

DOFF System Complete

DOFF is a steam based stone cleaning system. It's unlike any other steam system and can achieve temperatures of up to 150°C at the nozzle end – making it a 'superheated water system'. The operator is able to vary the temperature and pressure to remove many different types of paint and biological matter.

What can DOFF be used for? The steam/superheated water will remove moss, algae, fungi and other biological matter and will also kill off spores. This means there's then no need to use a chemical biocide during the removal process or as a protection against further biological activity.

How does it work? DOFF cleans stonework and masonry using high temperature steam. Whilst the temperature in the system is high, the pressure on the surface being cleaned is very gentle and the volume of water is low. The surface is therefore not saturated and will be dry within minutes.

What is the DOFF most effective in removing? • Bird or vermin fouling • Algae, moss, and fungi • Grease and many others, all without causing any damage or disfiguring the substrate.

How does DOFF work? A normal water supply is taken through the pump into the Hotbox, where a range of temperatures of up to 150° C can be achieved. The low volume of super heated water and steam (5 litres per minute) is then fed through heat resistant hoses to special nozzles where a genuine 150° C is delivered. The surface being cleaned does not suffer any damaging pressure, thermal shock or deep saturation and dries within minutes. A range of different lances and nozzles are available.

OUTLINE METHOD STATEMENT

The following method statement was prepared prior to the works commencing and issued with the tender works package. This general method statement applies to all terracotta, brickwork and surfaces to the main façade.

Preparation:

1. Carry out a visual inspection of the terracotta and external surfaces with reference to the survey reports and schedules.
2. DOFF clean all surfaces / terracotta units in accordance with the cleaning system guidance.
3. On completion of cleaning work, all polythene protection and masking tape are to be removed.

Procedure: The basic procedure will be to use a heated steam at a temperature around 150 degrees centigrade generated by a DOFF steam unit manufactured by Stonehealth Ltd. Initially, cleaning will be attempted using DOFF generated super-heated steam only with a detergent being deployed if the degree of staining requires its use.

The pressure of the spray will also be controlled to cause the minimum amount of damage to any spalled surfaces. The work will be accessed from supplied sheeted scaffolding by the principle contractor. The procedure may be repeated if the surface finish has exceptional staining. All personnel to have received such training in low pressure/DOFF spraying from Stonehealth Ltd.

Resources: Personnel and supervisor using the Doff system to have been trained by Stonehealth Ltd, the manufacturers of the DOFF system. The supervisor to have had five years experience, and who is qualified with an NVQ Level II in Façade Restoration.