

Greening up your Apartment?



Sebastian Church FCA 2014-10-25

You live in an apartment and you want to save money by making your home more energy efficient (and reduce your CO2 emissions at the same time). So what can you do and what can't you do?

Firstly if your property has been built or converted within the last 15 years most of the easy/cost effective gains will already be built in. As such improving your homes' energy efficiency will be limited and more a matter of personal choice than any obvious financial gain.

If your home is older (particularly if it does not comply with the 1992 building regulations) the list of what is most effective runs something like this:

1. Loft insulation - if you live on a top floor,
2. Double/secondary glazing
3. Modern boiler
4. Cavity/secondary wall insulation,
5. Other (including solar panels and heat pumps)...

Loft Insulation

Loft Insulation is a must, it is cheap, easy to do and makes a big difference (where a loft exists). Some apartment buildings have flat roofs and some have pitched roofs with top floor apartments inside, these will not be suitable for loft insulation – though secondary ceiling & wall insulation will still be very effective.



Assuming there is a Roof Space (loft) the next question is “who does it belong to?”. Usually these spaces are owned by the freeholder and are maintained by the Service Charge. If this is the case (you can check in your lease or ask your property manager) then you will need to ask your property manager to arrange for the loft insulation to be undertaken.

If you live in the top floor apartment and the roof space is part of it, you should get the space above your home insulated as soon as possible and watch you heating bills drop. This is easy and cheap to do, can be undertaken as a DIY project, or can be undertaken as part of the “Green Deal” by your energy supplier (it might even be free).

You will need to have at 270mm of insulation to get the most out of it. This will usually involve two layers of the insulation material (of standard thermal quality) the first should be aligned between the rafters the second across the rafters at 90 degrees to the first. If you already have 100mm it is still worth adding the additional 170mm as this will save much more energy.

Don’t forget, if you are unsure about who is responsible for the space it is always best to check with the freeholder or your property manager in advance of undertaking any work.

Double Glazing (and Secondary Glazing)

After Roof insulation Double Glazing is the most important energy efficiency improvement you can make, though it is not cheap it will save you a lot of money and will add value to your home as well. In the long run it will definitely be worth the investment.

In properties that are not “Listed” or in a “Conservation Area” double glazing will be the best approach. However, the new windows will require “permission” as an alteration to the structure of the building. Most freeholders, delegate the granting of this “permission” to their Managing Agent. The key parts of the “permission” are that the windows are sympathetic to the design of the building (i.e. match the rest of the building’s windows etc.) and are installed by a FENSA registered installer.



If you live in a “Conservation Area” or your building is “Listed” you will require planning permission and/or listed building consent as well as a “permission”.

In some “Listed” buildings and in some “Conservation Areas” you will not be able to get planning permission and/or listed building consent for new double glazed windows. In which case you should instead fit good quality secondary glazing (a second sheet of glass covering the whole window frame on the inside of the window). As this is within your apartment and does not affect the structure you will not need to ask for planning permission or “permission” from the freeholder or Managing Agent but you might still need the approval of the conservation officer if your building is listed.



Modern Boiler

A new boiler, that replaces one that is more than 10 years old, is likely to be about 50% more efficient. For smaller apartments a “combi” boiler will usually be suitable, these remove the need for a separate hot water cylinder, and if you currently have a hot water cylinder can free up valuable cupboard space. Larger apartments (with more than 1 bathroom) may want to retain their hot water cylinder and just replace their existing boiler with a modern condensing boiler.



When it is possible to fit the new boiler directly into your existing plumbing and ventilation you will not need permission from your Managing Agent or Freeholder to carry out the works. Always get at least two quotes from reputable installers. Don't believe the installer who tells you he can't use your existing plumbing and ventilation without a second opinion, it is maybe just the boiler he wants to sell you that does not fit your current plumbing and ventilation.

Some modern boilers will require alterations to the flues. If this involves making or changing holes in the exterior of the building or adding exterior pipework you will need to get the Freeholders permission before undertaking the works.

