

A Guide to Damp-Proofing and Basements

This leaflet provides guidance on “where” to go and “what” to do when considering the recovery or improvement of a basement.

Damp proofing in basements

As the need for accommodation increases many property owners are considering the conversion of formerly uninhabited areas of houses, such as basements into self-contained dwellings for letting or sale.

Bath and North East Somerset Council welcomes good schemes of conversion to make effective use of parts of buildings which might otherwise be wasted and unoccupied.

However, basements and sub-basements were not originally intended for permanent occupation and were generally built to a lower standard than the rest of the property.

So it is of greatest importance that if the basement is to be converted permanently into someone's home, all of the inadequacies of the original construction are removed as far as possible.

Dampness is the most common inherent defect of basements and sometimes the most difficult and expensive to remedy properly.

The problems identified

Many older properties of say Georgian or Victorian construction were built with rooms totally or partially below ground.

These were intended for use as a work place such as a kitchen, scullery or laundry and included cellars but were not designed originally for permanent habitation.

As a working area such as below ground rooms were generally adequate and problems of dampness were of limited concern.

Being part of a larger house they were not occupied for sleeping or subjected to intermediate heating as would occur when converted to a self-contained dwelling.

Particularly of concern are problems associated with earth retaining walls and garden walls, arches and other structures which abut the building, usually at basement or sub-basement level.

The presence of these structures can encourage moisture from the ground to move across the walls into the dwelling at any level. The moisture can be forced through the walls under considerable pressure and in extreme cases running water is present.

More commonly, the presence of structural dampness results in a visible brown staining of decorations, bulging or crumbling plaster, warping or splitting of timber skirtings and door frames etc., and often a distinctive musty smell associated with mould growth or rot to timbers.

Comprehensive and effective damp-proofing of such structures becomes critically important where a basement (possibly with sub-basement) is being converted into a self-contained flat. The method chosen should be capable of lasting for the life of the dwelling.

The Law

Any dwelling formed by the conversion of basement rooms must be suitable for human habitation and conform to certain basic requirements for new dwellings.

In the past 'Closing orders' and 'Undertakings' have been served on basements preventing their use. Before these notices can be lifted the dwelling will have to be inspected by the Council to determine if the improvements are adequate to allow future occupation.

It should be remembered that if a basement dwelling is not adequately treated and dampness re-emerges it may become unsuitable for human habitation; in such cases where significant hazards are identified, basements may be prohibited from use as residential dwellings preventing future occupation until satisfactory remedial works are carried out.

Besides dampness, there are several other hazards particularly relevant that should be considered when renovating basements and sub-basements, these include: 'excess cold', 'lighting', 'excess heat', 'collision and entrapment' and 'structural collapse and falling elements'.

Executing the works

It is recommended that all treatments be carried out by a specialist damp proofing contractor. Where works are to be carried out by a sub-contractor it is wise to ensure that the sub-contractor has received the specialist contractor's survey and report and that all works will be executed by him under the direct supervision of the specialist contractor and strictly in accordance with that report.

Guarantees

If possible it is recommended that a 30 year guarantee is obtained against re-emergence of dampness, due solely to the failure of the damp-proof membrane or associated injected damp-proof courses, and of structures and finishes which are damaged as a direct result of failure of the damp-proofing treatments.

It is advisable that property owners satisfy themselves that the installer's guarantee is independently underwritten. It is also wise for the property owner to determine that the installer's guarantee (and any underwritten protection) provides for re-treatment of failed d.p.c. and d.p.m. and also reinstatement of damaged areas and incidental expenses.

Arches and barrel vaults

Generally these areas are not considered to be capable of being made fit for human habitation.

This is because the permanent removal of dampness is not possible due to the nature of the construction or the likelihood of vibration and future structural movement as a consequence of their proximity to footpaths and roadways.

Low ceilings heights, absence of natural lighting and ventilation and poor noise insulation are additional defects which result in general prohibition on the use of arches and vaults for habitation. Where property owners propose extensive damp-proofing works in these areas with a view to including them within the dwelling it is advisable that they refer to one or all of the sections listed at the end before works are executed.

Where to go for further advice

Housing Services

Where closing orders or undertakings are in place preventing habitation of part of a property, members of the Housing Standards Team are available to offer advice.

Listed Buildings

Many of the basements being converted to self-contained dwellings form part of a building which is listed as being of architectural or historic interest. In all cases involving the alteration of such properties, or parts of properties, the Historic Environment Team must be consulted prior to works commencing.

Approvals

It should be remembered that conversion of any building into separate dwellings requires planning approval and that all structural alterations and new construction require approval under the Building Regulations.

Contacts

- Housing Services: 01225 396418
- Planning and Development Services: 01225 394041
- Building Control: 01225 477517
- Historic Environment Team: 01225 477632

Specialist help

Treatment of dampness in basements and vaults is a specialists operation and it is recommended that a specialist damp contractor be engaged to advise on works required for renovation.

Given that effective damp-proofing of some basements can be complex and may involve extensive alterations or new construction, owners may wish to consider the advisability of employing an architect or surveyor to oversee the scheme.

This document/publication/leaflet 'A Guide to Damp Proofing' can be made available in a range of community languages, large print, Braille, on tape, electronic and accessible formats from the Information Officer (information_officer@bathnes.gov.uk) - Tel (01225 477983) Minicom (01225 477815)