Keeping Cool in a Heatwave

A Practical Resource

Expect more frequent, more severe heatwaves

2026's extreme June heatwaves emphasise that Britain's outdated housing including most new-builds have an over-heating crisis. We need to adapt our homes and habits to be more 'Mediterranean'. Many recent UK homes are still poorly designed to prevent overheating, as required by Building Regulations since 2022.

Shade Your Home

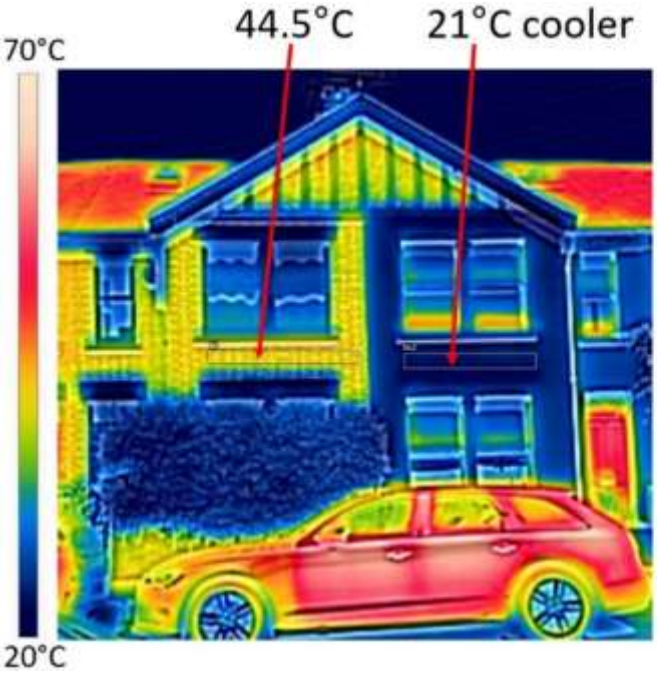
Minimise the sun's heat getting in through windows, etc

- **Internal curtains or blinds**, especially white or reflective ones, can help reduce the effect of sun coming in a window, but **external shading** that keeps the sun right out is even better: see FamilyRollo Roller Blinds.
- External shutters are traditional in southern Europe for a good reason → External blinds – can be electrically operated. Many varied examples.

  DIY: Re-sized white sheets are effective and let some light through. Old sheets from charity shops or FreeCycle. See the Heatwave Toolkit.
- **Awnings,** retractable or DIY (video), shade windows or a patio, etc. DIY awnings can be deployed from an upper window but take them down if it gets too windy. Many remote-controlled, solar-powered electric awnings can automatically deploy when sunny and retract if too windy. More choices. Further ideas for external shading.
- **Rooflights** angled towards the sun let in a lot of heat. Most Velux roof windows can have external anti-heat blinds retro-fitted. Their Interior blinds can help too. Other manufacturers have theirs.
- **Trees** that shade your home really help. Deciduous trees let you benefit from winter sun too. Could you plant one or more for the future? Or build an arbour or pergola to shade your home or patio?
- **Solar-control film** on windows reduces the sun's heat coming in, but it cuts some light too. It's a low-cost solution that you can fit it yourself: See video
- **Low-G glass** (solar-control glass) lets in much less radiant heat from the sun, with a small reduction in light transmission. Specify it for new or replacement sunny windows. But both the above also reduce solar gain in the winter, which would otherwise keep you warmer. Controllable shading is better in this respect.

Ventilate Right:

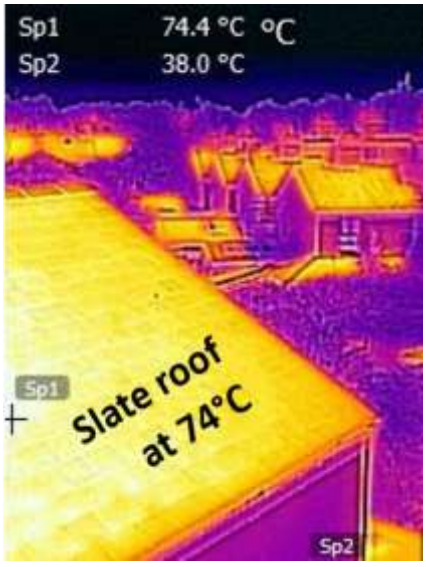
- **On a hot day**, as soon as the air is hotter outside than in, close all doors, windows and vents that would let hot air in. You may be able to keep ventilating longer on the shady side of your home.
- **Cool off at night** To sleep better and cool down your whole home let hot air out by opening windows or skylights at the top of your home. Draw in cool air by opening ground-floor windows or vents where the air is cooler outside. Fans, including upper floor extractor fans, may help.
- **If your home is only on one floor**, purge the hot air by opening windows or vents on opposite sides if possible. If you only have openable windows on one side, can they be opened at the top and the bottom? If so, place a fan to draw in cool air at the bottom. Hot air will rise and be expelled through the top.
- **Security** Many windows can be part-opened in secure ways that won't let a burglar in. For example restrictors like these can be fitted to wooden sash windows, letting them only open a bit when you want.
- If mosquitos or other insects are a problem for opening windows, consider fitting fly screens, to keep them out. More here or magnetic ones. DIY using Midge Mesh. It's also good for solar screening, while still enabling you to have a view out. See DIY video. Info in YouTube Description.



