

Cambridge Homeowner Ready for Extreme Weather?

CLIMATE RESILIENCE TOOLKIT

Preparing your home for extreme weather can help mitigate the effects of climate change. These are some of the steps you can take to protect yourself and improve the resiliency of your home.

1. Install solar panels on roof

How: Discover your sun potential by learning about solar options: https://www.energysage.com/landing/home-solar/p/cambridge/?utm_medium=Partner&utm_source=The_City_of_Cambridge.

Why: This will reduce the risk of brownout during **extreme heat** and could provide your building autonomy during energy shortages due to **flooding** or **extreme heat** if you also install storage power systems and separate circuits.

2. Replace asphalt roofing with light-color reflective materials

How: Use light color material to minimize heat gain. Ask your roofer about cool roof options for solar reflectance.

Why: This will maintain your roof at cooler temperature and help your house be more comfortable during **extreme heat** and potentially reduce your energy bill.

3. Have a rain garden

How: Replace your landscaping in the low areas of your property with native plants and soil that can temporarily hold and soak in rain water runoff that flows from roofs, driveways, or patios.

Why: By capturing stormwater away from your house foundation, you will reduce your **flooding risk**. If you are replacing asphalt, you will also make your yard cooler during **extreme heat**.

4. Replace asphalt with porous surface

How: Pave your driveway and pathways with light color material such as pavers or gravel that let water filter.

Why: This will maximize water getting directly into the ground and will reduce your house **flooding risk** and **street flooding**. It will also make your yard cooler during **extreme heat**.

5. Replace or complement your boiler with a ductless mini-split system

How: Contact a contractor specialized in air-heat pumps for a condenser outside your home — above the identified flood elevation -- and air handlers that provide heat and cooling. No ductwork is required for easy and unobtrusive installation.

Why: Your system will be protected from **flooding** and will provide clean energy for cooling during **extreme heat**.

6. Make your windows and doors airtight

How: Replace all the caulking around your windows and doors. Or when replacing, ask how they perform for energy loss. Make sure that replacement windows meet or exceed energy requirements.

Why: It will keep your house cooler during **extreme heat** and will also maintain interior temperature during energy shortage due to **flooding**.

7. Install electric subpanel for critical utilities to operate on back-up power

How: Decide which electrical loads are critical to power during a blackout to be connected to a separate sub-panel. Circuits feeding the refrigerator, lighting circuits and any other necessary loads will be pulled from the main breaker panel into the isolated subpanel to be powered from a generator or solar panel.

Why: This will maintain minimal comfort in your home during a blackout or power outage due to **flooding** or **extreme heat**.

12. Insulate roof, basement and exterior walls

How: Learn about options for a no-cost home energy assessment: <https://cambridgeenergyalliance.org/no-cost-energy-assessment/>. Use your assessment to find out how you can make energy efficient improvements.

Why: It will help maintain your home's temperature during extreme weather.

11. Plant/Preserve trees

How: Water and trim trees as needed

Why: To improve urban tree canopy, reduce **extreme heat** in the city, and save energy.

10. Clean storm drains(s) close to your home

How: Remove leaves and dirt that clog the grates.

Why: This will allow for the City's infrastructure to best capture stormwater and reduce **flooding risk**.

9. Use flood-resistant materials

How: When rebuilding your basement, use water resistant material such as terrazzo, or ceramic tile floor and cement board.

Why: This will reduce **flooding damage** to your home and will allow you to recover/be back to normal faster. These materials are also often mold-resistant and would protect from condensation.

8. Elevate or relocate main utilities

How: When replacing or upgrading your heating and electrical utility systems, raise all components at least 1 foot above the anticipated flood level if you are in a flood area, and as much as affordable otherwise.

Why: Avoid costly **flood damage** by preventing your electrical system components, including service panels (fuse and circuit breaker boxes), meters, switches, and outlets to be in contact with flood water. These are easily damaged by flood water.

