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|  | DIY Energy Saving Measures for Waterside Residents |



COLD WARM HOT

Thermal imaging surveys throughout the Waterside estate have highlighted common areas where homeowners can implement relatively straightforward measures to save energy and increase thermal comfort. The following is a list of areas for consideration, together with suggestions for remedies and possible suppliers. We will be grateful to hear from any of those who have had thermal imaging surveys and used the results to make changes, however small, to their homes, and would like to collect any new information or advice which you may have - please contact kay@kaygordon.co.uk

There is a lot of benefit in fitting thermostatic valves on all (but one) radiators in your house, and keeping doors closed so that comfortable temperatures are maintained in specific zones.

Plot your energy usage through <http://www.imeasure.org.uk/> a free online tool to help you measure and understand how you use energy in your home.

Remember that a 1 mm gap all the way round a door adds up to the same area as an A4 piece of paper – like a massive ever-open letter-box – so it is well worth paying attention to draught proofing. Patio doors are a weak point in Waterside, watch out for keyholes and gaps.

**Draught excluders**: available in a wider variety of styles and profiles, including some V-shaped tape with a profile which widens when the wind blows across it: see <http://www.stormguard.co.uk/pdf/fitting/ADS/VSEAL.pdf>

Using Q-Lon products). The Retro 21-L is around the edge (on the inside) of French doors: the plastic bit is nailed into the doorframe, and when the doors close the rubberised bit squashes against the door, creating a draft-proof seal. The FS-Strip is nailed to one door on the upright, and when shut presses against the other door and creates a draft-proof seal.

<http://www.draftproofing.com/schlegel-Q-Lon.html>

For advice on fitting see: <http://www.environmentcentre.com/wp-content/uploads/2013/10/2_Draught_proof_detail_new_branding.pdf>

**Letter boxes**: try Ecoflap: <http://www.ecoflap.co.uk>

**Key holes**: get keyhole cover: hardware store

 **Thin external doors**: decorative front doors and kitchen doors often have sections which are much thinner, and these show up very clearly in thermal images. To decrease heat loss, add panels using timber from builders merchant. An additional door is possible in some designs (see 12 Merrivale Square)

**Cold front door**: use curtain and portiere- widely available online (e.g. <http://www.jim-lawrence.co.uk/productnode/4904/portiere-rods>)

## Ventilation fans and other appliance holes

**Ventilation fans**: can often cause uncontrolled back-draughts- investigate use of extract fans with back-draught preventers (e.g. <http://www.xpelair.co.uk/premier-dx400-and-cf40-centrifugal-extractor-fans.html>)

Similarly remember to insulate around any other external holes, e.g. for tumble driers etc. One effective method is to use polyurethane foam – see <http://www.energysavingtrust.org.uk/Insulation/Draught-proofing>

## Radiators

1. Although we have cavity walls in Waterside there is still benefit in preventing heat escaping directly through the wall, which has very modest insulation inside. You can just glue or tape normal foil onto the wall behind a radiator, or invest in marginally better solutions such as rolls of thin insulated foil (e.g. <http://reviews.homebase.co.uk/1494-en_gb/694573/reviews.htm>) which can be glued in place with wallpaper glue or hung from a bamboo cane, to light-weight contoured ‘silver’ panels at a cost of £5 - £10 a radiator (e.g. <http://www.heatkeeper.co.uk/>).
2. A shelf above the radiator helps to spread heat back into the room – but keep curtains clear of the radiator!.

## Chimneys

If you have an open chimney you can reduce heat loss enormously with a chimney balloon or chimney sheep. The balloon plugs your flue leaving a small flow of air required for ventilation. These are available online at <http://www.chimneyballoon.com/> and <http://www.chimneysheep.co.uk/> Alternatively, make your own from a bin liner filled with scrunched newspaper (but don’t forget to remove either of these if you have a fire!)

## Loft hatches and catflaps

Use draught-proofing and extra insulation around and above loft hatches.

 For catflaps consider a double flap or a magnetic/chip operated flap (<http://www.staywell.co.uk/Intl/UK/Products/Pet-Porte-Smart-Flap.aspx>)

## Windows

Waterside original windows have a lot of wood in their construction and a very narrow gap between the double glazed glass panes, without the gas filling that is now standard or any special frame or finishes to control heat gain/loss. This is a major cause of heat loss for all homes.

