

Roof upgrades - Strata Resilience Program

The Strata Resilience Program (the Program) aims to assist eligible bodies corporate in coastal parts of Central and North Queensland to improve the resilience of their properties against cyclones.

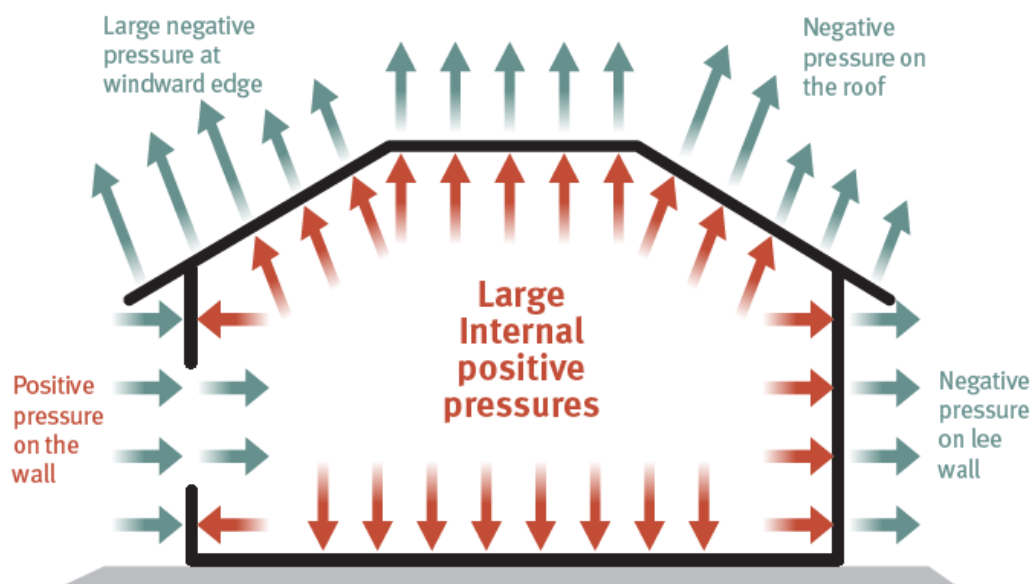
Activities like retrofitting the existing roof structure, replacing old style louvres, protecting the windows, strengthening the doors, and ensuring the building is well maintained, are all ways to improve the strength of buildings.

Wind loads

The severe winds from tropical cyclones exert huge forces on buildings with wind pushing on the windward wall and applying high suction pressures on the roof, sometimes lifting the building off the ground as detailed in Image 1 below.

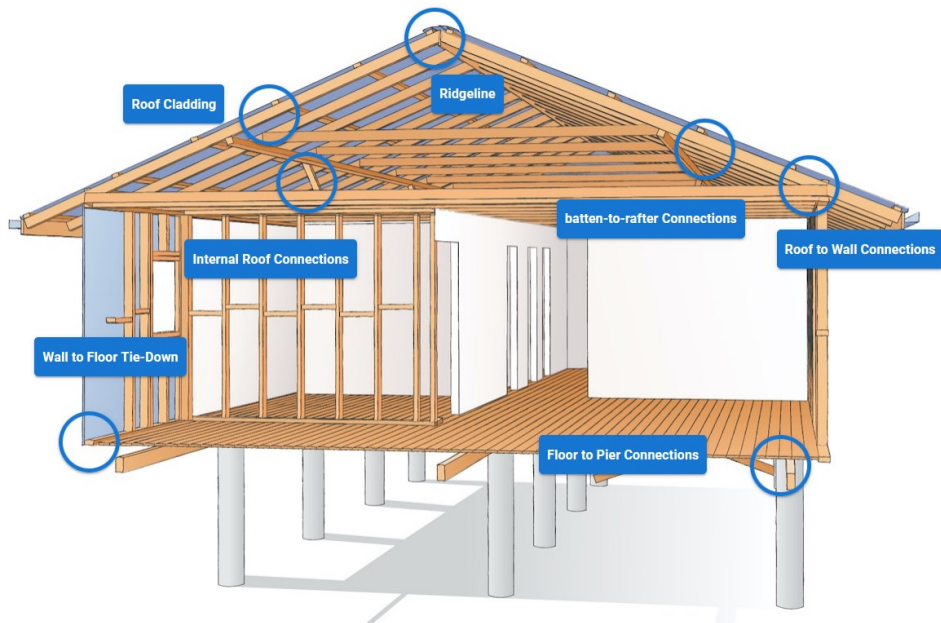
In addition to these severe loads on the outside of the building, if a sudden opening occurs, for example, a broken window or failed door, the windward wall pressure can suddenly enter the building and potentially double the load on the roof structure. Some older buildings have not been designed for this load.