White walls and roofs absorb much less heat from the sun. This thermal image shows a white wall's surface in a heatwave that's 21°C cooler than the neighbour's plain brick wall. Of course the rooms inside won't be 21°C different, but the rooms with white wall will be significantly cooler.
They're both making good use of white internal blinds and shutters. The white home on the right has a very hot grey front door that would be cooler if painted white. See 'White Walls are Cooler in a Heatwave'.
Flat roofs get very hot in the sun too. This Aluminium Solar Reflective Paint suits asphalt or bituminous roofs.

Avoid unwanted heating from appliances, lighting, etc

- Choose low-energy appliances & lights: use them only as needed
- Are your hot water pipes and tank (if you have one) well insulated? Adding insulation will save you energy in the winter too.
- Is your fridge or freezer in a hot place? It will be inefficient and make that place even hotter. Fridges and freezers work best in cool places, although check their user-guides for operating ambient temperature range. eg: a garage may be too cold in the winter.
- Eat salads, etc. Minimise cooking, especially ovens. Use the extractor fan, if that removes cooking heat. Barbecue outside or cook in the cool evening with the door/windows open



Insulate walls and roofs, especially those that get hot in the sun.

Reflective insulation (eg: multifoil) is effective for reducing heat radiating down from a hot roof. Draught-proofing keeps hot air out.
These measures also save energy used in winter heating.

Thermal Mass from brick, stone, concrete etc. stabilises indoor temperatures, reducing peaks.

Like in cathedrals! External wall insulation, with the thermal mass of the walls inside is good for this. You can benefit from the thermal mass of solid floors too by covering them with tiles, rather than thick carpets. Cooling the thermal mass in your home with night-time ventilation helps keep those rooms cool in the day.

Air Conditioning Try all the 'Passive' cooling measures above that work for your home & budget.

If you're still too hot, you probably need 'Active' Cooling, consuming energy, usually meaning Air Conditioning (AC). Air-to-Air Heat Pumps are very similar and most can cool you in summer, like AC, AND heat you in winter, providing 3-4 kW of cooling or heating from 1kW of electricity. In a heatwave, your outdoor AC unit blows out Hot air, which may heat your neighbours and worsen the urban heat island.

Cool yourself

- **Spray** or sponge yourself with water – or a damp towel round your neck?
- **A fan** can help you stay comfortable, especially with a spray.
  Its electricity consumption is low, compared to air-con.
- Similarly cool your home by **hanging up damp towels or sheets,** maybe combined with a fan. Good if it's not too humid.
- Take a cool **shower**
- A cold pack around your neck or under your arm, in a sock if too cold.
  Put a nearly-full water bottle the freezer. Later cover it & take it to bed!
- Wear **loose, thin clothing**, a wide-brimmed hat & sunglasses outside
- **Avoid going out** or exerting yourself in the heat of the day. Plan ahead
- Take a water bottle & sun shade when you do go out. Check the weather forecast first.
- **Don't get dehydrated.** Have cold drinks regularly.

Avoid heat exhaustion and heatstroke See NHS advice

Human choices

If your home's too hot, is there anywhere you can go that's cooler?
Can you sleep in a cooler room – on the north side or ground floor?

See this NHS advice on staying safe in hot weather. Older people and young children are most at risk.

Some people, like those in sunny, single-aspect flats have **few options to stay cool** and suffer badly in heatwaves. If global heating reaches 2°C above pre-industrial levels, as expected by 2040, 9 in 10 existing UK homes will be at risk of overheating, but many of the improvements needed are fairly simple for most homes. Ones that are difficult to improve will need AC.

Being Neighbourly
Consider how you can help neighbours, family & friends in hot homes, especially the elderly or young.

- Can they cool off at your home?
- Could you offer them advice or practical help, using some of the above?

Other Resources:

Cambridge area:
CCF's Get Ready for Heatwaves companion online talk and its Heatwave Preparation YouTube Playlist.
Transition Cambridge's resource and Cambridge Retrofit Hub's Summer Shade & Home Cooling Workshops.
National resources:
Overheating Adaptation Guide for Homes from Shade the UK. Beat the Heat from UK Gov.
The Heatwave Toolkit has lots more DIY solutions, including 'Paint Yoghurt on Your Windows'!

Hoping that you stay cool and can enjoy the hot weather!
***Tom Bragg*, Cambridge Carbon Footprint volunteer, June 2026**