

STAY WARM FOR LESS

ENERGY SAVING HACKS FOR THE HOME

There is no copyright on this booklet. All ideas are gathered from the internet and the author has no ownership.

This book may be reproduced in any form in order to help those who are struggling to keep their homes warm.

Judith Leary-Joyce is not an expert. All information given here is to be used at the discretion of the reader.

Web links are provided purely to point the way for the reader, who is encouraged to research further to ensure they make the correct choice for their circumstance. No recommendations are intended.

No liability is assumed for losses or damages due to the information provided. You are responsible for your own choices, actions, and results.

Any damage to property or person is the responsibility of the reader

 Created with Vellum

CONTENTS

Introduction	v
1. Ventilation	1
2. Doors	4
3. Windows	10
4. Radiators	13
5. Floors	15
6. Saving energy in the kitchen	18
7. General energy saving ideas	21
8. Home Improvement Grants	26

INTRODUCTION

If your home is draughty and cold and you're dreading winter, then I've written this for you.

I am not an expert, but I've scoured the web and put together all the ideas and hacks I could find. Then I had it looked over by an expert to make sure that what I'd written was accurate,

I wanted to give you ideas that would make your home more comfortable. I've included web links, plus YouTube videos that show you how to put the ideas into action. These are **not** recommendations, they are just to get you going with your own searches. So take a look and choose the actions that will work best in your situation.

Areas covered in the booklet are:

- How to reduce the cold air coming into your home
- Knowing the air vents you can't cover up and the importance of ventilation
- Exploring energy saving options around the house
- Home improvement grants you can apply for

INTRODUCTION

None of these actions is a magic bullet, but together they can make a difference. And every little will help.

Some of the ideas will require a small amount of do-it-yourself knowledge and basic tools. At the end of the booklet, I've include an email address in case you need to borrow tools. Also links for who to speak to if you need help.

Important - please read the section on ventilation before you start

When you block up draughts you stop fresh air coming into your home. This matters because:

- we produce moisture just by living and that moisture is held by the air in your home.
- the warmer the air, the more moisture it can hold, so while your room is warm, you're fine.
- if the moist air hits a cold surface or just gets overloaded, then it condenses and you end up with damp walls and windows. Worst case scenario - this can turn to mould which is a risk to health.

All this means is that you need to change the air on a regular basis - unblocking draughts for a while, opening windows - anything that will allow the moist air to leave and fresh air to come in.

So read through the section on ventilation and work out your plan, then you can stay warm *and* dry, without adding mould to your To Do list.

CHAPTER 1

VENTILATION

IMPORTANT - PLEASE READ BEFORE YOU START

This booklet is all about how to cut down draughts into your home.

However draughts are not only cold - they provide us with fresh air to breathe and they remove excess moisture from the house, which reduces condensation and the risk of mould. So we have to find ways of changing the air on a regular basis without freezing you out.

WHY DO WE NEED VENTILATION?

Just by living, we give off moisture. Cooking, sweating, washing, breathing all release minute amounts of water that hang around in the air. Unless the air is changed and the water dispersed, it will condense on cold surfaces – walls, windows, mirrors, - and in time produce mould. All this is bad for our health. Read about it here¹

You need to insulate to stay warm and ventilate to stay healthy.

- When you are leaving a room, open the window for a few minutes to change the air.
- Always leave the air bricks uncovered - they bring in a regular flow of fresh air. Make sure they are not blocked by external debris or filled with leaves.
- Removable insulation can be taken out briefly - chimney balloon, draught excluders - even a short time will change the air and remove the moisture.

AIR BRICKS – when it gets really cold you may be tempted to cover up the air bricks² that bring cold air into the space under the floor. **DON'T DO IT!**

While we need to stay warm we also need regular fresh air into a building to avoid condensation and mould. So leave the air bricks open and uncovered.

Open the window

I know this will seem in direct opposition to everything else said in this booklet, but opening the window for a short time is probably your best option. Five minutes should be enough on a very cold day. Choose your moment and do it when the room is cooling down so you don't lose all your hard earned warmth. But please do it. It will save you loads of problems down the line with condensation and mould.

