



Centre for
Alternative
Technology

DAMP PROOF COURSES

An article taken from our membership magazine **Clean Slate**

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What is a damp proof course, and what does it do?

A damp proof course (or DPC) is a layer of material between the foundation and the rest of the building which prevents water from getting into the building fabric.

In a new building it is standard and cheap to fit a DPC during construction. Traditionally these were two overlapped layers of slate or lead, though some old buildings do not have them at all. Modern buildings tend to use bitumen or polythene based materials (you can get recycled plastic DPC). Land drainage around a building is also important.

Do I need a new one?

Timber frame buildings with minimal foundations will only need small amounts of DPC material. It is important to fit a DPC here as timber can soak up moisture (this being how trees live!) and will rot if not able to dry out easily. However whether masonry or brick buildings do the same is open to debate. There is a growing school of thought that 'rising damp' is an urban myth (or a complete con) and that retrofitting chemical DPCs can be a waste of money, quite apart from the environmental impact of the chemicals used.

Famously, Mike Parrett of Lewisham Council in London has investigated over 5000 buildings and has never found a sign of rising damp. In every case, damp was attributable to something else.

Investigative journalist Jeff Howell comments "*if you invite a damp-proofing company to inspect your home for dampness problems, you should not be surprised if they 'discover' its existence. That's how they make a living.*" He also identifies the meters usually used to test for dampness as inaccurate. To accurately test for moisture, you have to do a more time consuming and costly drill test. See Jeff's website (listed below) for more myth busting facts and figures.

If you have an expensive DPC fitted and it doesn't solve the problem you would think you'd be covered by the guarantee. Not necessarily! A subsequent drill test which shows that there's no 'rising damp' can be taken to indicate that the DPC has worked - you just have some other problem (which of course may have been the case all along!)

So what should I do?

Well first check your roof, gutters, pointing and ground levels (or get a building expert to do it). Dig out anywhere where the ground level is higher outside than in. In some cases, digging down 200-300 mm and putting in stones or gravel will help drainage around the site. Fixing these problems will cure most damp problems.

The other possible cause of damp is condensation (which generally occurs lower down walls where it's coldest, again looking like 'rising damp') in which case you also need to look at your heating and ventilation systems.

If walls have been affected by long term damp even when the problem has been solved it will usually involve re-plastering internally as the original plasterwork will be affected by hygroscopic salts which could result in continued damp problems. And bear in mind that the building can take up to 12 months to dry out.

There can be a problem if the DPC has been bridged, i.e. with render. Water can potentially move up the render where it can't move up the brickwork or masonry. This could also feasibly cause problems with frost damage. DPCs must extend through the full thickness of the wall, including pointing, applied rendering or other facing materials.

A side effect of retro fitting DPCs is that often in older properties, original lime based plaster (breathable so allowing moisture to move through it, and flexible) is replaced with strong cement renders. This can cause serious cracking problems at the point where the old plaster meets the new. Make sure you replaster with lime or a weak cement mix.

But I've been told I must fit a DPC...

There is a concern that you have to fit DPCs to satisfy mortgage companies. We contacted some to see what they said:

Graham Wood of the Norwich and Peterborough Building Society: *"We do not insist on the installation of a modern DPC in older properties if there is no evidence of a damp problem."*

Presumably this means that if you can identify the cause of any damp such as gutters/roofs etc and solve them they would not require a DPC.

He also stated that they were happy to accept environmentally friendly materials such as slate and understood other

companies worked on the same basis (it is possible to retrofit slate DPCs, if expensive!)

The Ecology Building Society say: *"If a property requires damp proof in the course of the renovations, and a borrower requests our advice, we put them in touch with the AECB"* (see link below).

(NB: The AECB suggested we look at Jeff Howell's website!)

And if you're convinced you have rising damp? Get a proper drill test done by an independent surveyor.

If anyone has any relevant experiences to contribute please let us know!

Contacts:

Jeff Howell's website

www.ask-jeff.co.uk

Includes advice on the best way to care for buildings, without paying for unnecessary building work, e.g. for damp, woodworm, and dry rot.

Dampbuster (Mike Parrett's website)

Web: www.dampbuster.com

Includes a small photo gallery of damp problems, and details of the books and DVD's Mike has published on the subject.

Association for Environment Conscious Building (AECB)

0845 456 9773; www.aecb.net

Visqueen Building Products

Recycled polythene damp proof membranes.

Tel: 01993 779911

Web: www.visqueenbuilding.co.uk