

A large, faint, light blue graphic of a lightbulb is centered in the background of the slide. The lightbulb has a rounded top and a rectangular base.

SWITCHED ON
PORTSMOUTH

**Thermal Camera
Workshop**

Winter 2023/24

How to use the camera

Laser Pointer Button:
Emits a laser that identifies
the temperature of a
specific point

Be careful not to point in
people's eyes

Power Button:
Hold to turn the camera on.

Press again to access the
menu system and gallery



Return Button:
Back up or exit in the menu
or gallery

Up/down Buttons:
Use to navigate menu and
gallery

How to use the camera

Trigger:
Press this to take a photo

USB-C Connection Port:

Plug USB-C cable into this port to connect to a desktop/laptop. You can then save any photos you have taken and/or charge the device.

Please delete all photos from the camera before returning. Any photos left on the camera will be deleted



When to use the camera



Wait until at least two hours after sunset to ensure any effect from direct heating by the sun has disappeared.



Ensure conditions are dry and calm to avoid any cooling due to evaporation or wind chill.



Ensure that there is at least a 10°C difference between internal and external temperature so that any heat loss shows up clearly.

Doors

- Look for cold spots around your door
- If blue is surrounding the door, it may need to be draught-proofed
- If there's a large amount of blue at the base of the door it may need a draught excluder
- Windows, letterboxes, and key holes can also lead to heat loss