If you can manage to sleep with the window open a crack at night that will also help reduce condensation.

Fit a humidity sensing fan vent - this will remove excess moisture from the air, preventing damage to walls and ceiling as well as reducing mould and mildew growth. Because of the humidity sensor it will only change the air when needed,

VENTILATION

keeping your home healthy while allowing you to reduce draughts and stay warmer without spending a fortune on heating. They are not expensive and can be purchased online³ or any DIY store.⁴

-
1. <http://tech-controllers.com/blog/fresh-air-in-your-house-all-year-round---learn-how-to-air-your-rooms-properly>
 2. <https://cavitech-uk.com/blog/is-blocking-air-bricks-a-good-idea/>
 3. <https://bit.ly/3fог6nv>
 4. https://www.diy.com/departments/airroxy-100mm-humidity-sensor-extractor-fan-silent-bathroom-ventilation-extraction/5901583200939_BQprd

CHAPTER 2

DOORS

Doors have to provide openings big enough for people and stuff to get through. So far, so blindingly obvious. Heat automatically travels from hot to cold, so open anything when the weather outside is cold and warm air will just float away.

Step one - make sure the door is open for as short a time as possible. Crystal clear maybe, but still worth saying! It can be easy to forget to pull the door too if you're chatting with a neighbour or the postie.

Step two – check the amount of air coming in when the door is closed. This means looking at:

- How the door fits into the door frame
- How the door frame fits into the opening in the wall
- If your door has glass in it, how cold that feels

All three are ways for warm air to leave the building and cold air to come in.

INSULATING BETWEEN DOOR AND DOOR FRAME

Put your hand up against the join between the door and the door frame. If you can feel any draught at all, then you need draught excluders to fill in the gap.

Draught excluders are thick strips of foam, some of which expand to fill the space. They fit onto the door frame where it meets the door itself and its purpose is to fill up any gaps between the two pieces of wood to block the cold air from coming in and the warm air leaving.

Self adhesive – if you don't have any tools then this is the tape¹ to choose. All you'll need is a tape measure and a pair of scissors.

Clean down the inside of the door frame where you want to fix the tape, to remove any dirt, dust or grease that might stop it sticking, then pull off the backing and fix the strip into place.

Expanding foam tape – this looks very promising. Once in place it expands so there's no risk of it still allowing air movement. It does take a bit of care to manage the expansion, so put 'fitting expanding foam tape²' into youtube before you start. You'll pick up some useful hints like: once you've cut your strip off, put some tape around the rest of the roll to hold it in place, otherwise it will all start to expand and become less useful in the future.

Memory foam tape - this is tape that squashes when the door closes but returns to it's old shape once it's open. This means it won't compress permanently and lose its ability to fill the space.

Insulation tapes are easily available at DIY³ store and online⁴.

Insulating the door / floor gap

It's rare for a door to fit tightly against the floor, so this is always a good place to check for draughts. Remember to check internal doors as well, especially if they link directly to a cold space like a hallway or porch.

Draught excluder – use these whenever you close a door to another space. Lay it across the bottom of the door and tuck it in so you know you're blocking off all the cold air.

There are a few ways to make these – a quick search on the internet will provide other ideas I'm sure⁵. Some I've heard of:

- Cut the toes off old long socks and sew them together to form a tube that fits the width of the door exactly. Stuff with old clothes or rags
- Fold up any heavy piece of material and lay it along the base of the door – I used an old dressing gown for years and it did a great job
- If you want to, you can buy smart draught excluders in department stores or online, but they won't do any more of a job than something you can make yourself.

Door brush seal – this is a brush that attaches to the bottom of your door to block the draughts. It is more effective than a draught 'sausage' excluder, purely because it is there every time you close the door and not just when you remember to put it in place. You can buy them from any DIY shop⁶ or online⁷. Some are self-adhesive and some add in screws to secure the fit. They can be fitted to external and internal doors.

- Remember to measure your door before buying to make sure the brush is long enough.

