Stone works Method Statements

Prepared by Del Stone, 22a Cudworth Street, London, Tel 020 7426 0771

Jos Torc Cleaning System

The stonework/concrete cladding will be cleaned sufficiently to removal all soiling and pollution deposits in order to minimize future decay and reveal any defects.

Only operatives experienced and trained for the task will carry out all work.

Following the results of cleaning trials the approved method of cleaning will be used subject to the CA's approval.

On Site Liaison: Managing Director - Mr Derek Hersey. Office telephone: 020 7426 0771. mob 07860 410596

Contract Manager - Mr Eric Staggs. Office telephone: 020 7426 0771. mob 07778 599046

Area Supervisor - Mr Steven Hersey. mobile: 07702 060337

Mark Jennings -mobile: 07966 232637

Working Hours - Days: 08.00 to 16.30 Monday to Friday. 08.00 to 14.30 Saturday & Sunday

1. Stone Cleaning

Method: Jos Cleaning System.

2. Survey
   Examine whole facade with CA and agree scope and methods of working to suit condition of the stonework and the level of carving detail.

3. Statutory Approvals
   Method statement for approval by CA, who will submit it to present local
   authority and/or English Heritage for approval if necessary. Liaise and provide technical advice if requested from the statutory authorities.

4. Adverse Weather Considerations
   Do not use frozen materials.
   Do not carry out any spraying of stonework when air temperature is at or below
   5 oC. If air temperature drops suddenly, cease all work and protect.

5. Protection
   Store materials under cover away from area of work.
   Protect all existing openings from water penetration, including ventilation holes.
   Prevent excessive run off onto untreated areas below.
   Prevent timber bearers, protective boards etc. from staining stonework in wet conditions by wrapping in polythene.
   Protect against damage and disfigurement to stonework during the course of the works.
   Ensure that arises and projection features are protected using securely fixed slats, boards, etc. Remove at Practical completion.
   Divert gutters and down pipes leading to soak aways in order to avoid solids blocking up the drainage system. Provide filters if necessary to prevent solids blocking existing gullies and main drains.

6. Reference Panel
   Select and agree with CA area for reference panel which is representative of the substrate, soiling and detail of the main works.
   Test area to be in a discreet position.
   Record test area and protect from further alteration.
   Record parameters by which test area has been obtained.
   Measures adopted as a result of the tests must be attainable and controllable in main works.

7. Sequence of Working
   Agree with CA sequence of all works and extent of area being worked on at any one time.

8. Operatives
   The cleaning of the building surface will be carried out by a capable operator who has received instruction from Stone health Ltd into the proper use of the JOS Cleaning System. Stone health Ltd maintain a record of the induction of each operator, together with subsequent monitoring information.

9. Jos System
   The material to be used in the JOS System must be that supplied or approved by Stone health Ltd. These are currently as follows;

i.	Calcite.	0.05 to 0.4 mm	3	- 3.5	hardness
ii.	Calcium Carbonate	0.05 to 0.4 mm	2.5	- 3	hardness
iii.	Unil - Fine	0.1 to 0.5 mm	6	- 6.5	hardness
iv.	Unil - Standard	0.1 to 0.8 mm	6	- 6.5	hardness

   Generally, preference should be given to the granules of lower hardness (i and ii) to minimise the risk of abrasion to the substrate and wear to the nozzle. However, the removal of the heavy soiling or paint may be best achieved by swift use of a harder granulate (iii and iv) rather than a prolonged use of a softer one (i and ii)
   Consult Stone health Ltd for materials required for special applications. If so required.

10. Working Methods Statement
    Clean large areas with the Standard nozzle. Use smaller Micro nozzle for ornate and less accessible work. Use Piccolo nozzle for delicate details, statuary, etc.Agree with the CA any following additional methods which may be required, subject to the constraints of any executed samples. Pre-soaking of surface contaminants with fine water spray allowing a dwell time of up to several hours to loosen deposits. This application should be restricted when the retention of hydroscopic components such as lime mortar is required. This is especially the case where the stability of internal surfaces may depend upon low residual moisture levels.
    Removal of paint by chemical or mechanical methods, e.g. solvent gels, hot air gun, etc. Beware of problems on confined areas due to poor ventilation, or conversely open areas where public access is difficult to control. use of a spatula/scraper tool. This may be useful for the removal of paint, and also for thick carbon, moss or tarry deposits before JOS work is carried out.