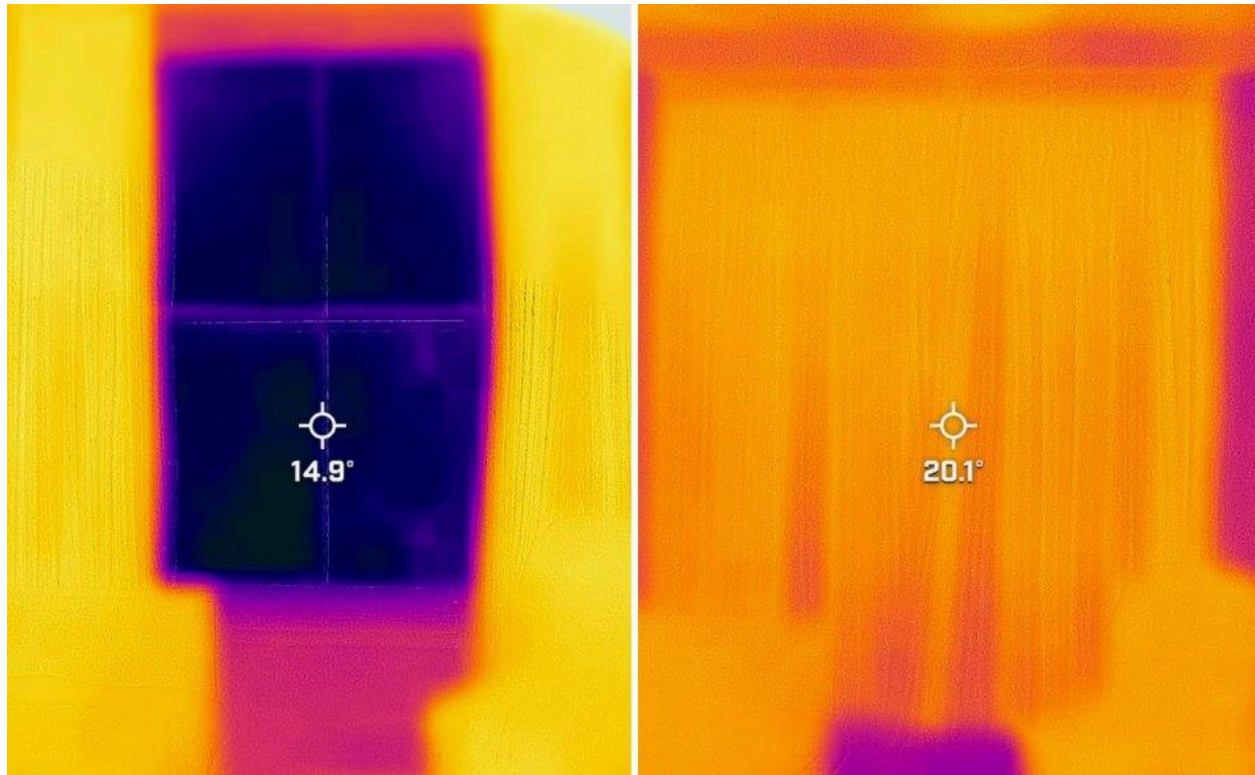


Doors



- Self-adhesive draught-proofing strips can be used to stop draughts around the door
 - [How to Install Draught Excluders – YouTube](#)
- Draught excluders can be bought or made to stop draughts at the base of the door
 - [How to make a draught excluder | National Trust](#)
- Letterbox brushes can be installed
 - [How to install a letter box brush - YouTube](#)

Windows



- Windows lose a lot of heat, make sure to close your curtains/blinds when the sun goes down
- Windows may also need draught-proofing
 - [How to Install Draught Excluders – YouTube](#)
- Silicone sealant can also be used to seal gaps around windows