- When fitting the brush to an external door, it is worth fixing with screws as well as the inbuilt adhesive, because they are likely to take a lot of wear, (especially if you kick them closed like me) so it's worth making sure the brush is secure. Again – youtube can help with this, showing step by step fitting instructions.⁸
- You may need more tools for this – a junior hacksaw to cut the strip to size, a screwdriver, a pair of pliers, a tape measure and pencil. *See --- for resources.*

Letter boxes – a part of the door we take for granted, but which is essentially a dirty great hole for cold air to come in through. There are a couple of options:

- You can put on a **letterbox draught excluder** – brushes that fill the gap to block air but allow your post to be delivered. (The Postie may not be so pleased, because it is a bit harder work!) You can buy the excluder from DIY stores⁹ and online¹⁰. Letterboxes seem to be a universal size, but it would be worth measuring first just in case, to make sure you get the right one.
- I haven't seen it recently, but I recall as a kid we used to have **material flaps** attached to the top of the letterbox. It's something you can make yourself – any heavy material cut to a size that is bigger all round than the letterbox and attached just at the top. The flap will cover the space but it will move to allow the post to be pushed through. A small elastic wire can be fitted (as for the curtains) to hold the cloth in place once the post has arrived.

Remember to collect your post as soon as you realise it's there. If the Postie doesn't push the letters right through, it may sit in the box and leave you with a gaping hole into your home.

Keyholes – keyhole brushes stop cold air coming through the space. The brush fits underneath the handle, so use a screwdriver to take it off, fit the brush, then put the handle back again. Look on youtube for short videos¹¹ to show you how to do this.

Door frame to wall – test out the join where the door frame meets the wall for small cracks that let cold air in. **Transparent weather sealing tape** from a DIY store or online¹² will seal these up. Short video to show you how to use it here.¹³

Door Curtain - hang a thick, heavy curtain on the inside of the front door (or any draughty door). Make sure the curtain covers the whole of the door frame, so all joins are well covered. The heavier the curtain is the better it will be at stopping cold coming in. Keep it drawn unless you have to open the door. You can buy 'thermal insulated drapes' online.

Build an internal porch - if you have space and the skills, you can build an internal porch which will allow you to answer the front door without losing all the heat. You may be able to find old timber and doors online or via sites like Freegle¹⁴ when people have timber left over from a renovation.

-
1. https://www.diy.com/departments/diall-white-self-adhesive-draught-seal-1-6m-w-9mm-t-5-5mm/1802906_BQ.prd
 2. <https://www.youtube.com/watch?v=V6lZXjRR-1k&t=4s>
 3. <https://www.toolstation.com/stormguard-extra-thick-weatherstrip/p39239>
 4. My Book
 5. <https://www.youtube.com/watch?v=1hXiGWJQ7y0>
 6. <https://www.wickes.co.uk/Wickes-838mm-Door-Brush-Draught-Excluder---Gold-Effect/p/218014>

DOORS

7. <https://www.insulationsuperstore.co.uk/product/garage-door-draught-excluder-brush-seal-2514mm--3-x-838mm-lengths.html>
8. <https://www.youtube.com/watch?v=jLc2XPGkyUA&t=22s>
9. https://www.diy.com/departments/diall-white-letterbox-draught-excluder-h-80mm-w-342mm/1802854_BQprd
10. <https://lowenergysupermarket.com/product/letterbox-covers/>
11. https://www.youtube.com/watch?v=6o__TFXXxek
12. My Book
13. <https://www.youtube.com/watch?v=CsQrYUOkzcE>
14. <https://www.ilovefreegle.org>

CHAPTER 3

WINDOWS

Most of what we've said about doors also applies to windows. You need to make sure any joins are tight and don't allow cold air in and warm air out. The cold glass will also cool down any warm air that hits it.

Draught excluder – wash the internal window frame where it meets the glass window to remove dust, dirt and grease. Apply the **insulation tape**¹ and close the window up tight. See a video about fitting here².

Non-opening windows – windows that don't need to open can be sealed up permanently using **mastic sealant**³. Youtube has demonstrations⁴ to show you how to do it.

