The powder

The particles are 20-50 micron aluminium silicate crystals. This is recycled waste recovered from aluminium smelting processes and produced only for Thomann-Henry.

The crystals are as fine as talc and do not abrade masonry surfaces. Instead, dirt is 'rubbed' from surfaces

Compared to the Jos/Torc cleaning system a typical Torc powder such as Unil 250 might be 0.1 to 0.5mm in diameter whereas the aluminium silicate might be 0.04mm.

Pressure

The aluminium silicate powder is blown with 4 bar of compressor at the nozzle and is less at point of impact allowing for losses. The powder is projected through a 6mm nozzle.

There will be no adverse impact on either the historic or special architectural interest / character elements of the building.

Due to the power of the six 24" 3HP motors, the powder and dirt is immediately sucked back into the cabin, leaving the cleaner with a crystal clear view of the facade he is working on. This clarity and the absence of water means there is no risk of over-cleaning. From ground level and the cabin, the entire building is visible. As it is not obscured by scaffolding, the overall appearance can be monitored during the cleaning process.

Unlike traditional sandblasting techniques, which can have a harmful high impact, *façade gommage* provides perfect results without damage. The powder is so light that if necessary more than one pass will be made to slowly diminish a layer of dirt. When we carry out a test sample this can be done around a bare hand to show how gentle the system is, ideal for historic buildings where preserving the natural stonework is essential.



Accreditations

The French are especially protective towards their historic buildings and will only accredit systems that pass serious scrutiny. Many historic buildings all over the world have also chosen 'façade gommage' after testing the system alongside other methods. Awards and accolades include:

- The Prestige de L'Europe and Laurier d'Or in France for "technical achievement in restoration".
- Listed in the Guide of French Artisans d'Excellence for the cleaning of historic structures.
- Granted the Qualite Ravalement in France for work on landmark buildings.
- Test panels on the Place Vendôme, Chateau de Versailles, and the Louvre Museum in France were analysed and approved by the Laboratoire Nationale des Monuments.
- Approval granted by the National Park Service in the US and the Heritage Conservation Program in Canada.
- Approval granted by **UNESCO** for work on three buildings on the **World Heritage List**:
 - Gaudi's Casa Milà - Barcelona, Spain.
 - Church Santa Clara Vahia - Coimbra, Portugal.
 - **Jerónimos** Cloisters - Lisbon, Portugal.

References

Thomann-Henry has received written references for numerous projects, many from conservationists and industry professionals testifying to the fact facade gommage® cleans with no abrasion or damage. The system has been very well received in London with listed building consent granted for Grade 1 buildings and a Scheduled Ancient Monument , following highly satisfactory test samples by both City of London and Camden Council.

- Brooks's Club on St James's Street, a Grade I Listed Building was cleaned in three days in July 2010. This is a 250-year-old stone and brick building. English Heritage was consulted on this property and approved the test panel.
- 57-58 Lincoln's Inn Fields, a Grade 2* over 250 years old, was cleaned by *façade gommage*. Our cleaning process was chosen by conservationist consultants at BNP Paribas for its quality and gentleness following comparisons with other systems.
- The Eastern elevation at Fishmongers' Hall, a nineteenth century Scheduled Ancient Monument at London Bridge, was cleaned in November 2011
- Test cleans have been undertaken at The Old Royal Naval College – a Scheduled Ancient Monument

Grade II Listed Buildings include NatWest High Holborn (cleaned in one morning), The Ritz (cleaned in 16 days) and two faces of The Adelphi, the Marriott Park Lane, Australia House and others. Deutsche Bank AG



employed independent material scientists for the cleaning of their headquarters, made from very soft limestone, before choosing *facade gommage*®.

An Australian Heritage report for St. Andrew's Cathedral, Sydney, Australia, concluded that *façade gommage* was less disruptive and more sensitive to masonry surfaces, than washing with water in the traditional manner. The mineralogist's report was produced prior to Thomann-Henry being awarded the project.

Individual references can be supplied on request. Full Case Studies with photographs can be found under "Case Studies" on www.CleanBuildings.co.uk.