

ENERGY EFFICIENCY GUIDE

FOR PEOPLE WHO RENT

How you can make your home more comfortable, healthy, and affordable.

Winter 2019

better renting



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ABOUT 'HOME TRUTHS'

People who rent deserve homes which are comfortable, healthy, and affordable.

But, as renters, we know the home truths about living in rental properties. The homes we live in, often little more than 'glorified tents', make it harder to live comfortable and healthy lives. Landlords don't act to improve the efficiency, affordability, and comfort of rental properties. Renters have few rights to make modifications to their homes. We end up experiencing temperature extremes, worse physical and mental health, and higher power bills.

It often feels like we have no choice but to live with freezing or sweltering homes. But there are things we can do right now to make our homes nicer and healthier to live in.

Home Truths is all about sharing this message with a community of renters. By sharing our experiences and knowledge, we can challenge the feeling of powerlessness which often comes with being a renter.

People like us, who rent, have the power to make renting better. And we can start in our own homes.

better renting

Better Renting is a community of renters working together for stable, affordable, and liveable homes. With more Australians locked out of homeownership, more of us are renting, and renting for longer. But renters are denied the rights and protections of homeowners. We can't all own a house — but we should all be able to rent a home.

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WHAT RENTERS ARE SAYING

People who rent are already feeling the difference energy efficiency can make

66 I have really noticed a difference with the bubble wrap - the house seems warmer in the mornings, even with negative temps outside.

Our living room has been warmer, the curtains have made a noticeable difference... they help retain heat a lot. The bubble wrap definitely helps, there's less cold air radiating from the windows."

The gap around the door doesn't have a cold breeze coming through, and I don't feel any draught when I open the pantry door. That's got to be helping.



LIVEABLE HOMES FOR PEOPLE WHO RENT

HOW TO USE THIS GUIDE

This guide has been written with consideration of the issues which affect people who rent. We recognise renters currently do not have rights to make certain modifications at home, and even when they do, the threat of rent-increases or eviction can deter tenants from making requests of their landlord or real estate agent.

We chose the projects in this guide because they can be installed temporarily. Many do not require landlord permission. Most importantly, you can do all the projects yourself.

The projects are based on a few key principles for making a home more energy efficient, and they offer simple solutions to common problems.

First, you'll need to identify the main issue(s) making your house cold. Some issues are out of your control as a renter - like having inefficient appliances or no ceiling insulation. But, good news! Two of the worst issues are ones which you *can* fix yourself - draughts and uninsulated windows.









Draughts

Draughts - gaps or cracks which let hot air leak in and cold air leak out - account for up to 25% of lost winter heat in homes (Source: ACTSmart).

Think of a draught like a hole in your wall - one small gap might not look like a problem, but if you add up all the gaps throughout the house, you could have the equivalent of an open window's worth of cold air constantly leaking into your home.

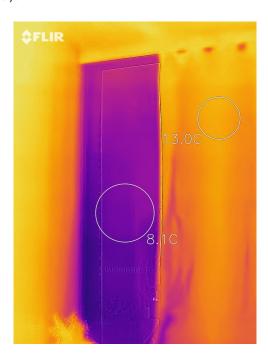
Draughts make your house colder, and make your energy use much less efficient. Sealing off the draughts in your house can make a real difference to your comfort and bills.

You can find draughts by looking for gaps around doors and windows, gaps around skirting boards, or large holes like wall vents. On a cold day you might be able to feel cold air leaking in with your hand.

Uninsulated Windows

Windows are another huge source of heat loss in winter - up to 40% of a home's heating energy can be lost through windows (Source: YourHome).

There is often a stark difference in temperature between interior walls and windows, even in well-insulated homes. This thermal image shows the difference in temperature between the curtain (13°C) and window (8.1°C) on a winter morning in Canberra.





Many renters live in older houses with single-glazed windows, draughty window-frames and inadequate window coverings (like flimsy blinds, or often no covers at all). It is hard for renters to ask for better curtains to be installed.

However, insulating your windows can make a huge difference to your comfort and bills at home, so this guide includes a couple of easy, renter-friendly options to make your windows warmer.

Using This Guide

The projects in this guide are designed to help you seal up draughts, insulate your windows, and make your living areas easier to heat. Every home is different, and each will have particular issues, but we have found that most problems can be solved using these principles. At the very least, trying some of these projects will help make your house a bit easier to heat.

The how-to guides include step-by-step instructions, a list of materials including example brands and costs, a link to a YouTube video demonstrating the project, photos, and tips. Please note that the photos do not correspond to particular steps, except where stated (eg., "see third image" will refer to the third image in that project guide).