Windows you don't need to see through – ask around for old bubble wrap and put this up on windows you don't look through. You can seal them into place with any sort of tape and the air in the bubble will add extra insulation to the cold window.

Window to wall connection – check out where the two meet. If there is a draught coming through use either a **trans-**

parent window tape or mastic to fill/cover. (See weblink in Doors)

Window glass – when warm air hits a cold surface, two things happen: the air cools down before circulating back into the room; as the air cools it drops the moisture it's carrying and produces condensation. So anything you can do to warm up the surface of the glass will help.

One option is to put on **thermal insulation film**⁵ Give the window pane a good clean, then apply the film using the adhesive tape provided, then heat the film with a hair dryer so it smooths out and stretches over the glass. This is best used on single glazed panes as it can cause 'fogging' on double glazing, See video for how to do it here⁶.

CURTAINS

Always close your curtains as soon as you can at the end of the day and leave them closed overnight. In particular, if you have windows that face south/west side make sure to open them during the day to make the most of the sun's warmth.

Heavy curtains - if you have the option of heavy, padded curtains, they will hold more heat inside the room.

You can create this effect if your curtains have an inner liner. Add a sheet of lightweight quilt wadding between the curtain and the lining and hold it in place with some tacking stitches. You could also hide a second pair of curtains between the layers or on the back of your existing ones, adding extra padding. Charity shops often have curtains that would work perfectly for this.

Curtain wire - draughts can still come down between the wall and the curtain. A **curtain wire**⁷ can be attached to the wall on either side of the curtain near the bottom using eye hooks. As soon as you close the curtain, stretch the wire across so it

holds the curtain tight to the wall, holding cold between the window and the curtain. Video here⁸ for how to put up a curtain wire. Just apply the same techniques lower down to provide a holding wire for your curtains. **NB** remember to buy wire hooks when you buy your wire.

Choose when you open the curtains

Curtains and radiators – traditionally radiators are placed underneath windows in order to warm up the cold air seeping through. However this also increases the chances of losing heat through the window to outside.

- If you have long curtains, **lift them up** above the radiator so they don't block the warmth and it can flow directly into the room.
- Put a **shelf above the radiator** that will hold the curtains (if they are long), blocking the heat from reaching the window and directing it from the radiator into the room.

-
1. https://www.diy.com/departments/diall-white-self-adhesive-draught-seal-1-6m-w-9mm-t-5-5mm/1802906_BQprd
 2. <https://www.youtube.com/watch?v=V6lZXjRR-1k&t=4s>
 3. <https://www.unibond.co.uk/en/sealants/mastic-sealant-the-all-purpose-all-rounder.html>
 4. <https://www.youtube.com/watch?v=RP4nQ51jKSw>
 5. <https://bit.ly/3BVMJBC>
 6. <https://www.youtube.com/watch?v=fXlvuLnLo70>
 7. https://www.dunelm.com/product/net-curtain-wire-1000010223?defaultSkuId=20598624&ds_c=Home+Improvements_Make+and+Mend_%5BGoo-TEXT-DECORATING-MAKEMEND%5D&ds_k=Net+Curtain+Wire&gclid=Cj0KCQjwjvaYBhDIARIsAO8Pke0z-KR1qzWwOucLEH2YYf2CHyILXIKqa14oIPqh9O2s0L-BxZ3WLscaAq_0EALw_wcB&gclsrc=aw.ds
 8. attaching curtain wire to hold a curtain in place

CHAPTER 4

RADIATORS

Any central heating system is only as efficient as its radiators, so it's vital to make sure they're working well and delivering all their heat into your room. There are a few things you can do to improve the quality of heat from your radiators:

Bleed your radiator – air can get caught in a radiator and prevent the hot water filling all the space. To make sure you're getting the best heat possible, you need to remove the air so the radiator can be totally filled with hot water. This is done with a **radiator bleed key**¹ that releases the air and makes it more efficient. Video to show you how to do this here.²

Use thermostats – if you have thermostats on your radiators, use them to adjust the temperature in each room and switch them off in rooms you don't need to use or heat. If you don't have them, consider fixing them next summer when the system isn't being used. A rather detailed, but interesting, explanation here³.

