**Disaster preparation** 

# Your flood resilient home

Your guide to building, maintaining and insuring a resilient home





## Introduction to flood resilience

Floods are a major threat to many Australian communities, especially in vulnerable areas. As climate change progresses, these floods are becoming more common, intense, and unpredictable. This makes preparation vital. Heavy rains, storm surges, or overflowing rivers can cause floods.

Such events lead to severe damage and endanger lives. Thus, floods rank among Australia's most destructive disasters. Building codes set basic standards for construction in at-risk areas.

However, they often overlook specific risks or extreme flood events. To truly protect your home, you need to exceed these standards.

By going beyond basic codes, you lessen damage, ensure safety, and aid emergency services.



## This guide covers:

**01.** 

What to consider when you're building or renovating

pages 04-06

03.

What to do if there's an imminent threat of a flood

pages 10-12

02.

Maintaining a flood resilient home

pages 07-09

04.

Insurance considerations including reviewing and understanding your policy

pages 13-18

## Investing in flood safety boosts individual and community protection.

The information contained in this booklet is provided for general information only and should not be relied upon for the purposes of advising on any particular matter. This booklet does not contain legal or financial advice. If need be, you should seek your own advice germane to your personal circumstances. For further information, please <u>contact NEMA</u>.

01.



## What's a resilient home and why it's important

A 'resilient home' can withstand disasters and recover quickly from them. It's a protective space for you and your loved ones.

A 'resilient home' safeguards your family, property, community and peace of mind. It's an investment in your future that avoids stress, heartache, and financial loss.

#### Building or renovating a flood resilient home

Include resilience measures early when building or renovating in flood-prone areas. Smart designs and strong structures boost your home's weather resistance. It can help protect your property and loved ones.

This section highlights some key actions and features for construction or renovation.

#### **National Resilience Action Library**

The National Resilience Action Library (NRAL) is now available on the NEMA website and delivers a comprehensive public collection of evidence-based risk mitigation activities for flood, cyclones and bushfires. The NRAL ensures that property owners, renters, communities and all levels of government have readily available advice on best practice mitigation measures and actions they can undertake to reduce the risk to their homes. NEMA has worked with the University of Queensland and James Cook University to deliver the underlying information on mitigation actions, based on sound research.

## **Building or renovating a** resilient home



These measures work together to create a comprehensive flood defence system. While some may seem costly, they're an investment in your home's safety and your peace of mind. Note, these are just some of the measures you could take.



#### **Elevated utilities**

Raise electrical systems, HVAC equipment, and other utilities

#### How

Install electrical outlets, switches, and equipment above the expected flood level

#### Why

Protects critical systems from flood damage and allows for quicker recovery



#### Flood-resistant materials

Use flood-resistant materials for walls, floors, and insulation

#### How

Select materials such as concrete, closedcell foam insulation, and ceramic tiles

#### Why

Reduces water absorption and promotes faster drying after a flood



#### **Elevated structure**

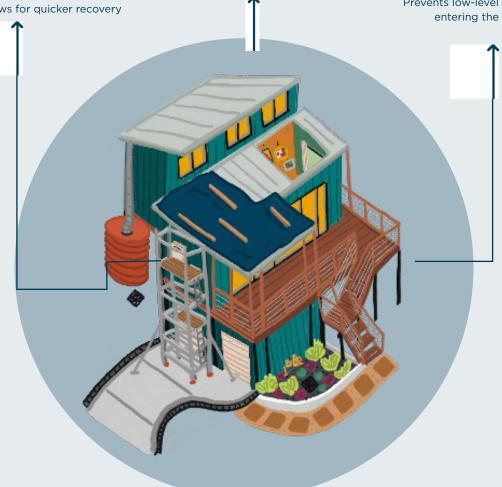
Raise the house floor level above the defined flood level

#### How

Construct the home on stilts, piers, or a raised foundation

#### Why

Prevents low-level floodwaters from entering the living areas



**Key:** Cost\*: \$ Very Low <\$1,000





\$\$ Low \$1,000 - \$10,000 \$\$\$ Medium >\$10,000





## **Building or renovating a** resilient home





#### **Backflow prevention**

Install non-return valves on sewage and stormwater pipes

#### How

Fit one-way valves to prevent water backing up through the pipes

#### Why

Prevents contaminated water from entering the home through the plumbing system



#### **Improved** drainage systems

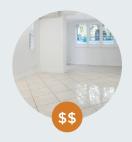
Enhance property drainage and install a sump pump system