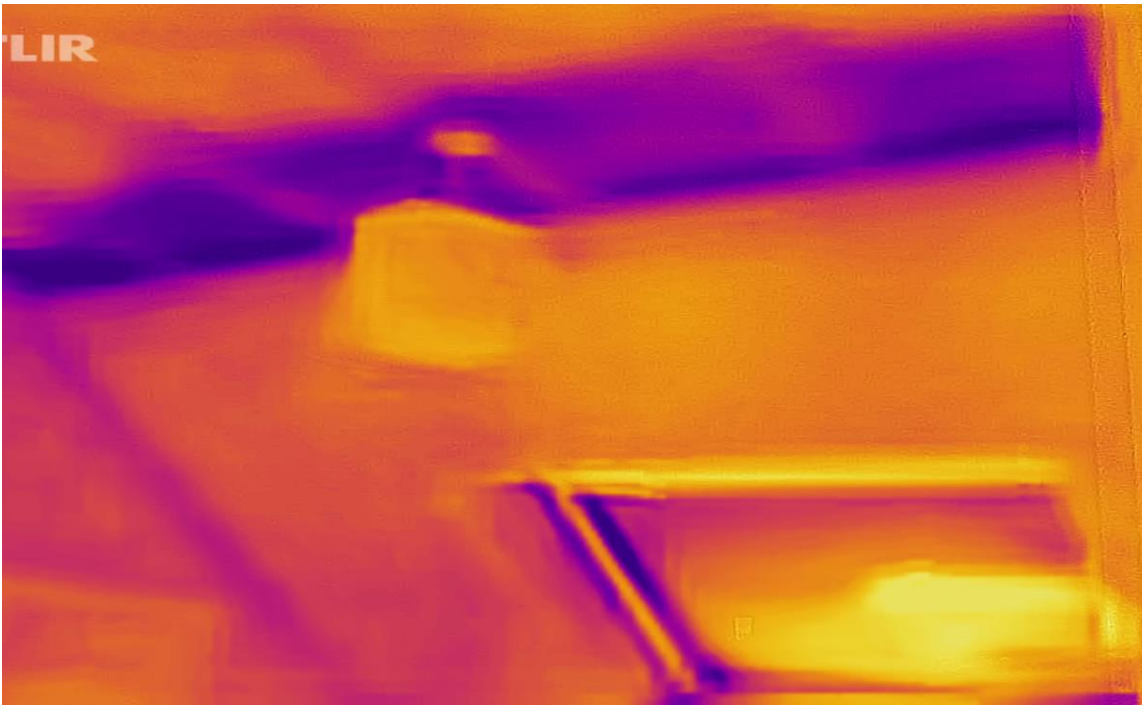


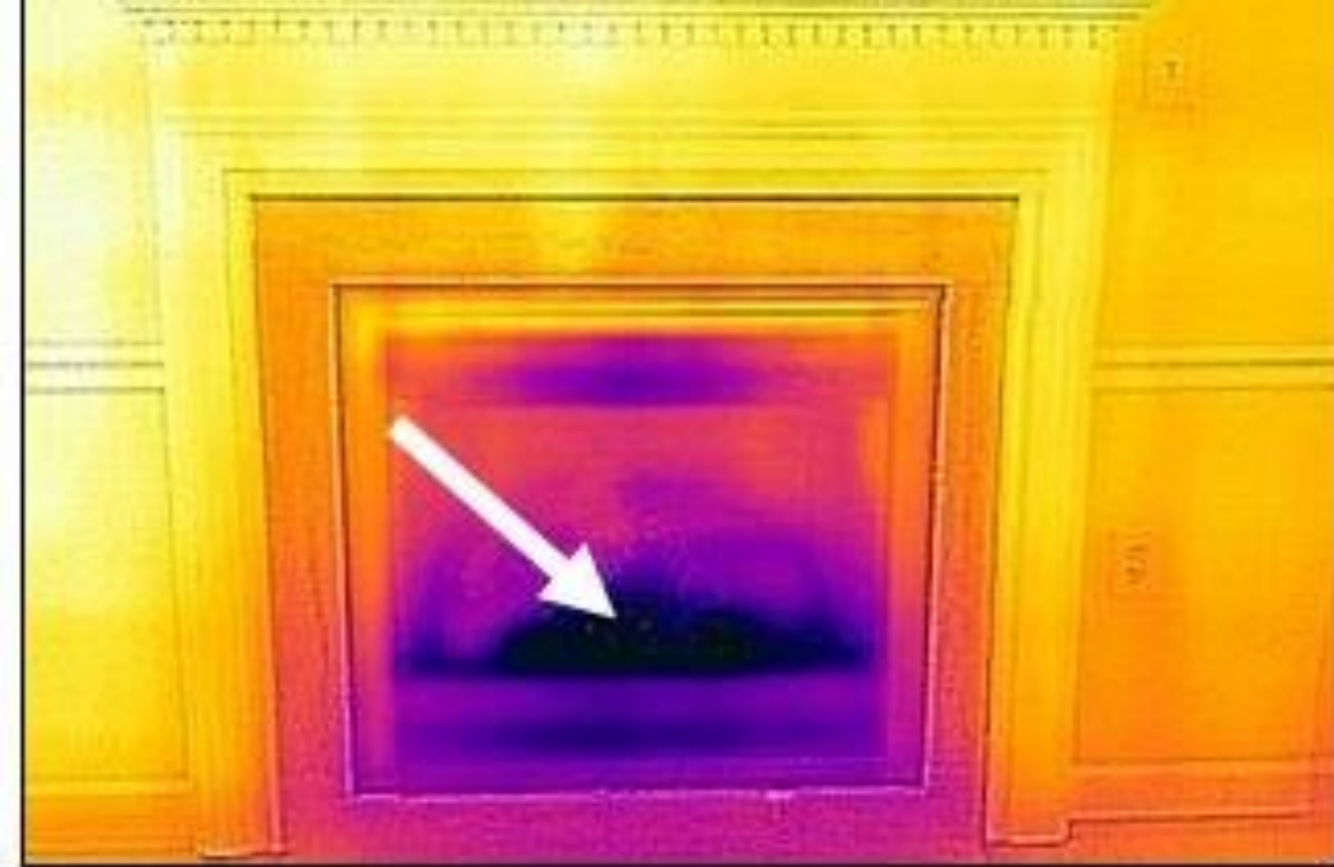
Loft hatch and roof

- Loft hatches can lose a lot of heat if they aren't insulated

[Our Guide on How to Insulate a Loft Hatch | Loft Centre](#)

- Cold spots on your roof or top floor ceiling can show if insulation isn't installed correctly – you may be able to fix this by redistributing the insulation.