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MATT'S STORY

Matt and two of his friends live in a sharehouse in O'Connor. Their home is charming, spacious, and completely freezing. It's a lovely home, but winter is a nightmare.

"This house is a tent... it was built before the concept of insulation became a thing."

Huge, old windows, which don't even close properly, radiate cold air. Gaps around the windows let draughts blow in. The only things insulating the single-glazed glass are thin shades, which they often don't bother rolling down - the shades do nothing to protect against the cold.

Matt and his housemates usually go without heating in their bedrooms to save money - past bills have made them wary.

They use a fireplace in the living room, but it's hard to keep the heat in. The room is bounded by two open doorways, so cold air from the kitchen, laundry and front door is constantly streaming in.

Matt knew they had to do something to stop the flow of cold air into the house.

So, they stuck bubble wrap up on their windows, and sealed some of the bigger gaps with gap filler rod. They also used gap filler rod to block old wall vents, which were letting in cold air. They put door snakes in front of the front door, to stop draughts coming into the house, and in front of their bedroom doors, to insulate their rooms from the cold hallway.



The biggest change came from putting up temporary curtains over the open doors to their living room. "The curtains make a huge difference and keep the warm air inside the room... it means we can sit out here and study and relax more comfortably than we could before."



Matt and his housemates were surprised by how easy it was to make all these adjustments and plan to try more in the future.

"Every renter deserves to be warm without paying exorbitant bills... wherever I move I'll be thinking about this and doing these small things to make myself a bit warmer."

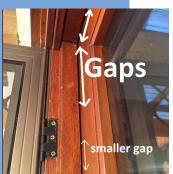


09 **DRAUGHT-SEALING:** WEATHERSTRIPPING

Doors and windows can allow air leaks even when they're closed. Sealing these gaps will create a tight seal around windows and doors, keeping warm air in and cool air out. This could save you up to 25% on your energy bill.

https://youtu.be/qbidV7F8Y9M

- Materials: Weatherstrip (e.g. Raven Window & Door Weather Strip 5m - Bunnings \$7-10)
 - Scissors

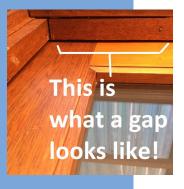


1a. Identify gaps around doors

First, you will need to identify whether your doors are leaking air. Look at both sides of the door when it is closed to spot any gaps between the face of the door and the door frame. The first two images shows what this may look like from the front of a closed door. Check where the hinge side of the door meets the frame, too, although this can be difficult to see.

1b. Identify gaps around windows

Check closed windows to spot any gaps between the bottom, sides, or top of the window and the window frame. The third image shows an example of this at the bottom of a closed window. If there are gaps around either your door or window, you will probably feel air blowing through them on a windy day.



2. Choose a type of weatherstripping/draught-proof tape

Weatherstripping comes in two main types: foam and rubber. Rubber is more durable and should be used for doors, but both types can be used for windows.



Both types come in different widths and styles - you may have to experiment with these to find the right size for your door or window. You can buy a few different sizes to see which works best. You'll know it's right when the stripping creates a tight seal, leaves no gaps and compresses very slightly between the door and the door frame. For large gaps, you might need to stick additional layers of tape over the first layer.

3. Prepare the surface

Clean the door/window with a cloth and/or rubbing alcohol - remove any dirt which may prevent the weatherstripping from making a complete seal against the surface.



10 DRAUGHT-SEALING: WEATHERSTRIPPING CONT.









4. Apply strip

Apply one continuous length of strip to each inside edge of door frame or window frame (where gaps appear). Cut tape as needed. Make sure all strips meet tightly at the corners.

Note: The most common mistake here is to stick the tape on the wrong edge of the door or window frame. You need to apply the tape to the edge of the frame which has face-to-face contact with the door or window. This position is fairly straightforward with most gaps (see: image 4 in this guide). However, this position is different for the hinge-side of the door (see: image 5, and at 1:33 on the YouTube video).

5. Check and adjust if necessary

Check to see if contact is made between the door/window and frame, and the stripping compresses when shut. Check to make sure the door or window closes properly - if it doesn't, try removing some tape from the area with the smallest gap, adding more tape, or using a thinner or thicker type of tape. Trial and error may be necessary here!

TIPS: If there are only gaps in certain areas, e.g. the top half of the door, only apply the strip to the area with the gap - applying tape further than this may prevent the door or window from closing properly.

If the gap size varies around a window or door, try using a thin strip of tape all the way around the door frame. You can then add thickness by sticking more strips of tape over the first layer to fill areas with larger gaps.