Insulating behind radiators – if there is no barrier between the radiator and an uninsulated wall, heat will be lost

through the wall to outside, reducing the amount that comes into the room. Use foil insulation – aluminium foil insulation⁴ or foam foil insulation⁵ – and fit it behind the radiator if it is on an outside wall.. The material helps to reflect/bounce the heat back into the room and the insulation stops it being absorbed into the wall. Video on how to fit it here⁶.

Turn down the temperature – if you haven't done this already, you can try turning down the temperature by one degree. It won't make a huge difference to comfort but it will help with electricity bills. I understand that just one degree lower can save up to £128 per year. I saw this in Octopus energy saving tips here⁷.

Move furniture away – make sure to move furniture away from the radiator, otherwise the fabric of your chair or settee will absorb the heat and stop it flowing into the room. Even just leaving a gap between your furniture and the radiator will make a difference.

-
1. <https://www.screwfix.com/p/radiator-valve-key/16909>
 2. <https://www.youtube.com/watch?v=PVP1rbzk4DU>
 3. <https://www.youtube.com/watch?v=HEbAISvrOpA>
 4. <https://www.screwfix.com/p/radiator-reflector-foil-470mm-x-4m-1-88m/88629>
 5. <https://www.ecohome-insulation.com/product/ecotec-radiator-insulation-kit/>
 6. <https://www.youtube.com/watch?v=48co8eLBUmg>
 7. <https://octo.ps/3BBzF4M>

CHAPTER 5

FLOORS

Depending on the age of your home, you will have either a concrete floor or a suspended wood floor.

Insulating a concrete floor - this will be well sealed from draughts but is a very cold material so it can absorb the warmth from the room. You can use a **floor foam insulation kit**.¹ This comes in a roll and can be laid underneath rugs, a carpet or vinyl. It isn't the cheapest option however. Alternatively you can look at any underlay or insulation material² and put that down in the same way.

Insulating a suspended wood floor - wooden floors sit above a 'sub floor void' ie the gap between the floor and the ground the building sits on. This space has air bricks that must be kept clear so the space is well ventilated and the building remains dry. However this does mean there will be loads of cold air coming up through the floor boards unless something is done about it.

If you've moved into a home where all the surface flooring has been removed or you can lift carpeting or rugs temporarily, you can do any or all of the following:

- Seal up the gaps between the floorboards to cut out draughts – this can be done with any sealing tape or masking tape folded in half, sticky side out, and pushed down between the floorboards, so it springs out and fills the space.
- Lay floor foam insulation³ on top of the floor, seal the strips together and around the edge, joining the floor to the wall. See youtube for instruction/demonstration⁴ Lay your chosen floor covering on top. If laying vinyl, check out whether a layer of plywood is needed on top – some sites I've read say it's needed, others don't mention it, so just find out before you start.

Rubber backed carpet – putting down a carpet with a rubber backing helps to reduce draughts and cold from underneath the floor. If you don't have the option of carpet, then putting down some form of insulation/underlay and rugs - ideally with a rubber back - will still make your room warmer and more comfortable to live in. Try Freegle ⁵to see if you can give a home to some 'pre-loved' carpet or insulation.

Sealing gaps between carpet and wall – if you can't seal between the floorboards because of your floor covering, then there's a risk of draughts coming up where the carpet meets the wall. Filling up these gaps between wall and floor will reduce the cold.

Use any flexible materials you can find - broken up bits of wood fibre or mineral wool insulation (you may see this offered on Facebook renovation pages where people have small amounts to get rid of), shredded newspaper, cut up pieces of material (old T shirt would work well) - anything that can be stuffed down into a small space. Break the material up into small pieces and push it down where the floor covering

FLOORS

meets the wall. Fill up the whole space until you stop feeling the cold draughts.