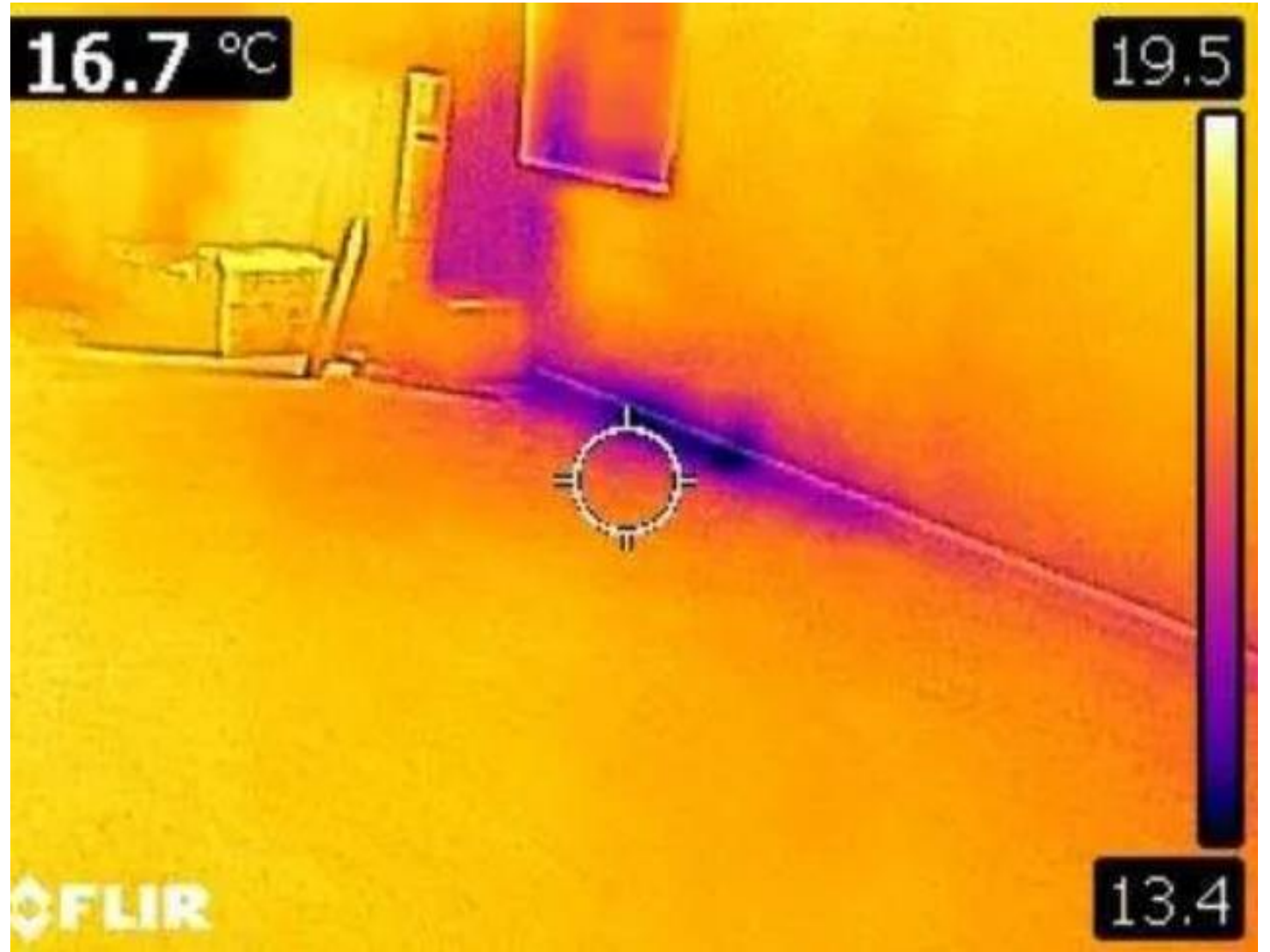
Chimney flue

- If you have a chimney flue in any room, use the camera to see if your losing heat from it
- Lots of blue may indicate you have an open flue
- To reduce heat loss, use a chimney balloon to block the flue. Blocking the flue with other items, such as blankets, may lead to issues such as damp

[Installing-a-Chimney-Balloon.pdf \(applyforleap.org.uk\)](http://www.applyforleap.org.uk)

