Project No: 23037/38



## **Methodology of External Works**

Project:	External repairs and cleaning 38 Great Queen Street, London
Contract Administrator:	Tuffin Ferraby Taylor LLP
Client:	United Grand Lodge of England
Reference:	UGLE/23037
Date issued:	19 March 2013

## Introduction

The property is situated on the north side of Great Queen Street.

The Applicant is planning to undertake an external repairs contract to 38 Great Queen Street in order to maintain its appearance and general state of repairs. As a part of this work, the existing walls are to be repaired in line with best conservation practice and cleaning removing scaling and discoloration to the building.

The building is Grade II listed.

## **Cleaning of Elevations**

The elevations are heavily soiled with general pollution and carbon deposits. Our proposals include for undertaking a DOFF clean system of all brickwork.

Prior to undertaking the cleaning, a series of samples will be completed. The sample clean will enable the timing, temperature and pressure necessary for the cleaning process to be established. A sample area will be selected as the benchmark and recorded accordingly.

Before the cleaning progresses, the elevations will be inspected for any fractures or open joints which may allow water ingress. Likewise, all gutters, hoppers, downpipes and gullies will be checked to ensure they are free from obstructions and debris.

All openings will be protected with heavy duty polythene and tape. A drainage system will be installed onto the scaffold to prevent water dispersion at pavement level.

Once the above has been completed, fine nebulous sprays of clean cold water will be applied to the surfaces to initially soften dirt deposits.

Encrustations and dirt will be softened progressively to reduce the risk of mechanical damage, and to allow greater control over the removal and permitting more frequent monitoring of the surfaces. This ensures that the right levels of clean are achieved and reduces the risk of over cleaning.



Any softened material will be removed using soft bristle brushes.

Quantities of water used will be kept to a minimum to prevent over saturation of the building. The DOFF sprays will be timed to control the steam.

The flow rate of the water will be monitored and recorded for information. This practice will be continued throughout the progression of the works to ensure an even application over the entire façade.

Once the dirt has been softened, stubborn areas will be brushed immediately using suitable fibre/ natural bristle brushes and special care and attention paid particularly to detailed areas of the stonework.

All works will be completed from the top down and the cleaning parameters recorded.

All works to be carried out in accordance with BS 8221.

## Stone/Brick Repairs and Pointing

This section is to be read in conjunction with drawings.

Once the scaffold is erected, a detailed survey of the elevations will be undertaken.

Where stonework/mortar joints are cracked, suitable lime mortar repairs will be undertaken by a specialist stone mason. The mortar mix in repair areas will exactly match the existing in terms of colour and texture. No ordinary Portland cement will be used.

Sample testing of the existing lime mortar jointing will be undertaken to confirm mortar selection.

If replacement stones/bricks are required, then they will exactly match the existing in terms of shape, profile, material, colour etc.

When structural defects such as cracks and bulges are identified, it is strongly recommended that the advice of a structural engineer with a knowledge and experience of older structures is sought. In all instances the causes of failure should first be correctly diagnosed in order to plan the appropriate repair works. Minor cracks can be repaired by carefully cutting out the affected areas, replacing fractured bricks, and repointing using a mortar appropriate to the wall.