#### How

Create proper grading, install French drains, and add a sump pump with battery backup

#### Why

Improves water runoff and removes water from the home's perimeter



#### Water-resistant internal features

Use water-resistant internal wall linings and flooring

#### How

Install moisture-resistant drywall, ceramic tiles, or concrete floors

#### Why

Reduces water absorption and potential for mould growth



#### Flood doors and **barriers**

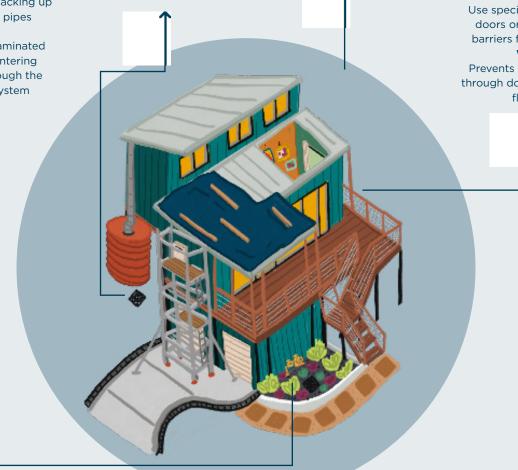
Install flood doors or removable flood barriers

#### How

Use specially designed doors or deployable barriers for entrances

#### Why

Prevents water ingress through doorways during floods





**Key:** Cost\*: \$ Very Low <\$1,000



\$\$ Low \$1,000 - \$10,000 \$\$\$ Medium >\$10,000









## Maintaining a resilient home and why it's important

Getting ready for floods is key to protecting your home, family, and finances. It can save lives. Simple actions like clearing drains, raising valuables, and waterproofing your home greatly improve safety. You'll face flood warnings with confidence, knowing you're prepared.

This approach reduces damage and repair costs. It can also lower your insurance rates. A prepared home bounces back faster from floods, lessening disruption. You're also helping your community by reducing the burden on emergency services. Regular upkeep and flood preparation keep your home safe for years.

This section provides key actions far maintaining a flood resilient home and yard.

## **Actions to maintain a** resilient home



These measures work together to create a comprehensive flood defence system. While some may seem costly, they're an investment in your home's safety and your peace of mind. Note, these are just some of the measures you could take.



#### **Maintain elevated** utilities

Inspect and maintain elevated electrical and HVAC systems

#### How

Ensure all elevated systems are secure and in good working order

Protects critical home systems during a flood



#### **Check structural elements**

Inspect foundation, walls, and floor for cracks or damage

Look for signs of water damage or structural issues, especially after flood events

#### Why

Early detection can prevent more severe damage



#### **Inspect and maintain** flood barriers

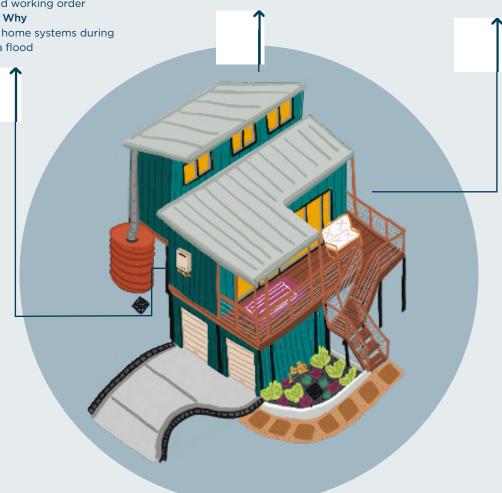
Regularly check flood doors, barriers, and seals

#### How

Ensure all flood protection measures are in good condition and properly fitted

#### Why

Maintains the integrity of your flood defense system



**Key:** Cost\*: \$ Very Low <\$1,000 \$\$ Low \$1,000 - \$10,000 \$\$\$ Medium >\$10,000









## Actions to maintain a resilient yard



#### Test sump pumps and backflow valves

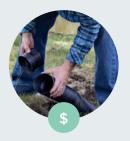
Regularly test and maintain sump pumps and backflow prevention devices

