How to green up your home

Part 2: Getting the basics right – dry boots, a warm coat and a good hat.
There are three things worth getting right in any house: keeping it dry, reducing heat loss and minimising draughts. Although they might just seem like useful property maintenance tips each will help to reduce waste, reduce carbon emissions and reduce the toxicity of your home, helping to make it greener in the long run.

Let’s start at the bottom and work our way up.

Dry Boots

Houses get wet – especially in some parts of the UK. The trick, whether you’re in a new house or an old one, is to make sure that they dry out once it stops raining and there are a couple of things you can do to help this process. In wet weather water will accumulate around your house. If it can’t drain away your house will slowly become damp through absorption by the building materials and by evaporation of the water into rooms, which could cause cosmetic and structural damage as well as major health problems (which we’ll cover in a later article).

So how do we stop this? Well, the very first thing to do is find out where the water is coming from and then help it drain away quickly. If the nearby ground slopes towards your house you might have a lot of water to deal with when it rains hard, so consider digging a ditch or installing a land drain between the slope and house that can take away a good proportion of surface water.

Be careful and considerate about where this water drains to! Having tarmac, concrete or paving right up to the edge of your house is also a really bad idea as it creates an impervious layer that stops water draining away quickly. This situation can be improved by clearing a 12” wide strip, at least 12” deep, around the outside of your house and filling it with clean, rounded gravel.

Injection DPCs, timber treatments and other so-called ‘specialist’ damp treatments for houses never, ever tackle the cause of a damp problem – they tend to simply move dampness elsewhere and may fill your house full of chemicals. If you understand the problem then you can save yourself the hassle and cost of such temporary fixes.

A Warm Coat

Little or no insulation + lots of draughts = high heat loss (and high heating bills).

What’s less obvious is that your house may lose as much heat through draughts as it does through uninsulated walls or roofs, and that draught-proofing is the most cost-effective way of reducing heat loss in buildings. It is also one of the easiest things you can do yourself.

There are two things to remember: i) do not rely on squirty foam as it’s pretty toxic, not flexible and makes a mess; ii) draughts are not the same as ventilation! The references at the end offer practical guidance on where draughts will come from and how to tackle them.

Once you’ve tackled this it’s time to do as much insulating as is practical. If you have a loft then this is a good opportunity to have a clear out and see how much insulation is up there. It should be very neatly laid out...
and at least a consistent 14” (35cm) deep across the whole loft. Energy companies are legally obliged to fit insulation, free of charge, in some of their customers’ homes, though this is coming to an end so do call up to see if you’re eligible.

We usually advise against installing cavity wall insulation: the cavity exists to separate the wet outer skin from the dry inner skin and filling it up might lead to problems in the future - especially if your house is exposed to rain for long periods. Wet walls lose more heat than dry walls. (Think how cool wet skin feels when you blow over it.)

If you’re thinking about insulating your outside walls then speak to an architect who knows what they’re doing as it takes skill and understanding for it to be effective.

Windows and doors, which can make a massive difference to heat loss and draughts, are covered in a separate article.

A Good Hat

Your roof is your first line of defence against our precipitous climate and it’s worth remembering that every missing tile or slate on your roof is going to create a separate leak, which may eventually cause damp in your walls or ceilings if unchecked.

Next, think about the condition of your overhangs (the eaves) and verges (the bit of roof that sticks out past your gable). These often have ventilation slots that allow fresh air into lofts or between rafters, which, in turn, keeps them dry. Make sure these are free of cobwebs or insects’ or birds’ nests. If you can see discolouration or water staining on the soffits of the overhangs or verges this is a sure sign that you’ve a leaking roof or inadequate ventilation that needs checking and fixing as soon as possible.

Cracks in gutters and downpipes, or missing sections, will cause staining down the outside of your wall and create damp inside; inadequate supports for gutters or pipes will cause leaks at joints; gutters and downpipes that are too small for the job will overflow and cause damp problems. Although cheap and readily available, plastic gutters and downpipes are weak and have questionable environmental impacts. If you have cast iron it’s worth repairing them. If not then aluminium or galvanised steel are more benign and durable alternatives.

Conclusion

The brevity of this article means the advice offered above is fairly general but, together with the references, it should help you understand the basics of how to keep your house warm and dry. In the next issue we’ll look at indoor air quality, moisture, ventilation and health effects of some common building materials. Although having a dry, warm house is important we spend, on average, 90% of our time indoors so it makes sense that these places also help keep us healthy.

Further information:

- Historic Environment Scotland’s ‘Inform’ Guide on Damp: Causes and Solutions
- ‘Greener Scotland’ & ‘Energy Savings Trust’ have practical information on draught-proofing and insulation.
- www.maintainyourbuilding.org.uk has guidance for general maintenance of your property, whatever its age or style.

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