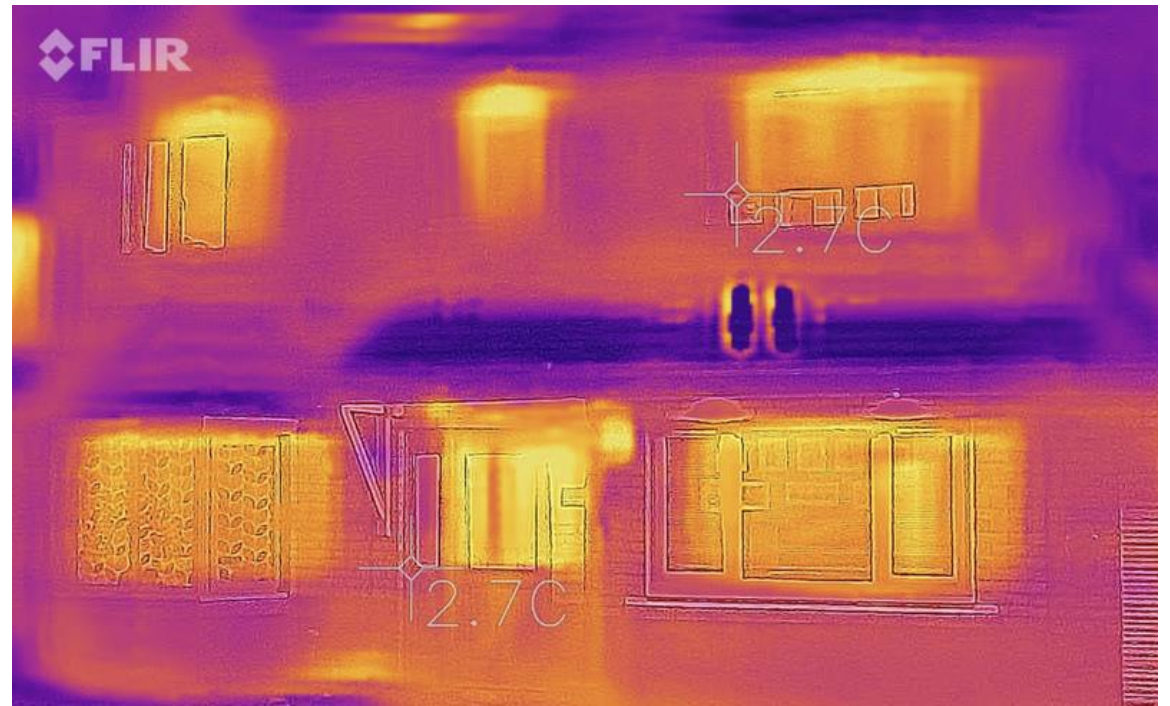
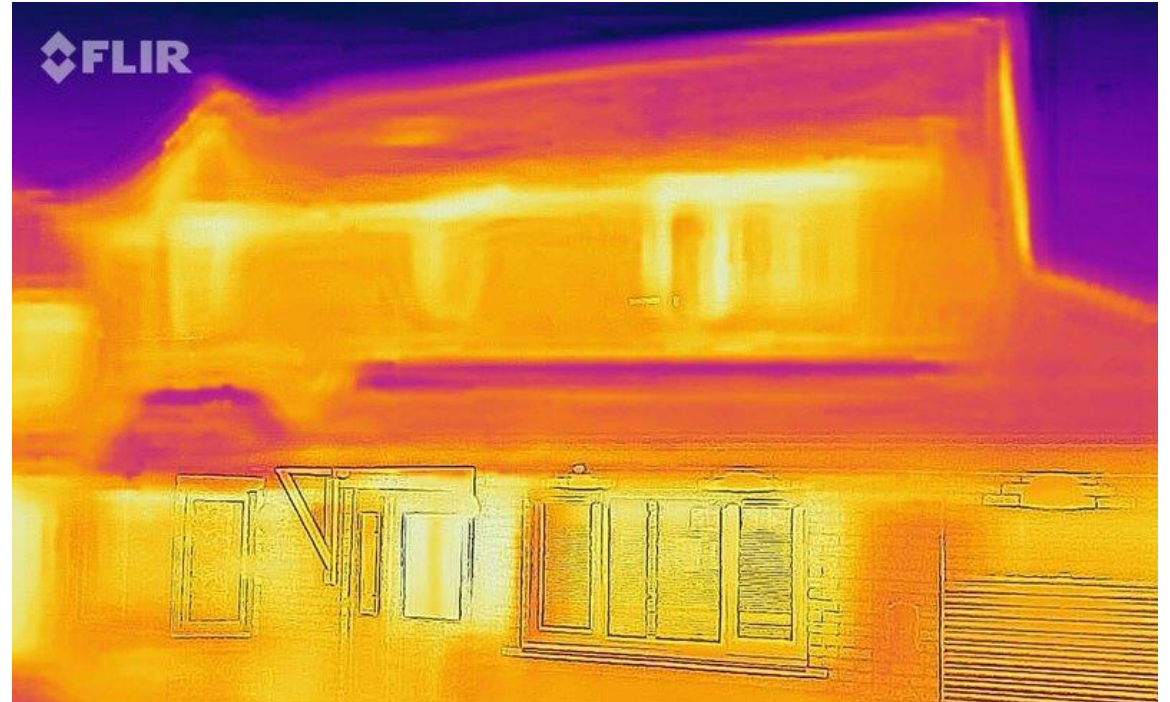
Floorboards and skirting boards