1. <https://www.therma-foil.co.uk/product/therma-foil-25-sqm/>
2. My Book
3. <https://www.therma-foil.co.uk/product/therma-foil-25-sqm/>
4. youtube how to lay floor foam insulation
5. <https://www.ilovefreegle.org>

CHAPTER 6

SAVING ENERGY IN THE KITCHEN

To save energy in the kitchen:

- **Keep the fridge door open for as short a time as possible** - cold air sinks, so when the door stays open, the cold air will 'fall' out of the door and the fridge will have to work harder, using more energy, as it cools down again.
- **Move your fridge** - make sure it's not pressed against the wall. If the air can circulate around it easily, it uses less energy.
- **Keep the fridge full** - a well stocked fridge is cheaper to run than an empty one. Put bowls of water in to keep it full between shopping trips
- **Check the temperature of your fridge** - keep the temperature of your fridge between 2.2C and 3.3C. If you can keep the fridge full - it works more efficiently that way.
- **Check your freezer** - this is most efficient between -17.8C and -15C.

SAVING ENERGY IN THE KITCHEN

- **Heating the oven** – the first instruction in most recipes is to turn the oven on. Ignore this and start it just soon enough to be at the right heat for your cooking.
- **Fill the oven** - plan ahead and fill the oven up, cooking as much as you can at one time. Batch cooking makes good use of the electricity, saves you cooking for the next few days and fills the fridge up.
- **Turn the oven off early** - turn it off five minutes early and leave the residual heat to finish the job.
- **Use the warmth** - as the oven cools down, open the door and let the heat come into the room.
- **Use an air fryer or slow cooker** - being smaller they use a lot less energy than an oven.
- **Boiling the kettle** – just put in a small amount of water. Every time you overfill, you waste energy heating it all up.
- **Use a steamer** - cook potatoes in the saucepan in boiling water and put vegetables in the steamer above that. This way one pan can cook the whole meal. Use a collapsible metal steamer¹ or a bamboo Chinese steamer.² The latter has two or three layers, is not expensive and also biodegradable. How to use here³.
- **Saucepan lids** - always put a lid on the saucepan when you're cooking. The food cooks more quickly because the heat is held in the saucepan.
- **Washing clothes** - always run full loads in your washing machine to reduce energy usage
- **Tumble dryer** - don't use your dryer if you can avoid it or only use to 'finish off' drying. You can invest in a clothes dryer⁴ - an airing rack that has a cover and a small heater. Try to use your bathroom, especially if it has a humidity sensing air vent⁵, since that will help to dry clothes if they can't go outdoors,

STAY WARM FOR LESS

to avoid creating excess moisture in the rest of the home.

- **Ironing** - if you have to do it, don't get distracted. Anything that makes heat uses a lot of energy so keep it on for as short a time as possible.
 - **Hairdryer** - same with the hairdryer. So let your hair dry naturally for an hour before using it.
-

1. My Book
2. My Book
3. <https://thewoksoflife.com/how-to-use-bamboo-steamer/>
4. https://www.aldi.co.uk/easy-home-heated-airer/p/713313545173201?utm_source=awin&utm_medium=affiliate&utm_campaign=78888-Skimlinks&awc=19523_1663424294_573b35ff1ad196d49a160e389a864a5e
5. <https://bit.ly/3Lr7Q1S>

CHAPTER 7

GENERAL ENERGY SAVING IDEAS

T here are other ways to save energy in your home:

LED bulbs - make sure your lights have LED bulbs that use much less energy. Either way - switch lights off when you don't need them.

Install a smart meter - this is provided by energy providers. They should tell you when you can have one, but you can also put in a request¹. They help you track your energy usage and identify which items use most energy.

Get smart plugs - these are plugs with timers² that turn appliances off automatically after a period of time

Get an electric blanket - these can be very cheap to run and allow you to get warm in bed without having to heat a whole room. This article ³has done the maths on how much they actually cost to run compared to heating.

Cat flap – pets are so important, but they also make for problems. Cat flaps are holes in the door you can do without when it's really cold.

