

## BUILDING CONSERVATION MASTERCLASSES MASONRY CLEANING

BC3D221 17-20 OCTOBER 2016 (3 day course)

Building cleaning has developed as an industry over the past forty years. During this period there have been failures and successes as the industry and specifiers have made mistakes and gained by experience. Even today, however, damage and disfigurement due to poor cleaning specification and execution is commonplace. The issue of BS Code of Practice No 8221 on Cleaning and Surface Repair and BRE digests 448 & 449 are important developments in the understanding and control of cleaning practices, but need to be coupled with sound practical instruction.

This course provides, over an intensive three-day period, a good understanding of techniques available for cleaning, paint removal and other surface interventions; this will enable sensible and informed specifications to be prepared with realistic costs. During the course participants will see demonstrated and will be shown how to use and apply a wide range of washing, mechanical and chemical cleaning techniques. Participants are encouraged to bring along photos and details of any specific masonry cleaning problems they might have or had, including if possible examples of the stone

Please remember to bring work clothes/overalls and shoes for practical sessions.

Course Leader: David Odgers, Director, Odgers

Conservation Consultants

Principal Tutor: Brian Klelund, Director, Tensid

UK Ltd

Sean Brennan, SMB Restoration Richard Cook, Sculpture Conservator

Jamie Fairchild, Director, Restorative Techniques

Ltd.

All students on this course will receive a copy of English Heritage Practical Building Conservation: Stone.

Recommended Reading:

English Heritage Practical Building Conservation: Stone, 2012, Ashgate Publishing

Ashurst N, Cleaning Historic Buildings, Volume 1

Substrates, Soiling and Investigation; Volume II Cleaning Materials and Processes, Donhead.

BS Code of Practice 8221 on Cleaning and Surface Repair.

## **OUTLINE PROGRAMME**

Day I Monday

Evening Discussion. Scope and compass of course

Day 2 Tuesday

Morning Lecture. Background and introduction. Historical context for cleaning and assessing

whether cleaning is required or beneficial. Types of substrate. The BS Code of

Practice on Cleaning and Surface Repair and its implications

Lecture. Soiling types (salts, stains, pollution, organic soiling) and their effect on limestone, sandstone, granite, marble, slate, bricks including gauged bricks, glazed and unglazed terracotta. Pre-cleaning survey. Range of cleaning methods. Trial cleaning

Afternoon

Lecture. A look at historical coatings and treatments and their interaction with masonry. Coating and paint removal – the reasons for & practicalities including

protection and containment.

Biological growths – identification, effects of and the ethics of removal

Lecture/Demonstration. Cleaning Methods I: Laser cleaning. How the laser beam is generated and the way that it can be used to remove dirt. Using the laser on site.

Case studies.

Day 3 Wednesday

Morning

Lecture/Demonstration. Chemical cleaning: theoretical basis, relevant actions/reactions and case studies. Using proprietary and purpose-made chemical systems; particular hazards to building fabric and personnel; safe and efficient use of hydrofluoric and acetic acid and EDTA based cleaners; use of sodium and potassium hydroxide based cleaners; ammonium carbonate and other poultices; pre-wetting, selecting dwell times; use of neutralising washes; specification

Lecture. Mechanical cleaning; hand-held abrasive blocks; systems based on compressed air and a range of abrasives with or without water; introduction to proprietary systems including the use of superheated water/steam; specification

Afternoon

Demonstration. Various cleaning methods

Lecture/Demonstration. Recent case studies including paint removal, abrasives, dry ice, steam. These will demonstrate how cleaning is carried out on real projects and highlighting how to choose between different options

Day 4 Thursday

Morning

Lecture/Demonstration. Water cleaning: using water in the form of flooding, fine and nebulous sprays, paper and clay poultices, water lances and steam guns; water, paper and clay packs for desalination; specification

Lecture. Surface treatments and coatings; choice of materials and their compatibility

and reversibility

Afternoon

Discussion and summing up Issue of certificates and depart.

Non-residential course fee £598
Fully inclusive residential course fee:
Shared bathroom facilities £754
Standard room with private bathroom facilities £814
Superior room with private bathroom facilities £874

## **HOW TO BOOK**

Please complete one booking form, or copy of form, per person per course and enclose a deposit for each course booked. On receipt of your booking, we will send all the further details you will need for your visit, including the course details and your final payment slip. Travel instructions will be sent to all students.

For further information about the course, please contact the Course Organiser: +44 (0)1243 818219 or cpd@westdean.org.uk

For further information about booking, please telephone the Bookings Office: +44 (0)1243 818300.

Website: www.westdean.org.uk