- Blue spots around your skirting boards can mean there are unsealed gaps
 - [Floor insulation information and advice - Energy Saving Trust](#)
- Filler can be used to draught-proof gaps in floorboards and skirting boards
 - [A helpful guide to draught-proofing - Energy Saving Trust](#)



Outside

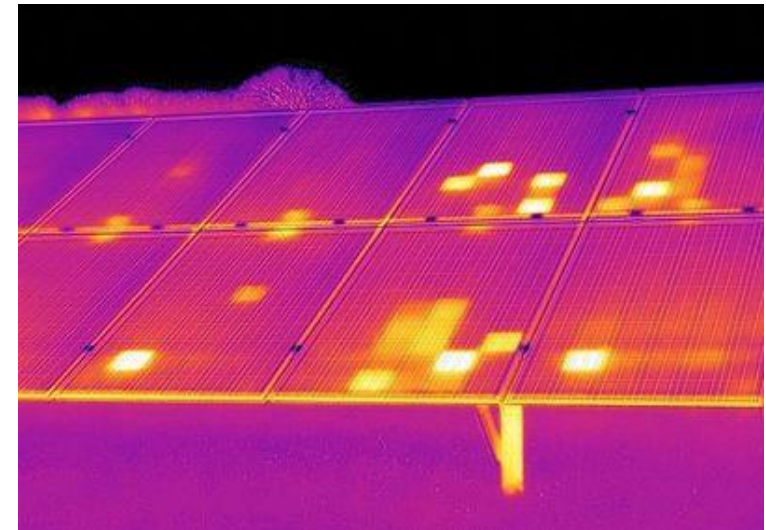
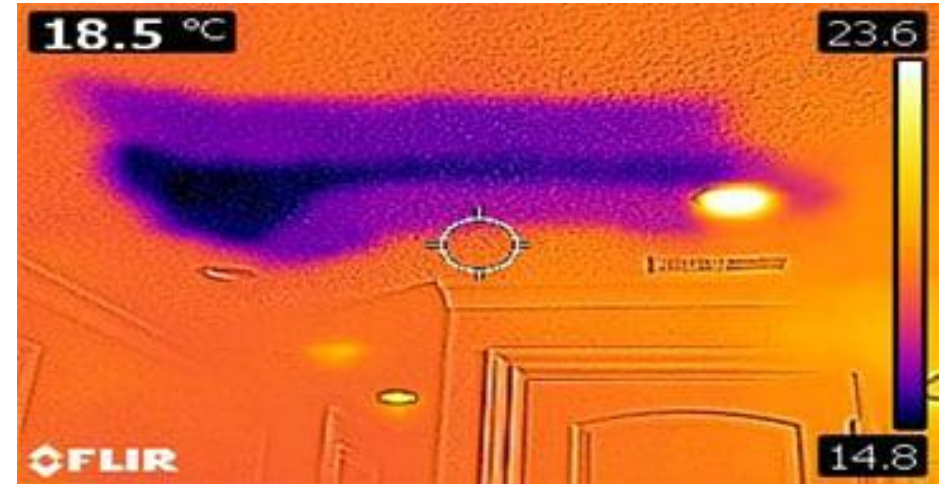
- When looking from the outside of your home, brighter orange/yellow spots now show where heat is leaving
- A home that is very bright from the outside may indicate a lack of insulation
- The photo on the right shows the same home before and after cavity wall insulation



Additional uses

- Detecting water leaks
 - The camera can detect differences in temperature caused by the presence of water. Left untreated, this could lead to mould.