DRAUGHT-SEALING: DOORS

Air can leak in through gaps between doors and the door frame - particularly at the bottom of the door. Draught-proofing the bottom of a door with a door seal will keep the warm air in and cold air out this winter.

https://youtu.be/B8P8oFWeQDs

- Materials: Door seal (e.g. Raven or Moroday door seal \$4-15 at Bunnings)
 - Garden shears or strong scissors
 - Measuring tape
 - Pencil



1. Choose appropriate type of door seal

Check with your landlord for permission to install either screw-in or adhesive weatherstripping on the bottom of the door. Better Renting can provide you with a sample email to send to your landlord if you need one. Provided the choice, screw-in door seals are easier to install and longer lasting. Door seals come in different materials, lengths and types - basic seals can be made from PVC or aluminium.



2. Measure the length of the door

Measure the length of your door with the measuring tape to determine how long your seal will need to be. Mark this length on the door seal.



Before removing the adhesive backing, hold the seal against the bottom of the door to determine the appropriate position. The soft, plastic bottom of the seal will need to be low enough cover the entire gap, but the seal must still allow the door to open and close properly. When you find a position, mark this alignment on the door with pencil.



4. Attach seal to bottom of door

Remove adhesive backing and press seal lightly to the base of door. Make sure the door can open and close - if not, just peel the seal off and re-position. Press down firmly to attach.

Option: If you feel confident, have landlord permission and have access to a drill, you can use a drill to secure a screw-in door seal to the base of door.



TIPS: Seal doors to prevent cool air from entering heated spaces - for example, closing off a laundry from a heated living area.

You only need door-seals on doors which are used regularly. For doors which get less use, you can place a door snake in front of the gap for a quick and easy fix.



12 DRAUGHT-SEALING: GAPS AND CRACKS

Gaps/cracks between walls and skirting boards, window frames, cornices and architraves are a common source of draughts. They can be sealed up with caulk or sealant to stop air leakage and heat loss. This may require landlord permission.

https://youtu.be/hkkYjT4NSYo

- Materials: Caulking gun (e.g. Monarch Heavy Duty Skeleton Caulking Gun -\$8.17 at Bunnings)
 - Gap filler/sealant (e.g. Selley's 'No More Gaps' - \$4.35 at Bunnings)
 - Sealant nozzles (e.g. Monarch 5pk -\$4.18 at Bunnings)
 - Scissors
 - Cloth
 - Nail



1. Prepare surface

Wipe down the area to be sealed with a damp cloth to remove any dirt, dust or other particles.

2. Load caulking gun

Hold in the small metal tab at the end of the gun (see: 1). This will allow you to pull the metal plunger of the caulking gun all the way back. Insert the sealant tube into the now-empty barrel of the caulking gun. Push the plunger back up to secure the sealant in place (see: 2).



3. Prepare sealant

Cut around 2-3mm off the tip of the sealant tube with scissors - make sure you have cut enough for the sealant to flow out.

Screw the nozzle onto the remaining tip.

Cut about 5-10mm off the tip of the nozzle at a 45° angle.

Pull the lever/trigger of the gun to get the sealant flowing.



4. Start sealing gaps!

Push the nozzle right into the gap. Hold the gun at a 45° angle against the wall (see: 3). Apply sealant along the gap in a steady line, varying pressure on the trigger to control the flow.



Wet your finger and run it along the line of sealant to push it further into the gap (see: 4). Use your damp cloth to run over the sealant and remove any excess from the wall. Leave your masterpiece to dry! To prevent the sealant from drying out between uses, insert a nail into the tip of the nozzle and cover with plastic wrap to keep all air out.



TIPS: If the gaps are large, you can fill them with gap filler rod (Moroday, \$5-10, available in different diameters at Bunnings) before caulking simply push appropriately sized rods into the gaps to achieve a tight fit and cut to length. Top these with sealant.



13 DRAUGHT-SEALING: WALL VENTS

Wall vents are permanent holes in your wall. When heating your home, vents let warm air escape unnecessarily. It's more effective to block them temporarily and control air flow by opening windows and doors instead.

https://youtu.be/Me256Tb1zq8

- Materials: Gap filler rod (e.g. Bunnings multiple sizes available - \$2-6)
 - Measuring tape or ruler
 - Scissors

Wall vents are essential ventilation in rooms with unflued or open-flued gas heaters or open fires - these must not be blocked.



1. Measure the size of the gaps

Using a ruler or tape measure, measure the length and width of the air vent gaps. Gap filler rod comes in different diameters - choose one about 3mm larger than the width of the gaps to ensure a good fit.



Cut the rod to fit the length of the gaps. Make sure to allow a few extra mm on each end as the rod is made of foam and will compress when squeezed in the gap.



3. Press the gap filler rod into the wall vent gaps

Push the pieces of gap filler rod into the gaps, making sure each piece fits tightly. If it is too small or too large, just cut another piece and try again!



