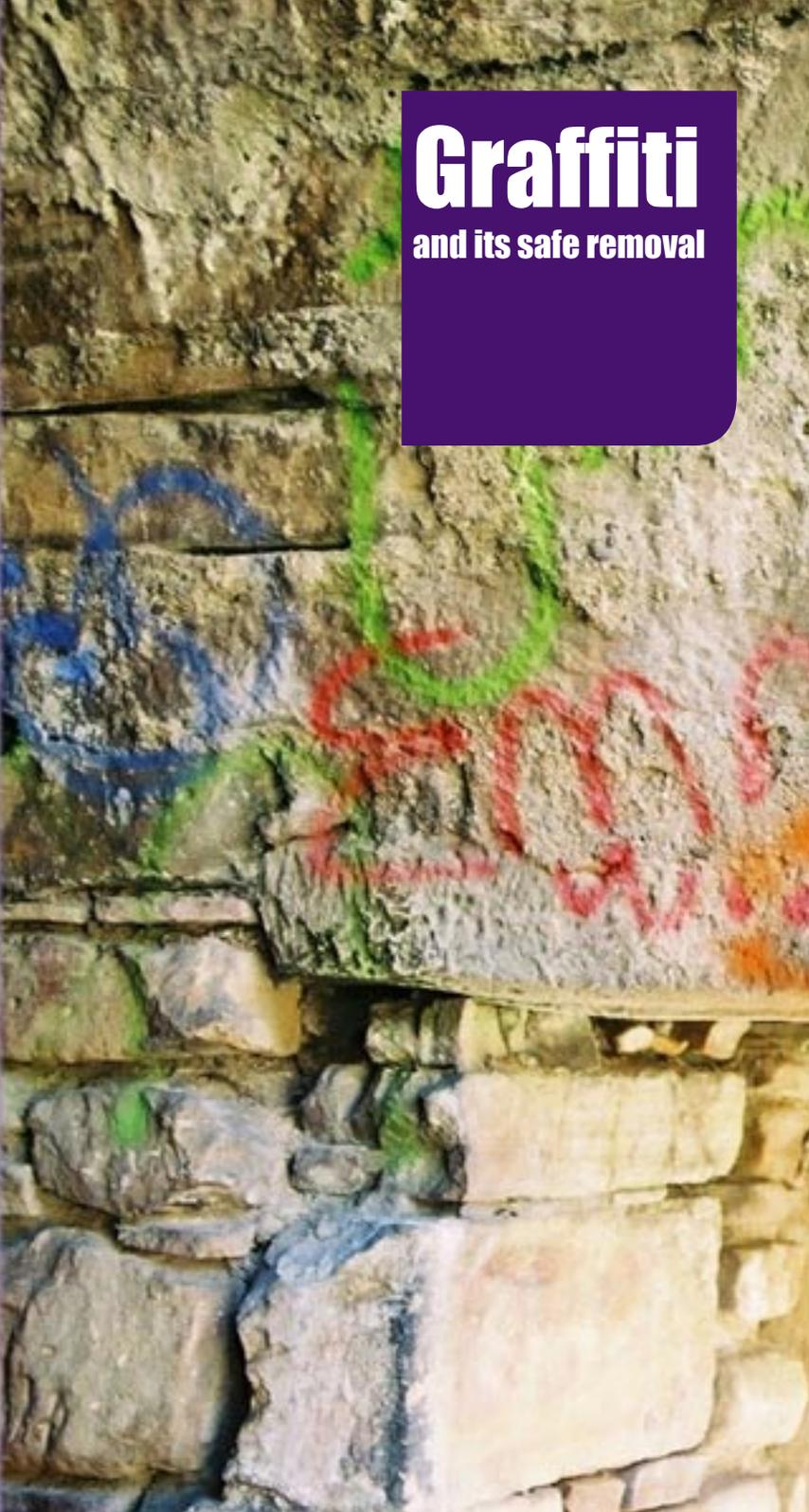


INFORM

INFORMATION FOR HISTORIC BUILDING OWNERS

Graffiti and its safe removal



What to do in the event of graffiti attack

The term graffiti derives from the Italian *graffio* meaning ‘scratching’ and can be defined as uninvited markings or writing scratched or applied to objects, built structures and natural features. Graffiti is a phenomenon which can be found on ancient structures around the world, in some cases predating the Greeks and Romans. Historical examples now have a significance of their own, and can throw light on the society of the period. Despite its long history, graffiti is a problem that has become particularly pervasive over the last fifty years as a result of the availability of cheap and quick means of mark-making. These include biro, felt and marker pens, correcting fluid and stickers as well as the ubiquitous spray paints.