Think about your cat's routine and the times when they don't need access to the cat flap. At those times, you can:

- prop a cushion against it to reduce draughts
- find a piece of wood / board and attach some form of padding that will absorb and block the cold air. Find a way to lock it into position – a couple of bolts, a curtain wire (as described above to hold curtains tight against the window)
- make a flap like the one for the letterbox – a piece of thick material that is larger than the cat flap and can be let down when the cat is inside the house. If the cat is outside, they would still be able to come in by pushing the material out of the way.
- if all else fails, block up the cat flap and pay attention to when the cat needs to go out.

Chimneys

This is a difficult one. Chimneys are huge holes coming into the house. Massive amounts of hot air are lost through the chimney and cold air comes down into the room as heavy draughts. However, the chimney also provides all important ventilation that stops condensation and mould.

If your thermostat is in the room with the chimney, it will be affected by the cold that comes down the chimney. This is important because it will automatically fire up the radiators in other rooms to the same level of heat needed to combat the cold from the chimney. If this is your situation, you could turn down the temperature so the chimney room is less warm, but other rooms are right. Alternatively, set the thermostat to suit the room with the chimney and turn off radiators in the other rooms when you're not using them.

GENERAL ENERGY SAVING IDEAS

If you are able to block up the chimney it will make a big difference to the warmth of your home:

- **chimney balloon** – made of plastic and inexpensive. You need to work out the size of your chimney and buy the one that fits. Put it in place and blow it up with the pipes provided. The plastic balloon inflates inside the chimney and blocks draughts from coming down. Remove it from the chimney from time to time, allowing fresh air to flow, and avoiding condensation inside the chimney. Find out how to fit it here⁴
- **chimney sheep** – a solid piece of sheep's wool that fits into the chimney space blocking off draughts. It's flexible so it will fill the space more efficiently and it lasts well. It's also easy to fit.⁵ This is the simplest option as it allows for some air movement, which means moisture can evaporate from the chimney.
- **loaded plastic bags** – I have read about this as an option. No idea how effective or safe it is. You can read comments about it here.⁶ Generally, a strong bin bag is filled with paper or something like a pillow and pushed up the chimney making sure it fits tightly. Again, you need to take care to remove it periodically to allow a flow of fresh air and avoid condensation inside the chimney.
- **board covering** - using wood or insulation board make a cover that fits into the opening of the fireplace and will close it off like a door. Put some small slots (air vent) into the wood to allow ventilation and avoid condensation inside the chimney, since this can lead to toxic mould growth over time

In the summer, remove any stuffing to allow the air to circulate.

NB: IF YOU PUT ANY FORM OF BLOCK IN A CHIMNEY, REMEMBER TO REMOVE IT BEFORE LIGHTING THE FIRE.

Loft hatch – if you have a loft, hopefully it is already well insulated. If not, see below for grants that can help you get this done.

Make sure the loft hatch is close fitting and doesn't allow any draughts to come through. If it does feel cold use the same process as for windows and doors, inserting insulation tape to make a tight seal.

Pipework – look inside the kitchen sink cupboard to find out if there are gaps around the inlet pipes. If so, these can be stuffed with rags, wood fibre or mineral wool insulation, newspaper or old clothing.

For a more permanent solution use silicone mastic or foam filler (although make sure to find out more⁷ about foam filler first, since it can be toxic)

Cover hot water pipes - if you have any hot water pipes you can access, make sure they have insulation material of some sort around them. This holds in the heat and reduces the energy used to keep the water hot.

Clear your gutters - heat is lost more quickly through a damp wall than a dry wall, so stand outside your home on a rainy day and check that water isn't running down the walls because of blocked gutters and gullies. If so, clear out any leaves and debris.

Light fittings – as with the pipework, check whether cold air is coming in through the light socket. If so, filling the gaps in the same way will help.

Hot water tank – if your water tank doesn't have any insulation around it, heat will be lost⁸. It then takes more energy to

keep it at the required temperature. Putting a jacket around it can make a big difference to running costs. See how to fit it here⁹.

Switch off, don't standby - we're so used to just leaving electrical items on standby for the convenience of a quick start up. But this still uses energy¹⁰. So get used to waiting a few seconds while the item gets going and you'll save some money.