 For double glazed windows which are old, blown or seem to be losing more heat than expected, consider getting advice on replacement of the glazed units (rather than the entire window) from local glaziers eg. [http://windowgeeks.co.uk/](http://windowgeeks.co.uk/main-map-page/?region=south_east) 01865 575 082

New double or triple glazing adds tremendously to the comfort of a house but is a major financial outlay - (worth considering if you need to replace a window). Secondary glazing is helpful and comes in many different forms, the cheapest being shrink wrap (like cling film) held in place with tape and smoothed by being gently warmed with a hair dryer. Martin Batts (Handyman Services: Tel no. 07900 698911; Email eynshamhandyman@rocketmail.com) can make secondary glazing on a wooden frame with shrink wrap at £20 per window. Magnetic panels are also relatively cheap and easy to fix to most windows.

This picture shows secondary glazing (on the right) added to the existing double glazing.

Sash windows can have problems if the brush pile down the sliding side panels is painted over or worn. Brush pile can be easily replaced.

If you cannot, or do not, wish to replace windows, choosing thicker curtains and investing in thermal linings can also make a difference. Make sure curtains don’t hang over a radiator preventing the heat from getting into the room, and remember to draw them at dusk. Blinds running in tracks the full depth of the window are the most effective.

## Trickle vents

Trickle vents fitted above windows are not required to be open in the winter. Any gas appliance ventilation is through fixed wall grills, so close trickle vents as soon as you no longer need natural ventilation.

Some trickle vents are poorly fitted and can be made less draughty by filling the edges with sealant, or just covering with tape during the Winter months.

Damaged and stiff trickle vents can be replaced with an easy-open type, but they are still subject to draughts. <http://www.ironmongerydirect.co.uk/products/window_and_joinery_hardware/window_ventilation/4247/4600ea_recessed_vent>

## Lights

Low energy lightbulbs, especially LED bulbs are getting cheaper and are a good investment in terms of energy saving and lifetime. These are available from standard DIY stores, or you can get advice from a specialist company (e.g. <http://www.efficientlight.co.uk/>)

LCON has a lightbulb library (<http://www.lcon.org.uk/2013/06/24/energy-light-bulbs/>), a case of bulbs which you can borrow in order to decide what styles of bulbs might be appropriate for different locations in your home.

If you have inset ceiling lights you may notice a draught from the ceiling if you take a bulb out – this is caused by the air moving from ventilation bricks in the external wall, through the ceiling void under the concrete floor and out into your room or the opposite side of the house.

## Appliances

Appliances left on stand-by can consume surprisingly large amounts of energy. There are a variety of power saving meters (e.g. <http://www.lindy.co.uk/power-c8/power-accessories-c341/energy-saving-products-c350/energy-saving-power-meter-p5965>) which can help you to determine where you are wasting energy and which devices you should try to remember to switch off at the plug.

## Hot water tanks and pipework

Hot water pipework running up walls is generally unlagged and acts like a radiator all year round (see left).

Your hot water tank should have a built in jacket, but exposed hot pipework inside the airing cupboard and in lofts is usually easy to lag.

Just check the dimensions before buying the lagging, if you have any plumbing work done, try to get internal pipes lagged while boxing is open.

## Wall and loft insulation

Recent advice on loft insulation recommends much more than was originally fitted in Waterside (100mm mineral wool is now 270mm), so check out your loft.

Where you have internal walls within the roof space, check that there is any insulation, this area is often accessible through a small hatch. The Thermalite building block and concrete floor provide very little insulation and a good quality insulation board can be fixed to the external faces within the roof space to make the top floor rooms much warmer. See <http://www.energysavingtrust.org.uk/Insulation/Roof-and-loft-insulation>

Surveys show that gaps in insulation are quite common, in 3 storey houses there may be uninsulated gaps at front and back where the concrete floor ends and just plasterboard projects over the floor below. Dormer windows may have missed insulation over the ceiling.

The listing of companies and organisations in this document does not represent approval or recommendation of their services by the Oxford Waterside Residents Association, but individuals have found them useful.

Check out this useful article from 2012 <http://www.telegraph.co.uk/property/9520737/Eco-living-the-volunteers-helping-theircommunities-to-save-energy.html>