It is usually considered a priority to remove graffiti as quickly as possible after it occurs. This is for two reasons: the first is to prevent “copy-cat” emulation which can occur rapidly once a clean surface is defaced. The second reason is that as paints, glues and inks dry-out over time they can become increasingly difficult to remove.

The owner of a building that has been subjected to graffiti attack should carry out the following –

- **Record Details**
- **Take Photographs**
- **Inform Police**
- **Check if cleaning will require consent**
- **Decide who will carry out cleaning**
- **Cleaning trials**
- **Cleaning of graffiti**
- **Take preventative measures**

Record details

Record details of the graffiti (the type of media used, the area affected, the type and condition of the surface it is on) and the time and manner of its execution, if known.

Take photographs

Photographs are useful to record graffiti incidences and may assist the police in bringing a prosecution. Such images are also required for insurance claims, and can be helpful to cleaning operatives to see the problem area before arriving on-site.



Inform the police

The police should be informed as there may be other related incidences occurring locally. An incidence pattern can identify possible culprits and stylised signatures or nicknames, known as “Tags”, may already be familiar to local police.

Check if cleaning requires consent

Local Authority Planning Department advice should be sought to determine whether graffiti removal will require planning permission and/or listed building consent. In scheduled monument cases, Historic Scotland’s Inspectorate can advise whether scheduled monument consent will be required.

Decide who will carry out cleaning

Having established that cleaning can take place, does the owner feel confident in carrying out the work themselves or should they seek professional help? The answer to this question is dependent on the individual, the scale of the graffiti, and the type and condition of the surface it is applied to.



Cleaning trials

Once clearance to clean has been established, cleaning trials should be carried out. These usually involve testing a range of methods and should be carried out on a small, unobtrusive area, if possible. Cleaning trials should always start with the least aggressive solution, usually water, and stop once a successful method has been found. Test results and methodology should be noted for future reference.

Cleaning of graffiti

Treatment of the area should be undertaken using the most effective method found in the cleaning trials. Care should be taken to comply with health and safety legislation with regard to both the protection of people carrying out the cleaning and of passers-by. Operatives should follow product guidelines in terms of application and removal, and wear the appropriate protective equipment. Measures must

be taken to ensure run-off, aerial mists, drips and splashes do not threaten unprotected members of the public.

Take preventative measures

If graffiti is expected to be repeated in a particular location it is wise to consider a removable, sacrificial, barrier-coating system as a form of preventative measure. This will not stop graffiti being applied but will make its removal much more effective and straight forward. Other preventative measures include neighbourhood watch schemes, improved lighting, CCTV, physical barriers such as gates and fences, and hard and soft landscaping. The crime prevention officer of your local police force may be able to advise you on measures to reduce your risk of a further graffiti attack.

Graffiti cleaning

Cleaning considerations

The type of cleaning required is dependent on two main factors; the type of media used to make the graffiti (e.g. spray-paint, felt pen, enamel paint, etc) and the type of material that has been defaced (e.g. stone, metal, wood, plastic, etc). The interaction of these factors must be considered when deciding on the best cleaning method. For instance, solvents that will remove particular paints or inks from metal may react with some plastics.

The type and condition of a stone, brick, concrete, wood or metal substrate may also determine what cleaning methods are possible. In some cases it may be advisable not to clean off, but to cover over. This may be an appropriate course of action where the substrate already has a covering of paint.

Removing graffiti from stone or other building surfaces may also remove the patina of surface grime and pollution products on the rest of the stone surface. This can result in a patchy appearance. In some cases the cleaned area can be graded into the surrounding masonry to give a more subtle tonal transition. Alternatively, in extreme cases, it may be preferable to clean an entire wall or elevation so that the finish is consistent.

Types of cleaning available

There are a variety of methods that are used to remove graffiti. These divide broadly into chemical and mechanical systems. Chemical preparations are based on dissolving the graffiti media; these solvents can range from water to potentially hazardous chemical “cocktails”. Mechanical systems attempt to abrade or chip the media from the surface, these include wet or dry air-abrasion systems (eg, wire-brushing, grit-blasting, etc). Abrasive systems can damage the underlying surface, particularly when used on brick or stonework.

In all but the most minor cases, the advice of specialists should be sought to ensure the most appropriate method is used.

The following table shows the appropriate types of cleaners for specific graffiti media. This information is for guidance only. Removal methods should be tested prior to full scale cleaning. Methods are listed with the least aggressive at the top of the table, and you should work your way down the table trying all methods likely to be effective on the graffiti media and substrate you have until a method is identified which removes the graffiti. Cleaning must stop if the action is causing damage to the substrate.