#### How

Ensure these systems are operational before the flood season

#### Why

Critical for preventing water ingress during a flood



#### **Check and clear** drainage systems

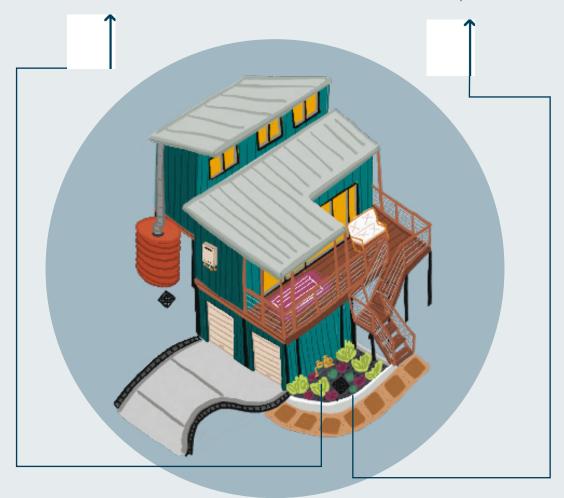
Regularly inspect and clean gutters, downspouts, and property drainage

#### How

Remove debris and ensure water can flow freely away from your home

#### Whv

Prevents water buildup around the foundation









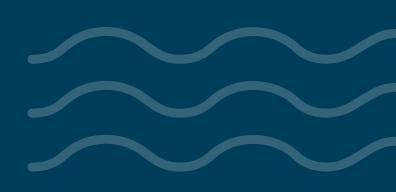


**Key:** Cost\*: \$ Very Low <\$1,000 \$\$ Low \$1,000 - \$10,000 \$\$\$ Medium >\$10,000





03.





## What to do when there's an immediate flood threat

An immediate flood threat refers to a situation where flooding is imminent or already unfolding near your location. This is when your preparations are put to the test, and you need to act quickly to protect yourself, your family, and your property from the approaching floodwaters.



## **Immediate Threat Checklist**

Print this checklist to have on hand if you ever need it

If '	vou	need	to	prepare	to	evacu	uate:
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0	Listen to local emergency broadcasts for the most accurate information	0	Ensure your emergency kit is ready and accessible
0	Activate your flood survival plan	0	Charge mobile phones and have a battery-powered radio ready
0	Dress in water-proof clothing (For example: long-sleeved shirts, long pants, sturdy shoes)	0	Keep pets inside and have carriers ready in case of evacuation

## Last minute actions around the house to reduce potential damage:

0	Move valuables and important items to higher ground	0	Secure or bring in outdoor furniture and items
	Deploy flood barriers or sandbags around	0	Activate your sump pump system
	entry points	0	Ensure your emergency kit is readily accessible
0	Turn off electricity, gas, and water at the mains	O	Listen to local emergency broadcasts and be prepared to evacuate if instructed
0	Elevate furniture and appliances if possible	0	Close and lock all windows and doors if evacuating
O	Move vehicles to higher ground		



#### Remember:

Decide early whether or not you're going to evacuate or stay.

Always follow emergency service instructions.

Prioritise personal safety over property protection.



Remember:

Stay calm and alert

Act decisively and early - don't wait until the last minute

Follow official instructions and your flood survival plan

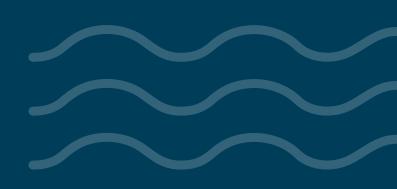
Safety first - leave early, well before the flood arrives

## Your Flood Emergency Evacuation Checklist

Print this checklist to have on hand if you ever need it

What to take:	
<ul> <li>Your pre-packed flood survival kit</li> <li>Important documents (for example: ID, insurance, medical info) in a waterproof container</li> <li>Medications and prescriptions (minimum 3 days worth)</li> <li>Phone, charger, and portable battery pack</li> <li>Cash and credit cards</li> <li>Keys (for example: house and car)</li> <li>Change of clothes</li> <li>Plenty of water (at least 3 litres per person)</li> </ul>	<ul> <li>Collect pets and their supplies (including carriers)</li> <li>Waterproof boots or waders</li> <li>Battery-powered radio for emergency broadcasts</li> <li>Flashlights and extra batteries</li> <li>Check on vulnerable neighbours if safe to do so</li> </ul>
	Add your emergency contacts:

04.