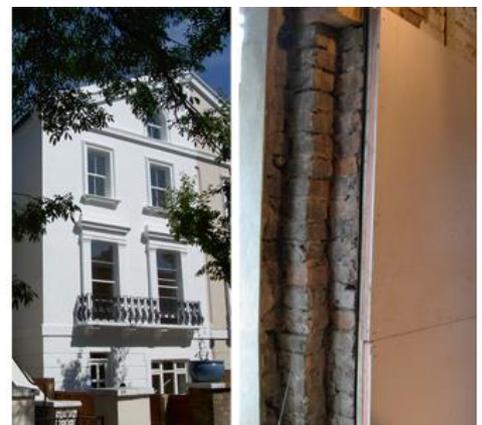
Some modern boilers require larger diameter gas pipes than have been installed in older buildings. It is very unlikely that you will get the Freeholder's permission to mount new gas supply pipes on the outside of your building. Apart from the ugly aesthetic of lots of pipes on the outside of your building, Insurers have indicated that it will have an effect on yours and your neighbours building insurance cost.

Your lease will give you a right (subject to permission and conditions) to run new pipes through the internal common parts, but these will have to be either "boxed in" or channelled into the fabric of the building. For an individual apartment this will make the cost of the boiler replacement considerably greater (and maybe not very economic if you are on the top floor). The alternatives are to find a boiler that can be fitted to the existing pipe work or get together with your neighbours and all have new boilers fitted at the same time, this will reduce each residents' share of the cost of the new pipework.

Cavity/secondary wall insulation,

Cavity wall insulation is not a popular product with most Freeholders, though it is easy to install it is difficult to remove and can cause significant problems. Properties with cavity walls were designed to "breathe" and the air space (the cavity) was often an integral part of the design stopping damp and other problems. Cavity wall insulation is also not something you can do just to your apartment as such it is unlikely to be a good solution for making your home more energy efficient.

The better alternative, in an apartment, is secondary wall insulation. This will involve fitting insulation onto the inside of your apartment walls and then redecorating over the top of the insulation. You will only need to insulate the walls of your apartment that face the outside of the building. As the work is all done within your apartment there is also no need for any permission in respect of these works from the Freeholder or Managing Agent, but if your building is "listed" you will need permission from the local conservation officer.



Other (including solar panels and heat pumps)

Before looking at expensive projects make sure you have done the simple things; so change all your light bulbs for low energy ones, check the energy ratings of your fridge/freezer and washing/drying machine and if you have white goods that are more than 10 years old the newer versions will often be 50% more efficient.

Make sure your heating is only on when you are in your home. If you work, have it come on half an hour before you get up in the morning and turn off as you walk out the front door coming back on again half an hour before you get home and turning off when you usually go to bed. Turn the temperature down 2 degrees and put a jumper on.



Put radiator reflectors behind your radiators (particularly on external walls) so more of the radiator's heat warms your rooms rather than the planet - a pack of 5 can cost as little as £30.

Draught exclusion is very worthwhile, front doors should anyway be fire resistant and draughts are a tell-tale sign that your front door needs some improvement. Front doors should be up to "FD30" standard (i.e. able to withstand a fire for 30 minutes). This requires the door to be fitted either in a frame with a recessed overlap or intumescent seals (which in themselves will exclude a draught). If you have a letter box it should have a spring loaded front and rear cover, again this is a requirement of Fire Regulations but will have the added



benefit of making it draught proof. If you have not yet fitted double/secondary glazing fitting draught excluding foam around your window frames will make your home much cosier in the winter, though it is no real substitute for getting the glazing sorted out.

Solar panels, heat pumps, and biomass boilers are all the rage in large new build developments. Most of these ideas are not really viable for the individual apartment

owner, but where you own a share of your freehold or control the management company they are certainly worth investigating.

In simple terms don't do anything until you have done the basics; double glaze, insulate the roof (and then insulate your exterior walls if you still need more insulation), stop the draughts and improve the efficiency of your white goods and boiler. All of these actions will improve both the EPC (energy performance certificate) rating of your apartment. EPC's are now a requirement for both selling and renting your apartment. It may be that better rated properties will be easier to rent and to sell.