Image 1



Internal pressures when windward wall is breached.

Image 2



<https://weatherthestorm.com.au/#/select/house2?step1=1&step2=0&step3=1>

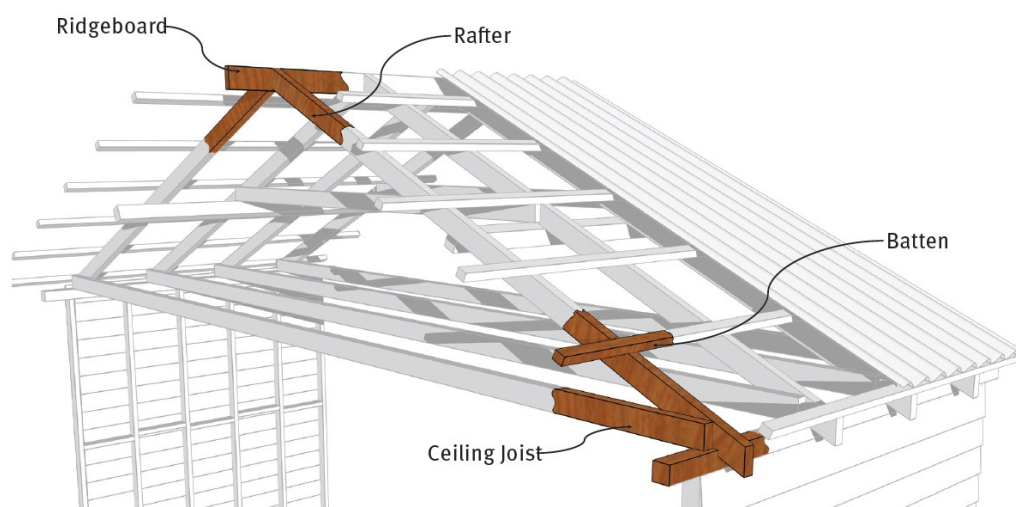
Source: James Cook University – Cyclone Testing Station

Upgrading a pre early-1980s building

Buildings built in pre early-1980s, were generally nailed together.

The new building code has upgraded these potential weak points of the structure by a combination of steel strapping, mechanical fixings such as screws or bolts, and steel tie-down systems such as brackets and rods.

Image 3



Picture: Minimal upgrade requirements to a pre-1980s roof structure.
Source: James Cook University - Cyclone Testing Station.

Picture: Minimal upgrade requirements to a pre-1980s roof structure.

For more information on how retrofitting the roof of an older building can strengthen the overall structure, view the James Cook University video at [Cyclone Testing Station - Educational Videos - JCU Australia](#).

What is eligible?

To be eligible for funding, the works must meet the following requirements.

Metal roof works

- All buildings:
 - must include the installation of sarking, cyclone assembly screws and fastened flashings.
- For pre-1982 constructed buildings:
 - be certified by a Queensland Building and Construction Commission (QBCC) licenced building certifier
 - Form 21 referencing AS1684.3:2021 for house-type buildings, and an engineer's design for larger buildings, provided on completion of the work
 - evidence of QBCC Home Warranty Insurance must be provided on completion.
- For properties built from 1982 onwards:
 - roof replacements, installation of sarking, cyclone assembly screws and fastening of flashings
 - completed works must meet AS1562.1:2018,
 - be certified by a Queensland Building and Construction Commission (QBCC) licenced building certifier
 - Form 21 referencing AS1562.1:2018 provided by appropriately licensed building contractor for the work completed
 - evidence of QBCC Home Warranty Insurance must be provided on completion.

Tile roof works

Following a number of severe cyclone events, a number of deficiencies were identified in how roof tiles were fixed in place. As a result, Australian Standard AS2050 was updated requiring every tile (whole, cut, ridge and hip) to be mechanically fixed with screws, clips or other mechanical method as recommended by the manufacturer and flexible pointing applied. Bedding compounds are no longer permitted for tying down tiles in these high wind regions.