TIPS: This technique can be used for all different kinds of wall vents - just cut the gap filler rod to match the shape of the vent (see 4th image for an example). Gap filler rod can be removed in summer to allow for better ventilation.



^{*}The photos in this how-to guide are courtesy of Lish Fejer at GIY: Green It Yourself. You can see Lish's video guide to draught-sealing wall vents using the YouTube link above.



BUBBLE WRAP YOUR WINDOWS

Sticking bubble wrap to your windows is a Materials: • Bubble wrap (e.g. Wrap and Move cheap, easy, and temporary alternative to double glazing. Bubble wrapping windows is an effective form of insulation - the air trapped in the bubbles helps prevent heat loss from a window by up to 50%!

https://youtu.be/3TxGI7IO2Ds

- 750mm x 10m \$11.47 at Bunnings)
- Scissors
- Spray bottle with water
- Measuring tape (optional)



1. Cut bubble wrap to size

Measure your window with the measuring tape and cut bubble wrap to the same size as the window pane. You can cut more off to make adjustments once the bubble wrap is on the window.

2. Spray window

Spray your window thoroughly with water - make sure the entire surface is damp. The bubble wrap will not attach to dry areas.



3. Stick the bubble wrap to the window

Press the sheet of bubble wrap to the window - make sure the bubble side is facing the window! The water contact will hold it in place. If you need to, trim any excess bubble wrap around the corners and edges to prevent the bubble wrap from lifting off at these points.



TIPS: If the bubble wrap isn't sticking in certain places, just respray the window with water. If the sheet falls down, try cleaning the window thoroughly and repeating the process. You can also secure the bubble wrap with some sticky tape at the edges of the window.

The bubble wrap can be taken down and stored in summer, and reused again in winter!



15 ZONING WITH TEMPORARY CURTAINS

Heating a large room can be inefficient and Materials: • 2 large 2.2kg Command hooks (4 expensive. Create a heated 'zone' in your living area by hanging temporary curtains in open doors or between walls. A smaller zone is easier to heat and will retain heat for longer.

https://youtu.be/PvBi2FAW74g

- pack \$8.98 at Bunnings)
- Curtain rod (e.g. Irja curtain rod set \$2.99 at IKEA)
- · Curtains (double-backed or blockout work best, but any thick curtain will do)
- Ruler







1. Determine where to install curtains

Decide on a location for your curtain. Hold up the curtain against the wall to determine where you should hang the curtain rail. The curtain should touch, or nearly touch the ground.

From this position, choose two points to attach command hooks to the wall - the hooks which will hold the ends of your curtain rail. You can measure the distance from the top of the door frame to these points with a ruler to make sure both hooks will be evenly placed. Mark these points with a pencil.

2. Attach command hooks

Read the instructions on the packaging and attach command hooks to your wall according to these directions. Wait one hour before hanging anything on the hooks.

3. Mount curtain rod and curtains

Adjust curtain rod to size, if necessary.

Thread curtains onto the curtain rod.

Hang your new curtain on the command hooks - enjoy your newly warm home!

TIPS: Cover a larger space with the same process - use four command hooks and two curtain rods to set up two curtain panels side by side. You can also use the same technique to install curtains over windows without needing landlord permission - and curtains really help to reduce the cold air which radiates from windows in winter.



MORE ENERGY-SAVING OPTIONS

Energy efficiency means you can reduce your bills by using less energy, without having to sacrifice comfort. But there are other ways to reduce your energy costs. Some ideas are below.

Don't pay somebody else's bills!

Does your landlord charge you for electricity? If so, there must be a separate meter for consumption. Otherwise, you may be entitled to a refund. Get advice from your local tenants union if this might be you.

You may be eligible for an energy concession

You may be eligible for a concession on your energy bill that will reduce your costs. If you are on a low-income, or have a healthcare card, or are a pensioner, this could be you. You can review potential concessions at http://bit.ly/nrgrebate

Save hundreds with one phone call

Changing energy companies is simple and there is no downtime. You may be able to save hundreds just by changing your retailer, or just asking for a better deal from your current retailer. Check out www.energymadeeasy.gov.au if you want to review options.









ACKNOWLEDGMENTS

Thank you for downloading and reading this guide!

If you try these projects yourself, make sure you take photos and share them with us on Facebook @BetterRentingAU - we'd love to see more renters making their homes efficient and comfortable!

If you need advice, or if you have questions about any of these projects, email anna@betterrenting.org.au - and make sure you join the group 'Canberra Renters' on Facebook to share ideas and advice with other people who rent.

We would also like to acknowledge the assistance provided by the ACT Government for Home Truths under the ACT Community Zero Emissions Grants Program.

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