### **Insurance**

Why it's important to understand and regularly review your policy

### Insurance is crucial for flood preparation. It ensures financial security and peace of mind.

Adequate coverage makes all the difference after a severe weather event, determining whether you recover or face financial trouble. Insurance enables you to rebuild, replace belongings, and cover living costs if you're displaced. Policies vary significantly, and details are vital for recovery.

#### This section covers:

- Why it's important to understand and regularly review your policy
- Insurance FAQs for homeowners
- Questions to confirm with your insurance company
- Advice on reviewing your insurance policy



## Why it's important to understand and regularly review your policy

#### **Underinsurance is common**

Many Australians are underinsured, meaning their policies won't cover the full cost of rebuilding or replacing their home and contents. The Insurance Council of Australia estimates 80% of homeowners and renters are underinsured for their home and contents.

#### **Changing risks**

Climate change is altering the frequency and intensity of natural hazards in Australia. Areas previously considered low-risk may now face increased threats. Regular policy reviews increase the likelihood that your coverage aligns with these evolving risks.

#### **Home improvements**

Renovations or additions to your home can increase its value and replacement cost. Without updating your policy, you might find yourself underinsured.

#### **Policy changes**

Insurers may modify terms, conditions, or exclusions in their policies. Regular reviews help you stay informed about any changes that could affect your coverage.

#### **New coverage options**

Insurance providers often introduce new products or coverage options that might better suit your needs or offer better value.

#### Peace of mind

Knowing exactly what's covered provides peace of mind. In the event of a disaster, you'll be clear on what support you can expect, allowing you to focus on safety and recovery.

#### **Tailored protection**

As your life circumstances change (for example: valuable new purchases, home-based business), your insurance needs to change too.
Regular reviews ensure your policy evolves with your life.

#### **Cost-effective protection**

By understanding your policy, you can identify opportunities to reduce premiums through resilience measures. Many insurers offer discounts for home improvements that reduce risk.

#### **Avoiding surprises**

Insurance policies can be complex. Regular reviews and discussions with your insurer can help clarify any misunderstandings before they become issues during a claim.

#### **Compliance with mortgage requirements**

If you have a mortgage, your lender likely requires specific insurance coverage. Regular reviews ensure you remain compliant with these terms.





## Insurance FAQs for homeowners

#### Q: Does my policy cover flood damage?

**A:** Most home and contents policies cover flood damage, but coverage can vary. Always check your policy details or ask your insurer for clarification.

### Q: Will my insurance cover the full cost of rebuilding my home after a flood?

**A:** This depends on your policy type and the accuracy of the information you provided when taking out the policy. Some policies offer 'extended replacement cost' coverage, which may provide additional coverage above the sum insured, while others are strictly 'sum-insured' policies. It's crucial to ensure your sum-insured amount is adequate and that you've provided accurate information about your property to avoid potential shortfalls in coverage.

#### Q: What is underinsurance and why is it an issue?

**A:** Underinsurance occurs when your sum-insured amount is less than the actual cost to rebuild or replace your home and contents. This can result in significant out-of-pocket expenses if you need to make a claim. Regularly review and update your sum-insured amount to avoid underinsurance.

#### Q: How often should I review my insurance policy?

**A:** Review your policy annually, or whenever you make significant changes to your property, such as renovations or major purchases.

### Q: Will my policy cover temporary accommodation if I'm displaced by a flood?

**A:** Many policies include temporary accommodation cover, but the extent and duration can vary. Some policies may cover a few months, while others might extend to a year or more. Check your policy or ask your insurer for specific details.





## Insurance FAQs for homeowners

### Q: What evidence should I compile now to support a potential future claim?

**A:** Take and regularly update photos or videos of your home's interior and exterior, including any valuable items. Keep receipts for major purchases and home improvements. Store these records in a safe, easily accessible place, ideally in both physical and digital formats.

### Q: How can I ensure I'm engaging a quality builder for repairs after a flood?

**A:** If your claim is accepted, your insurer may have a list of approved builders and will manage the repairs for you. There may be circumstances where you choose to manage the repairs yourself – you should discuss this with your insurer and make sure if choosing your own builder, they are licensed, insured and experienced in post-flood repairs.

