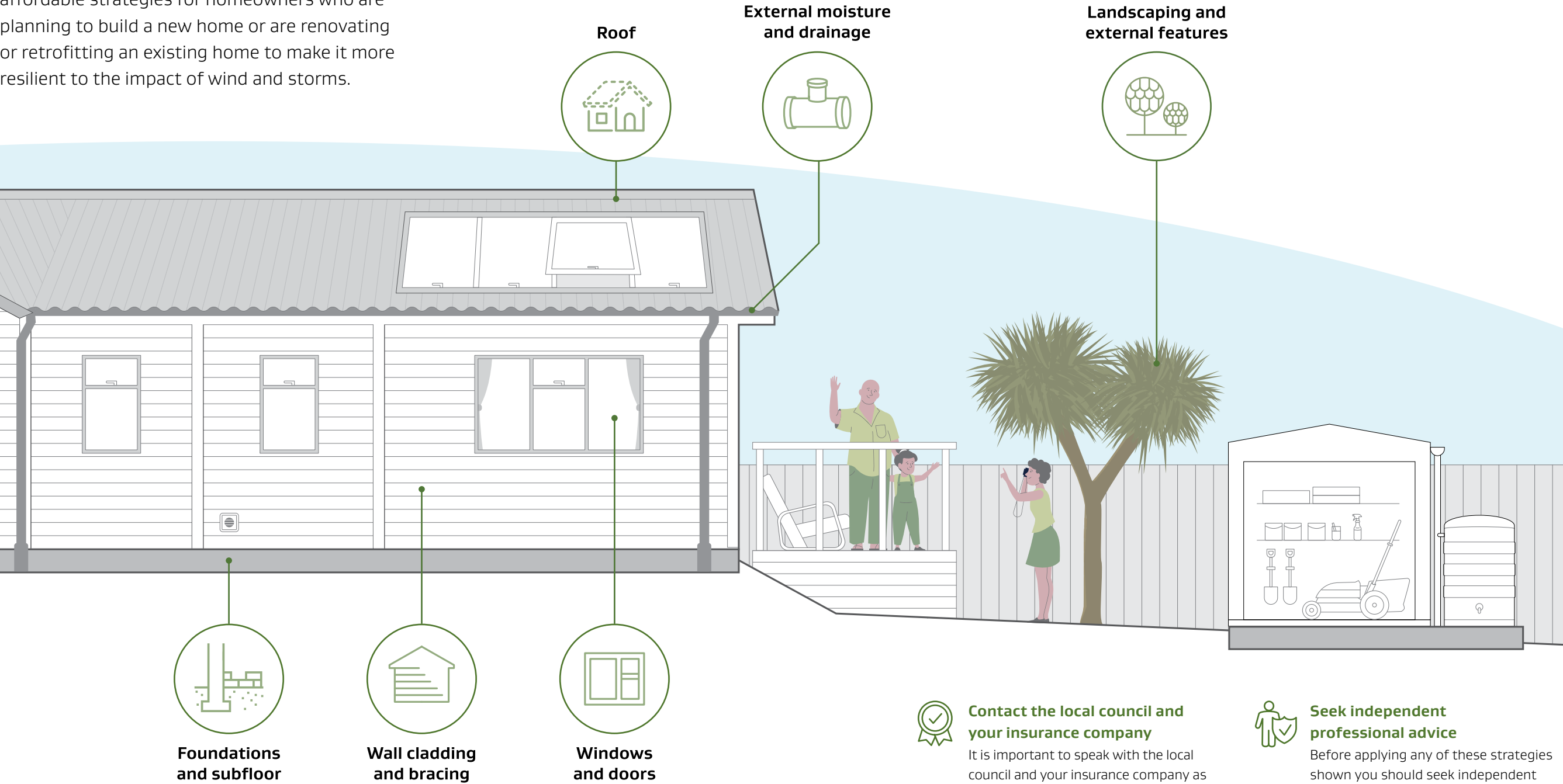


Wind and storm resilient home

This illustration presents some practical and affordable strategies for homeowners who are planning to build a new home or are renovating or retrofitting an existing home to make it more resilient to the impact of wind and storms.



Wind and storm resilient home

An existing home

When altering or repairing an existing home it's a great opportunity to include wind and storm resilient features. Renovations might involve adding an extension or improving the home's performance by upgrading windows, doors or cladding. Storm-related repairs such as fixing damaged roofing, broken windows or water ingress can be costly. However, by choosing durable materials, reinforcing roof fixings and improving drainage you can reduce the risk of future damage and improve your home's ability to withstand severe weather. A wind and storm resilient home is better prepared for Aotearoa New Zealand's changing climate and helps protect your investment in the long term.

A new home

New homes must meet the minimum standards set out in the New Zealand Building Code including requirements for wind and weather performance. Designing beyond the minimum requirements such as upgrading structural systems, designing to a higher specification and considering local wind exposure early in the design process can result in a home that is stronger, safer and more resilient to storms and high winds.



Applies to new homes only

All other strategies apply to both new and existing homes



Roof

- Use a simple roof shape (eg gable or hip) and design to reduce the risk of wind uplift.
- Ask your designer to specify that the roofing and trusses are secured with stronger fixings than the Building Code minimum to keep your roof firmly in place during extreme winds.
- Check that downpipes, gutters and flashings are maintained regularly to handle heavy rain and reduce the risk of leaks or flooding.
- Avoid internal gutters, parapets and any unnecessary penetrations.
- Anchor solar panels, satellite dishes and chimneys securely.
- Ask your designer to use a rigid air barrier and specify larger flashings than usual as these upgrades can help prevent water getting into your home.



Wall cladding and bracing

- Strengthen wall bracing systems to resist lateral wind loads (especially in high or extra-high wind zones).
- Keep the shape of your home simple and avoid tricky joins between roofs, walls and balconies as these areas are more likely to let in water.
- Use a single type of cladding to keep the exterior design simple and reduce the number of joins where water and wind may get in.



Windows and doors

- Install impact-resistant or toughened glass to reduce breakage during storms.
- Where possible, place doors and windows on the sides of the home that are more sheltered (eg protected by fencing or hedges and away from prevailing winds).
- Secure all large doors (eg garage doors) against wind pressure and reinforce if necessary.



External moisture and drainage

- Design the site with good drainage and slope land away from your home to avoid water pooling near foundations.
- Install backflow prevention in stormwater or sewer connections if the site is flood-prone.
- Use channel drains or permeable paving to manage surface water effectively.



Foundations and subfloor

- Secure subfloor framing and enclose underfloor areas to prevent wind-driven water or debris intrusion.
- For elevated or coastal sites, consult with an engineer to ensure piles or retaining walls are appropriately designed to resist wind and storm surge forces.
- Elevate ground floors in flood-prone areas or use flood vents to reduce water pressure on walls



Landscaping and external features

- Keep large trees and shrubs trimmed and away from the house.
- Secure fences, sheds and outdoor furniture to prevent damage from flying debris.
- Ensure planting does not create additional risk (eg top-heavy trees or those prone to snapping).
- Choose wind-tolerant plants and create buffer zones with low, dense vegetation where appropriate.