Action	Graffiti Media						Comments
	Unidentified Graffiti	Felt-tip/ Ball point	Paint	Lipstick	Wax Crayon	Sticky Labels	
1) Water	✓	✓	✓			✓	On a porous/permeable substrate, use of water only may cause dye etc. to soak more deeply into material. Use to identify felt-tip marker type.
2) Water & non-ionic detergent		✓		✓		✓	Gentle scrubbing with soft nylon bristle brush. Use non-ionic detergent on porous masonry. May cause dyes to soak more deeply into porous material.
3) Low-pressure steam & pencil sized nozzle						✓	Precise removal can be achieved without damage to substrate.
4) Warmed vegetable oil				✓			Apply with clean white cloth to absorb wax and pigment. In the case of porous stone substrates, may cause discolouration of the pore structure.
5) Oil or wax solvent				✓			
6) Petroleum-based solvent		✓				✓	On non-porous surfaces only. Gentle scraping of sticky label.
7) Proprietary graffiti remover (water-soluble)	✓	✓	✓				Generally less aggressive than solvent-based removers. Requires dry substrate.
8) Paint remover (typically methylene chloride) substrate.	✓		✓				Not suitable on painted substrate. Gentle agitation with soft nylon brush. Water-rinsable.
9) Proprietary graffiti remover (solvent-based gel or poultice)	✓	✓	✓	✓	✓	✓	Ensure health and safety precautions are observed. Some materials hazardous. Gentle abrasion of gels with soft nylon brush.
10) Bleach		✓			✓		Use only when other means unsuccessful. May bleach substrate material. Not recommended for porous stone. Testing on graffiti-free substrate required before use.
11) Low pressure water rinse	✓	✓	✓	✓	✓	✓	Use after all of the above methods.
12) Low pressure abrasive (e.g. micro-abrasive)	✓		✓				For porous masonry. Use only when all other methods have been unsuccessful. Carried out by specialist.



Protective equipment

Personal protective equipment (PPE) is required to use many solvents. This may vary from the use of rubber gloves, to full protective gear including hand and face protection in case of splash-back, and a solvent mask to prevent inhalation. Reading the manufacturers instructions and 'Technical Data Sheet' for the product (available free on request from all chemical manufacturers) will enable the correct protection to be used.



Protecting the environment

Often the products developed for paint removal are hazardous to the environment and the resultant post-cleaning residues or run-off must be disposed of in a specific way. The Technical Data Sheet (see above) for the product will give the recommended means of disposal. Alternatively, contact the manufacturer directly for advice on this subject.



Further reading and information

- *The Treatment of Graffiti on Historic Surfaces*, TAN 18 (1999)
ISBN 1 900168 81 2 (Available from the Historic Scotland Conservation Bureau, address below)
- *Stone Cleaning, a Guide for Practitioners*, Historic Scotland and Robert Gordon University (1994) ISBN 0 7480 0874 8 (Available from the Historic Scotland Conservation Bureau, address below)
- *Guidelines on Stone cleaning, Paint Removal and Graffiti Treatment*, Edinburgh City Council, (October 2003). Document can be downloaded at - http://download.edinburgh.gov.uk/DQ_Guidelines/Stonecleaning_etc.pdf
- *Practical Building Conservation, Volume 1 - Stone Masonry*, John and Nicola Ashurst (1989) ISBN 0 291 39745 X
- *Getting Rid of Graffiti: a practical guide to graffiti removal and anti-graffiti protection*, M.J. Whitford (1992) ISBN 0 419 17040 5
- *Old lead painted surfaces- a guide on repainting and removal for D-I-Y and professional painters and decorators*, The British Coatings Federation, Document can be downloaded at – <http://www.coatings.org.uk/files/Technical/Old%20Lead%20Painted%20Surfaces%20booklet.pdf>
- The Anti-Graffiti Association, PO Box 17, Banstead, Surrey SM7 3WR
E-mail: info@anti-graffiti-association.co.uk
Website: www.anti-graffiti-association.co.uk
- Health and Safety Executive Infoline, Caerphilly Business Park, Caerphilly CF83 3GG. Tel: 0845 345 0055
E-mail: hse.infoline@natbrit.com Website: www.hse.gov.uk
- Historic Scotland Conservation Bureau and Technical Enquiry Service, TCRE, Historic Scotland, Longmore House, Salisbury Place, Edinburgh EH9 1SH Tel: 0131 668 8668.
E-mail: hs.conservation.bureau@scotland.gsi.gov.uk
- Historic Environment Grants Team, Historic Scotland, Longmore House, Salisbury Place, Edinburgh EH9 1SH. Tel: 0131 668 8801
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- Historic Scotland Inspectorate, Historic Scotland, Longmore House, Salisbury Place, Edinburgh EH9 1SH. Tel: 0131 668 8600
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