### Q: What are the common reasons flood-related claims might only be partially accepted?

**A:** Flood-related claims are dependent on circumstances and policy coverage. Insurers may consider factors like sum-insured amounts, property maintenance, pre-existing defects and local flood regulations when the claim is being assessed.

### Q: What changes do I need to inform my insurer about?

**A:** Notify your insurer about significant changes such as renovations, major purchases, changes in occupancy, or starting a home-based business. These can affect your coverage needs and premiums.

### Q: Can I get insurance if I live in a high flood-risk area?

**A:** While it may be more challenging or expensive, insurance options are usually available. You might need to shop around.





## Questions to confirm with your insurance company

Before contacting your insurer, we strongly recommend reviewing your Product Disclosure Statement (PDS) and policy documents. These contain valuable information about your coverage and can answer many of your questions. Once you've familiarised yourself with your policy, consider discussing the following points with your insurer to ensure you fully understand your coverage:

<ul> <li>Are there any exclusions or limits specific to flood coverage?</li> <li>How will implementing flood resilience measures affect my premium?</li> <li>Is there a waiting period for flood coverage after I purchase or modify my policy?</li> <li>What is the claims process for flood damage?</li> </ul>	
my premium?  Is there a waiting period for flood coverage after I purchase or modify my policy?  What is the claims process for flood damage?	
modify my policy?  What is the claims process for flood damage?	
Do you offer any specific policies or add-ons for homes in high-risk flood areas?	
Are there specific requirements for homes in flood-prone areas to be eligible for coverage?	е
What additional coverage options are available for flood protection?	

Remember, taking the time to understand your policy or speak to your insurer before an event occurs can help ensure you have appropriate coverage and know what to expect in the event of a claim.





How to check

Look for these terms in your policy document,

they can reduce your payout if you're underinsured.

## Advice on reviewing your insurance policy

#### Sum insured (amount of cover) **Building code compliance** What to check What to check Is the amount enough to rebuild your home and replace Does your policy cover the cost of meeting current all contents? building codes when rebuilding? How to check How to check Use online calculators provided by insurers or the Look for terms like 'building code compliance' or 'extra Insurance Council of Australia. costs of reinstatement'. Consider getting a professional valuation. **Temporary accommodation** Specific disaster coverage What to check What to check Are you covered for temporary housing if your home Are you covered for all relevant disasters (bushfire, flood, becomes uninhabitable? storm, cyclone)? How to check How to check Look for 'temporary accommodation' or 'alternative living Review the 'Insured Events' section of your policy. expenses' in your policy. Some perils might be optional extras. **Contents coverage Definitions** What to check What to check Are valuable items adequately covered? Are items covered How does your insurer define key terms? away from home? How to check **How to check** Review your contents list. Look for subsections on Look for a 'Definitions' section in your policy document. valuables or portable contents. **Exclusions and limits Policy discounts** What to check What isn't covered? Are there limits on specific items? What to check Are you eligible for any discounts (for example: for How to check Look for sections titled 'Exclusions' or 'What we security systems, disaster preparedness measures)? don't cover'. How to check Ask your insurer directly about available discounts. Excess (fixed amount you'll need to pay if **Premium payment options** vou make a claim) What to check What to check Can you save by paying annually instead of monthly? What's your excess for different types of claims? How to check How to check Compare the total cost of monthly payments to the This is usually clearly stated in your policy schedule. annual premium. Underinsurance risks (are you fully covered?) No claim bonus (discount for not What to check making a claim) Does your policy have an 'averaging' or 'co-insurance' clause? What to check

Remember, insurance policies can be complex. If you're unsure about any aspect of your coverage, don't hesitate to contact your insurer or consider consulting with an insurance broker accredited by the National Insurance Brokers Association (NIBA). By thoroughly reviewing these aspects of your policy, you're more likely to have adequate coverage that provides the best value for your specific circumstances.

How to check

renewal notice.

Do you have a no claim bonus? How is it protected?

This should be stated in your policy schedule or

By investing time and resources in flood resilience, you're not just protecting your own property – you're contributing to the overall safety and resilience of your community.

www.nema.gov.au



#### Other documents in this series



**Bushfire** 



Storm and cyclone