Roof tile upgrade strategies are only eligible on an existing structure.

- Tile roof retrofit with sarking under tiles:
 - completed works must meet AS2050
 - be certified by a QBCC licensed building surveyor
 - Form 21 referencing AS2050 provided on completion of the work
 - evidence of QBCC Home Warranty Insurance must be provided on completion.
- Tile roof retrofit to current code without sarking
 - completed works must meet AS2050
 - be certified by a QBCC licensed building surveyor
 - Form 21 referencing AS2050 provided on completion of the work
 - evidence of QBCC Home Warranty Insurance must be provided on completion.

What is not eligible under the program?

- Partial roof repairs/replacements
- Roof replacement without tie-down upgrade for pre 1982 properties
- Building restumping

- Conversion from a metal roof to tile roof
- Works completed prior to grant approval
- Maintenance works.

Contractor quotes

Quotes should be provided by one (1) contractor covering all the works to be included under the Program. Separate quotes will not be considered. If your body corporate are completing multiple resilience strategies, they need to be included on one (1) quote.

When sourcing a quote from a licenced contractor, it must contain:

- the contractor's QBCC licence number
- a reference that:
 - the products comply with the relevant Australian Standards
 - certification for the works by a QBCC licenced building surveyor will be included.
- a full breakdown of the quote, and if additional items and/or multiple improvement options are included such as:
 - labour
 - materials
 - guttering, roof ventilators, flashings, and insulation
 - removal and reinstatement of solar panels and/or hot water units
 - engineering
 - certification.
- QBCC Home Warranty Insurance covering the full value of the quote or more (where applicable)
- any additional information that would assist the quote assessment, such as areas not included or out of scope.

If these requirements are not provided, the quote review process will be delayed and will require clarification from the contractor.

Approvals

If your application is approved, your body corporate will be notified by email. Your body corporate will then need to enter a QBCC approved building contract with the chosen licenced contractor for the quoted works.

While works are underway, the body corporate and the contractor are responsible for coordination of the works including site safety, protection of property and temporary accommodation, as required.

To assist the body corporate in managing agreed payment terms, grant funds may be paid in up to three (3) progress payments in line with the building contract. The programs progress payments will be the final payments following the body corporate contributions being paid in full. Grant payments may also be a lump sum on acceptable completion of the works.

Program funds will be paid directly to the contractor.

Completion of the resilience works

On completion of the roof upgrade works, you will need to provide the following documentation to the Program team, via the grant's portal:

- **Form 21** from a QBCC licenced building surveyor stating the works have been engineered and constructed to meet the Building Code of Australia (BCA).
- **Copy of the contractor's invoice:**
 - addressed to the Body Corporate (full name)

- referencing the Program application number
- including a list of progress payments and the status of these payments
- itemising and quantifying the works completed.
- **QBCC Home Warranty Insurance** details taken out by the contractor covering the full value of the quote or more (where applicable), prior to the work starting.

*If these requirements are not provided, the grant payment process will be delayed and will require clarification from the contractor.

Payment

Progress payments will be made in line with the building contract following the body corporate contribution being paid in full. Contractors will need to provide photographic evidence and a declaration of the works completed in the progress payment. If the photos don't clearly identify the completed works, an onsite inspection may be required prior to payment of progress payments.

When the documentation has been provided, an assessor will inspect the completed works to assess if the grant funds can be released. The Program team will arrange for the grant funding to be paid directly to the contractor. This is expected to take five to 10 business days after receipt of the appropriate documentation and the onsite inspection is completed.

On successful inspection, the grant funds will be approved and processed directly into the contractor's account.

Additional benefits

After having their roof upgraded, property owners have found the additional benefits including:

- improvement in cyclone resilience
- addressing existing roof leaks
- increase in street appeal
- support to local businesses and the building industry
- value for money
- potential benefit in insurance premiums.

It is recommended that you contact your insurer to find out if you are eligible for benefits on your insurance premium after undertaking these building improvements to increase the cyclone resilience of your property. Although not mandatory a cyclone preparedness plan may be required for individual insurers. The body corporate is encouraged to discuss the requirements with their insurer to support potential benefits on their insurance premiums.

For more information relating to insurance premiums, speak to your preferred insurer.

More information

Phone: 07 3007 4485 (Option 3)

Email: strataresilience@epw.qld.gov.au

Website: <http://www.qld.gov.au/strataresilienceprogram>