

Flooding in Historic Buildings

Dealing with flood damage quickly and effectively is vitally important. Materials and finishes of historic buildings all respond adversely to flooding but the steps described below can be taken to limit or prevent further deterioration. Information about specific historic buildings and guidance on whether remedial treatments and repairs require consent should be sought from the Council's Conservation Officer.

To minimise further damage and consequent repair costs it is necessary to **dry the building out slowly** - too quick and timber may warp, twist or split, salts will cause damage to stone and plasterwork, paints may peel and flake. Saturated timber is also vulnerable to rot through fungal attack if the water is trapped in the wood and cannot escape. As long as the wood is allowed to air-dry after flooding problems should not occur.

By using some or all of the following steps, even if the water has not fully receded, you can begin the drying process:-

- Clear mud and salt from the bases of external walls
- Remove covers and rubbish from airbricks
- Open all the doors (including built-in cupboards), windows, rooflights and trap doors (be careful to place a barrier round for safety)
- Remove carpets and underlays, vinyl, linoleum and other impermeable floor coverings and hardboard or medium density fibreboard sheets from floors
- Move furniture and pictures away from walls
- Lift floorboards to ventilate underfloor spaces even if the floorboards are themselves dry as this will aid drying in damp areas below. The easiest ones to lift are those that are butt-jointed or already altered. Lifting tongue and groove is difficult without damage and will need to be done by a carpenter or joiner.
- Wet floorboards should be lifted, left on edge and wedged apart to dry. Safety note: keep people out of rooms where floorboards have been lifted.
- Strip non historic wall coverings
- Remove and discard flood-soaked insulation material.
- Check for hidden voids and awkward spaces for example behind panelling, box shutters and linings to door and window reveals, under stairs and inside cupboards. Contact the Conservation Officer for advice with these.

It may be necessary to 'open up' the structure of the building to check for trapped moisture, for example, behind panelling. On no account should a building be 'stripped out'. Opening up should only be done selectively and in consultation with the Conservation Officer.

Where natural drying alone is not sufficient to dry out a building it may be necessary to **assist the process** by use of extractor fans, space heater and/or dehumidifiers. Some specialist companies offer other solutions. Expert professional advice should be sought on controlling assisted drying to avoid causing damage by over-drying. The Conservation Officer will be able to advise you.

It is rare for the structural integrity of an historic building to be compromised due to flood damage. Signs to look out for:-

- Bulging or dislodged sections of masonry caused by heavy impacts or excessive pressure
- Undermined foundations, especially at corners
- Cracks greater than 6mm (1/4 inch) above doors and windows and at ends of facades
- Any major leaning or tilting or subsidence of the structure not evident before the flood

Where there are signs of structural damage please contact Building Consultancy for advice. For listed buildings the Conservation Officer should be contacted as well. Architects, building surveyors and structural engineers with experience in the consolidation and repair of structurally damaged historic buildings can be called to help. They may be able to propose remedial solutions to avert the need for dismantling and rebuilding.

More detailed advice and further information is available in the English Heritage advice note 'Flooding in Historic Buildings', available from English Heritage at www.english-heritage.org.uk or free by post from customers@english-heritage.org.uk or English Heritage Customer Services at P.O. Box 569, Swindon, SN2 2YR



Contacts:

Conservation Officer: Dave Page 01386 565327
Building Consultancy: 01386 565384