- Detecting malfunctioning solar panels
 - Malfunctioning solar panels will appear slightly hotter than the surrounding panels. This can be easily seen with a thermal camera.



What you can do to reduce heat loss?

✉ hello@switchedonportsmouth.co.uk

☎ 0800 260 5907

SWITCHED ON
PORTSMOUTH

Check your properties insulation levels

Find out how to make your home more energy efficient

Enter your postcode to see the savings you can make and access FREE measures. For PO1 – PO6 postcodes only.

- The easiest way to find out if your property needs any insulation is to go to www.SwitchedOnPortsmouth.co.uk and use the home assessment tool
- The report will tell you how to make your home more energy efficient, such as by installing cavity wall insulation.
- For homes not in Portsmouth, you can check your insulation levels and recommendations on your EPC at [Find an energy certificate - GOV.UK \(www.gov.uk\)](http://www.gov.uk)
- If it's safe to do so, you can also check your loft insulation by accessing your loft. For the best results, your insulation should be over 270mm thick.



[Cavity Wall insulation](#)



[Floor insulation](#)



[Draught-proofing](#)

Types of insulation



[Roof and loft insulation](#)



[Solid wall insulation](#)

Types of Insulation



Freephone Advice Line

Open Monday–Friday, 9am–5pm, our energy advisors can provide:

- in-depth and ongoing support and energy and financial advice
- help with bill disputes
- referrals into local support services including
 - Income max
 - Free home energy visits (LEAP)
 - Home energy efficiency upgrades, e.g. solar panels

Portsmouth – 0800 260 5907

Hampshire – 0800 804 8601

(Including Gosport and Havant)

Free Energy Efficiency Upgrades – Warmer Homes

Only available for off-gas homes – not heated by gas mains

- Available via a Freephone/LEAP home energy advisor referral or online application
- Home energy efficiency upgrades:
 - Air-source heat pumps
 - Heating controls
 - Home insulation
 - Solar PV
- Available to owner-occupier and privately let properties – Landlords must contribute 1/3 of the costs
- Properties must be:
 - Owner-occupier – EPC D, E, F or G
 - Private rented properties – EPC D or E
- Occupiers must have:
 - Total household income of below £36,000 or;
 - Total household income of £20,000 after housing costs or;
 - Receive a means-tested benefit or you meet the eligibility criteria specified in ECO flex SOI
- Warmer Homes Programme – Switched On Portsmouth





Free Energy Efficiency Upgrades – ECO

- Funded by energy companies
- Home energy efficiency upgrades:
 - Air-source heat pumps
 - Heating controls
 - Home insulation
 - Solar PV
- Available to owner-occupier and privately let properties – landlords may have to contribute to costs depending on energy supplier and measures
- Properties must be:
 - Owner-occupier – EPC D, E, F or G
 - Private rented properties – EPC E, F or G
- Occupiers must have:
 - Total household income of £31,000 or;
 - Receive a means-tested benefit or you meet the eligibility criteria specified in ECO flex SOI
- To apply for this scheme contact your energy supplier
- [FAQs for domestic consumers and landlords | Ofgem](#)

Connected for Warmth

Eligibility:

Owner-occupiers and privately let properties in council tax bands A-D

What is on offer?

Full funding is available for:

- Cavity wall insulation
- Loft insulation
- Loft insulation top ups if under 200mm

Residents can also benefit from free:

- Smart heating controls
- Smaller energy saving measures
- Personalised energy advice

•INSULATION | Connected for Warmth

✉ hello@switchedonportsmouth.co.uk

☎ 0800 260 5907

📘 SwitchedOnPortsmouth

🐦 @SwitchedOnPorts





Great British Insulation Scheme

What's available:

Full funding for:

- Cavity wall insulation
- Loft insulation

Partial funding is available for:

- Flat roof insulation
- Park home insulation
- Pitched roof insulation
- Room-in-roof insulation
- Solid floor insulation
- Solid wall insulation
- Underfloor insulation

Eligibility:

- Available to owner-occupiers and landlords
- Property must be in council tax bands A-D and have an EPC D or lower

How to apply:

[Apply for support from the Great British Insulation Scheme - GOV.UK \(www.gov.uk\)](https://www.gov.uk)

Boiler Upgrade Scheme

The boiler upgrade scheme is available to owner-occupiers who:

- Have a valid Energy Performance Certificate (EPC)
- Have or plan to install a new heating system after 01 April 2022
- Are replacing a fossil fuel heating system such as oil, gas or electric.

