



DESIGN, NEW BUILD, RESTORATION & CLEANING OF STONework
LIMESTONE ~ MARBLE ~ GRANITE ~ SLATE ~ ARTIFICIAL STONE
EST. 1978

Clarke Design & Build
121-123 High Street
Dovercourt
Harwich
Essex

For the Attention of Gary Dingwall, Site Manager Clarke Design & Build)

Re: 7 Fitzroy Square

Stone Cleaning and Repairs to the Front Façade

Delstone as stone specialists were instructed by Clarke Design and Build to carry out a full masonry survey and refurbishment to the front façade of the above property.

The initial facade survey was taken from ground prior to the erection of scaffolding with the objective of determining the methods of cleaning that would be best to used clean, remove any carbon build up, dirt, and remove any unwanted previously used materials such as paint, without causing any damage to the fabric of the building.

This initial inspection found that the facade was made entirely of Portland Stone with the ground floor level façade painted using external paint. Sections of defective stone and some previous poor stone work repairs were also identified across the facade. This analysis then directed the methodology of cleaning that would be employed to give the best and safest results which would involve a limited use of TORC cleaning in association with the 'Peel away' treatment on the lower façade and elsewhere nebulous water sprays would be used.

Cleaning/repair:

The stone front door surround/ground floor areas had been previously painted with external paints which can often lead to problems as natural stone walls must be allowed to breathe and most paints, especially those which are oil-based, block the stone pores and in doing so trap moisture leading to decay. At Fitzroy square it was evident that paint layers had been built up on the lower section façade over time, which, due to its nature can be very difficult to remove. This lead to the decision to use a chemical paint stripper (Peel away) and the JOS Torc cleaning system to remove this build up, both of which are English Heritage approved.

Del Stone Project's Limited, 45 Squirrels Heath Lane, Romford, Essex RM2 6DP

VAT number – 171 0129 48

Co. number – 8564370



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Method:

The paint stripper “Peel Away” is applied to painted areas using plastic spatula’s with the application area then covered with protective sheets/blankets and left to dry for at least 48hours. Once Peel Away has successfully permeated the layers of paint the blankets are removed with the help of a spatula thus removing the paint. Although the Peel Away system is used to remove the paint it does not always remove 100% of the substances. In this instance we then employ the secondary JOS torc method of cleaning as the most effective and safest way to remove the remaining paint from the affected area areas. This method is particularly useful for delicate or intricate surfaces such as limestone. We have provided Method statements on this for your reference.

Once the upper scaffold was erected it enabled the remainder of the property to be surveyed which confirmed the earlier survey conditions but also identified areas of defective stone pointing and stone that was in need of repair.

It was determined that the upper levels of cleaning (that had not been painted -area marked up on accompanying diagram - DOC 1 Delstone - Facade Clean Areas) would be carried out using water jet spray via a series of adjustable nozzles capable of controlling the water delivered to the face (Nebulous Water Sprays). This involves a fine mist of clean water sprayed onto the stone for a sufficient time until the dirt softens and becomes responsive to removal by brushing using bronze or bristle brushes. On completion of the nebulous process a low pressure HP water lance is used to wash down to the façade to remove the remaining surface dirt deposits.

After the facade clean a further survey determines the extent of the Portland stone repair required which is outlined in the accompanying document – ‘DOC 2 Fitzroy square repair schedule’. Our inspection found some areas of old poor repairs that needed to be replaced, some defective areas of pointing and some cracks in the stone.

Method of repair:

On the flat ashlar repairs the damaged eroded and previously repaired stonework is cut back to a sound base, forming a neat square recess. This square is then filled using a bonding agent applied in a number of built up layers using a Portland Stone dust based mortar to finish flush with the surrounding stone. Crack repairs are carried out by drilling a 12mm hole at 300mm centres starting 150mm from crack and drilled at an angle to cross crack, extending 200mm past. Once all loose dust is removed the cracks are injected with an epoxy resin with a 10mm stainless steel dowel inserted to finish 15mm from the face of the stone. The surrounding area are then made good using a stone dust based mortar finishing flush with the surrounding stone.

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