



Information sheet No 39.

Building Resilience into our Homes

One of the most obvious effects of Climate Change is the increase of extreme weather events – heat waves, drought – extreme rainfall and the associated risk of flooding and high winds. When retrofitting our homes there is an opportunity to build in resilience to enable our homes to better cope with extreme weather and its consequences.

Extremes of Heat:

- A well-insulated property will remain cooler inside during heatwaves as well as warmer inside during cold weather.
- A roof with a good overhang will provide some internal shading from high elevation sun.
- When installing new glazing units, ensure there are sufficient opening windows on both sides of the property so a through draught can be created when necessary. Floor to ceiling glazing and conservatory roofs, especially on south elevations can cause tremendous heat build-up internally and internal shading /curtains, blinds or shutters will be necessary.
- Deciduous trees can help give shade in summer and let in light in winter.
- In cold roof spaces where insulation is above ceilings, ensure there is adequate ventilation. Heat build-up in well insulated roof spaces can be considerable, damaging under tile sarking felt and items stored there.
- The following link offers 13 simple ways to keep cooler in hot weather <https://www.cse.org.uk/news/view/2705>

Extreme rainfall events and flash flooding:

- Even property not build on a flood plain can experience flash flooding during what will be an increase in more frequent extreme rain..
- Keep guttering and gullies clear of debris. Consider if existing guttering can cope with heavier rain. Replacing with deeper flow might be appropriate. Are existing drains sufficient, especially on driveways sloping towards the house? Are additional strip drains necessary to prevent garages and outhouse from flooding? If your property is next to a river, stream, or ditch, keep the waterway in good condition.
- Ensure any rendering is in good condition.
- If solid floor homes are subject to flooding, might it be appropriate to replace carpets with tiled flooring? Raise wall sockets above possible flood levels and consider one-way valves to toilets, washing machine drains etc.

- Chip board kitchen units and furniture are particularly prone to water damage. If refitting a kitchen consider alternative materials which will dry out without damage. Have a supply of bricks to raise furniture on.
- If resurfacing hard standing areas, driveways etc. consider water absorbing materials.
- Air bricks to suspended floors can be fitted with temporary covers to prevent water getting under the floor.
- External doors can be fitted with flood gates – even a supply of sandbags could be helpful.
- In properties prone to flooding develop a flood emergency plan. e.g. essential telephone numbers including insurance and utility companies, instructions for turning off gas, water and electricity, a list of valuables and papers to move above flood level. Paper documents could well be kept in plastic files. There is a Government template to help develop a personal Flood Plan.
<https://www.gov.uk/government/publications/personal-flood-plan>

High Winds and storm:

- Fix any broken, slipped or missing tiles.
- Ensure all guttering and down pipes are secure.
- Ensure all outhouse and green house doors are secure and fences and fence posts are strong.
- Consider if any trees need maintenance, especially any weak branches which could hit the house.
- If installing a household storage battery, consider if it might be worthwhile having a backup system to supply the house with emergency power.

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