Grants are available for:

- £7,500 towards an air-source heat pump
- £7,500 towards a ground-source heat pump (including water-source heat pumps and those on shared ground loops)
- £5,000 towards a biomass boiler (if the property is off the gas grid in a rural area)



Warm Homes Local Grant

The Warm Homes: Local Grant will begin delivery on 1st of April 2025 and will provide energy performance upgrades.

This scheme will contribute to the statutory fuel poverty 2030 target (EPC C) and the statutory net zero 2050 target. This scheme will Improve Energy bill savings and carbon savings.

Eligibility Pathways – only one of the pathways is required.

- 1: located within Indices of Multiple Deprivation (IMD) Income Deciles (ID) 1-2 areas. [Warm Homes: Local Grant - GOV.UK](https://www.gov.uk/warm-homes-local-grant)
- 2: can demonstrate receipt of a means tested benefit or eligible via route 2 of ECO Flex.
- 3: annual gross income below £36,000 or the 'after housing costs' threshold in line with published equivalisation tables (which are dependent on household composition).



Warm Homes Local Grant

Additional eligibility criteria

- Properties must have an EPC EER rating within bands D to G (Park home equivalent)
- Owner occupier and PRS households are eligible.
- Social housing is ineligible - except for in-fill purposes only, capped at 10% of a project's total homes treated, with a 50% cost contribution required from social housing landlords.
- All fuel types are eligible

Cost Contribution

- Owner occupiers are not required/expected to make any contributions.
- PRS landlords may receive 1x home fully funded per landlord. A 50% cost contribution will be required from private landlords for any additional homes. Tenants do not contribute to costs.
- A 50% cost contribution is required from social housing landlords.



Warm Homes Local Grant

Energy Performance Measures

- Cavity Wall Insulation
- Flat Roof Insulation
- Internal Wall Insulation
- Loft Insulation
- Park Home Insulation
- Room-in-roof Insulation
- Solid/External Wall Insulation
- Underfloor Insulation
- Heating Controls
- Hot Water Cylinder Insulation
- Hot Water Cylinder Thermostat
- Hot Water Cylinder/Tank
- Low energy lighting
- Solar PV
- Solar Thermal
- Battery Storage (only eligible when complimenting Solar PV)
- Digital/Smart Controls
- Draughtproofing

Low Carbon Heat

- Air Source Heat Pump
- Ground Source Heat Pump
- Hybrid Heat Pumps (for homes currently heated by mains gas)
- Shared Ground Loops
- Wet Central Heating (a system using water to distribute heat)
- Biomass
- High Retention Storage Heaters

This is not an exhaustive list of eligible measures that can be installed under this scheme.

Installable measures are subject to funding, property restrictions, viability and discretion of the installer

ECO Flex

If you are not eligible for ECO through the standard eligibility criteria, you may still be eligible through ECO Flex, which provides extra eligibility routes into the scheme.

ECO flex has been published for Portsmouth residents and can be found on the Portsmouth City Council website - [ECO4 Flexible Eligibility Statement of Intent](#)

Havant and Gosport Council's should have their SOI's published soon and will be published on their websites.



How to find an installer

- When looking for an installer, make sure they have the relevant accreditations

Insulation:

- TrustMark - [Find a local Tradesperson • TrustMark](#)

Low carbon technologies – e.g. Heat pumps, Solar PV, Batteries, etc:

- MCS – [Find a Contractor - MCS \(mcscertified.com\)](#)
- TrustMark - [Find a local Tradesperson • TrustMark](#)

THANK YOU!



www.switchedonportsmouth.co.uk



Freephone advice line: 0800 260 5907 – For residents



energysaving@portsmouthcc.gov.uk
hello@switchedonportsmouth.co.uk



Admin line: 02392841947 – For frontline staff