Take chargers out of sockets - hard to understand but it seems that leaving charger plugs in sockets still uses up energy. So unplug when you've stopped using it. Go to this site¹¹ and scroll down to the short video for info

-
1. <https://www.ofgem.gov.uk/information-consumers/energy-advice-house-holds/getting-smart-meter>
 2. <https://www.techadvisor.com/article/723860/best-smart-plug.html>
 3. <https://www.idealhome.co.uk/property-advice/how-much-does-it-cost-to-run-an-electric-blanket-296454>
 4. how to install a chimney balloon uk
 5. <https://www.thegreenage.co.uk/better-chimney-sheep-chimney-balloon/>
 6. <https://forums.moneysavingexpert.com/discussion/6170235/how-to-block-unused-fireplace-chimney>
 7. <https://www.bobvila.com/articles/expanding-foam-insulation/>
 8. <https://www.thegreenage.co.uk/insulating-hot-water-tank-jacket/>
 9. <https://www.youtube.com/watch?v=nwVB1akhKyo>
 10. <https://octo.ps/3BBzF4M>
 11. <https://octopus.energy/blog/energy-saving-tips/>

CHAPTER 8

HOME IMPROVEMENT GRANTS

There are still grants you can apply for to help improve the energy efficiency of your home., which is great news. So read the criteria below, then go on the council website¹ and put in an application.

The aim of the project is to reduce your spending on energy bills, whilst reducing carbon footprint and contributing to the goal of net zero.

CRITERIA FOR FUNDING

In order to qualify for funding:

- The home must have a low energy efficiency rating ie: an EPC² rating of D, E, F, or G. (See below to find out what your EPC is) This will be assessed by Warmworks (the company employed by the council to do the work)

The household must also meet **one** of the following criteria:

HOME IMPROVEMENT GRANTS

- have an annual household income of less than £30,000 per year
- have an annual household income of less than £20,000 per year (after housing costs are deducted)

Through the scheme it may be possible to obtain the following measures up to a value of £10,000 for owner occupiers, and up to a value of £5,000 for private or socially rented properties:

- Wall insulation
- Loft insulation
- Air Source, ground source or hybrid heat pumps
- Solar PV
- Ventilation
- Double / triple glazing to replace single glazing
- Energy efficient doors
- Thermostats and heating controls
- Hot water systems and tank insulation

You can find out if you are eligible for the scheme by completing the short application form at <https://surveys.est.org.uk/s/GreenHomesGrantSchemeLAD> or by calling Warmworks free of charge on 0808 196 8255.

If you're eligible:

Warmworks get in touch to discuss the next steps. Firstly, they arrange a survey of your home. This allows them to recommend a package of improvements to make your home more energy efficient. At this stage, you'll be asked to provide evidence of your household income.

If approval is given, installation will be completed by an approved and trusted sub-contractor at no cost to you, the

householder, and the Warmworks team will be on hand to support you through the process.

Making the most of these offers will make a real difference to your energy bills, so do fill in the form or call Warmworks and find out if your situation is applicable.

EPC Rating - if you are renting you should have been given a copy of the EPC when you moved in. Alternatively you can go on the government website,³ put in your postcode and it will tell you what your rating is.

INVOLVING YOUR LANDLORD

if you are a tenant and your home needs some draught proofing, you will need to work out how to approach your landlord. Some leases allow for you to make reversible changes yourself. In which case, when you buy or obtain materials for draught proofing and insulating, make sure they can be taken out without leaving irreparable damage.

If the changes you need are more significant:

- talk to the landlord about the action needed and the benefit it will bring
- find out if they are OK with you doing it or if they will take it on
- let them know about the council grants that are available to help with insulation – they may be interested since it will improve the value of their property

The more information you can give them about what's involved, the cost, complexity of the work and benefits, the more chance you'll have of success.

HOME IMPROVEMENT GRANTS

1. <https://www.stalbans.gov.uk/news/apply-heating-and-insulation-grants-winter>
2. <https://www.evergreenenergy.co.uk/sustainable-home/what-is-an-epc-rating/>
3. <https://www.gov.uk/find-energy-certificate>

