

Our Coast. Our Future.



Factsheet | Resilient housing

What does a resilient home look like?

In coastal areas, private dwellings may be exposed to impacts from coastal hazards, including flooding associated with storm tide inundation. Smart choices in the design of your home can reduce the impact of tidal flooding. If rebuilding, renovating, or building a new dwelling, it is worth considering these top tips for a resilient home.

Some of these changes may have higher initial upfront costs but provide a longer-term benefit. Making these changes over time can reduce damage from future tidal flooding, and help you get back to normal quicker after a coastal flooding event.

Top tips for a resilient home:



Around the house

Raise electrical power outlets above waist height to reduce damage during a flood and allow power to be restored more quickly



Look at different floor and wall covering options. Tiles and waterproof grout are much easier to clean after a flood than wallpaper or carpet



Living room

Raise TVs, speakers, WiFi modems and other electricals above waist height or mount on walls if possible to reduce damage during a flood



Bathroom

If fitting a new bathroom, think about a free-standing bath or shower that is easier to clean around after a flood rather than a fixed bath

Kitchen and laundry

Raise fridges, freezers, kitchen appliances and cupboards on plinths or stands with removable kickboards to reduce damage and make cleaning up easier



If replacing electrical appliances think about appliances which can be lifted or placed in higher locations such as a front-loading washing machine on a shelf or plinth instead of a top loader on the ground.



Bedroom

Metal or raised bed frames and other furniture will be easier to clean up than divan or upholstered furniture



Outside

Place work benches along the inside of garage walls to help reinforce the walls and reduce damage from floodwaters and strong winds



NOTE: Consult a Registered Professional Engineer Queensland (RPEQ) structural engineer for all structural alterations

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Tidal flood depth and damage

A relative shallow tidal water depth (10 – 30 cm) can cause substantial damage to the interior of a dwelling (Figure 1). A water depth in the order of 30 cm can often require rewiring, reflooring and replacement of appliances. Investing early in adaptation measures can significantly reduce the damage to your home and the costs associated with clearing up. The top tips for a resilient home are recommended even if your dwelling is only exposed to relatively minor tidal flood events.

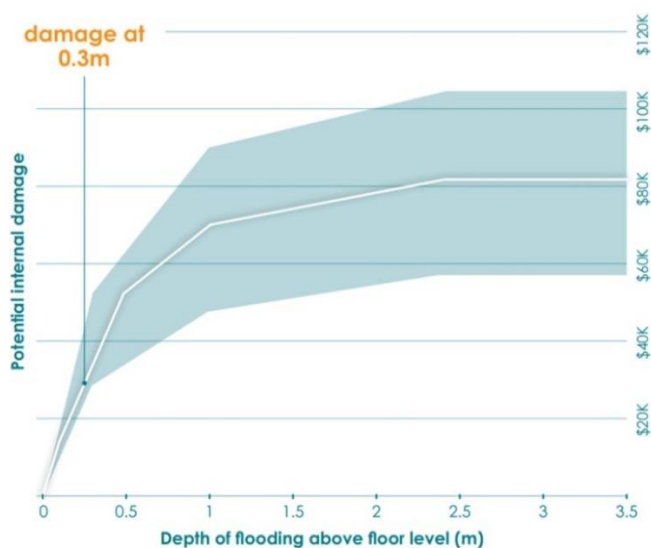


Figure 1. Indicative internal damage cost compared to depth of tidal flooding in residential buildings. Shaded area represents uncertainty and variation from a number of studies.

More information on coastal hazards can be found at:

<https://conversations.gladstone.qld.gov.au/our-coast-our-future>

FACT SHEETS IN THIS SERIES:

- Our Coastal Landscape
- Commonly Used Terms
- Coastal Hazards
- Coastal Hazard Adaptation
- A Strategic Approach to Adaptation
- *Our Coast. Our Future.* Strategic Plan

Further ideas for resilient homes can be found here:

- Flood Resilient Homes Program – <https://www.citysmart.com.au/floodwise/>
- Flood-resilience strategies – <https://www.citysmart.com.au/wp-content/uploads/2018/07/FWHS-Floodresilience-Strategies.pdf>
- Rebuilding in storm tide prone areas – <https://therocknews.files.wordpress.com/2011/08/draft-part-1-lowres1.pdf>

More information on coastal hazards can be found at:

Coast Adapt: <https://coastadapt.com.au/>

QCoast2100: <https://www.qcoast2100.com.au/>