11. Plant

    Adjustment of the water and air pressure should be made whilst maintaining an appropriate distance of the nozzle from the work.
    The balances should be achieved on order to obtain effective cleaning without abrading the substrate.
    The compressor capacities required are:
    Standard nozzle: 2400 litres per minute minimum (85cfm)
    Micro nozzle: 1000 litres per minute (36 cfm)
    Piccolo nozzle: 300 litres per minute (10 cfm)
    The maximum working pressures are:
    Standard nozzle: 4 bar (58 psi)
    Micro nozzle: 3 bar (44 psi)
    Piccolo nozzle: 2 bar (29 psi)

Method Statement for:

Repointing stone joints prepared by Del Stone, 22a Cudworth Street, London, Tel 020 7426 0771

1. Rake out the joints to be re-pointed with a diamond bladed angle grinder. 100-125mm x 3mm size blades are most suitable.
2. The general rule of thumb is for the depth of the cut to exceed the width, but to be a minimum of 10mm. The width of the cut is approx. 4-5mm.
3. All the dust formed by the cutting should be swept away.The surfaces are thoroughly wetted using clean water and a sponge.
4. Various mixes are available for different locations, but for the plain ashlar walling a mix of fine stone dust & lime, and white cement. Ratio: 6:2:1 is recommended.
5. The mortar is pushed well into the joint using a point trowel.
6. All surface splashes are removed by scraping with the trowel blade
7. After 15 minutes the mortar has sufficiently set for the thorough cleaning with water and a sponge. This is brushed across the joint producing a neat flush joint.
8. All operatives will be trained in the use of abrasive wheels and will be equipped with the necessary personal protection equipment i.e. gauntlets, gloves, goggles and helmets.

Method Statement for Reconstituted Stone Repairs for:

Corinthian Urn Repairs

1. This type of repair is used for minor damage or for the part repair of larger stones
2. Scribe out the intended perimeter of the repair using right angles in vertical and horizontal lines where possible. Use the edges of the stone so that the stone is divided vertically rather than horizontally.
3. Cut through the perimeter using a small diamond bladed angle grinder to form a depth of 20-25mm.
4. Using a hammer and chisel cut away the area to be repaired forming a keyed rugged surface. A comb or clawed chisel works rest.
5. Ensure that the back of the repair area is sound without loose pieces and brush away all surface dust. An application of SBR Bonding Additive diluted 1:1 with water ensures a dust free surface.
6. Application of the repair mortar should be carried out before the SBR has completely dried.
7. The repair mortar shall be tested for colour appearance and texture by trying samples. These should be dry before conclusions are made.
8. A tried and tested mix is 6 parts silver sand, 3 parts sieved stonedust, 2 parts white cement and 1 part lime.
9. Apply by pressing firmly with a gauging trowel which has a rounded end for this purpose.
10. The mortar is applied in layers not exceeding 12mm in one coat. After each coat scrape the surface of the mortar after the initial set, usually this takes place after one hour at a temperature of approximately 10-20 degrees Celsius.
11. Additional coats can be applied repeating this process.
12. The mortar is then ruled with a straight edge and finished with a float.
13. The perimeter is cleaned away using a brush or sponge avoiding staining the stone with mortar

BROOKS / MURRAY

ARCHITECTS

8-10 NEW NORTH PLACE
LONDON EC2A 4JA

TEL 020 7739 9955
FAX 020 7739 9944

architects@brooksmurray.com

CLIENT:
Clarke Design and Build

JOB:
7 fitzroy square
& 11 Grafton Mews
London W1T 5HL

DATE: 20.11.13
SCALE: na

DRAWING TITLE:
Details in reference to condition 7

DRAWING NUMBER:
LB 07c 002