



Check your deck

If you are an owner of a house, unit or other building with a balcony or deck — whether it is made from timber, metal, concrete — you should carry out regular inspections of the structure to help ensure its safety.

Deck and balcony safety

In recent years a number of deaths and serious injuries have occurred as a result of falls from decks, balconies and windows, or from the collapse of decks and balconies. Had people been more aware of the dangers associated with elevated areas and the importance of adequate maintenance of decks and balconies, some of these deaths and injuries may have been prevented.

Use your deck safely

- Avoid installing heavy objects such as spas on a deck or balcony, unless the deck or balcony has been specifically designed to withstand this extra load.
- Avoid excessive jumping, dancing or other movement on a deck or balcony, unless the deck or balcony has been specifically designed to withstand this extra load.
- Remember that as a deck or balcony ages, elements generally deteriorate, reducing its ability to withstand the loads for which it was originally designed.
- Avoid having large numbers of people gather on a deck or balcony at once, unless the deck or balcony has been specifically designed to withstand this load.
- Never climb over a balustrade, and never climb from one balcony to another, especially in multi-storey or high-rise buildings.
- Never sit on top of a balustrade.

Child safety on decks and balconies

There are a number of safety precautions to help ensure the safety of children around decks and balconies. These include:

- ensuring buildings are adapted to make them safer for kids
- ensuring there are no climbable elements on the balustrades that kids can grip to help them climb

- placing all outdoor furniture and other climbable objects well away from balustrades
- ensuring furniture and other climbable objects are difficult to move, for example, using heavy furniture
- installing high locks or latches and self-closing devices to doors leading to decks or balconies
- not placing furniture or other climbable objects near windows
- not relying on flyscreens or non safety-grade glass to protect window openings
- constantly supervising children.

Inspecting for wear and tear

If you own a building with a balcony or deck — whether it is made from timber, metal, concrete or another material — you should ensure it is inspected carefully for decaying timbers, unstable balustrades, corrosion and cracking of concrete.

The components of a balcony, deck and balustrade to regular inspect and what to look out for include:

- **Fixings:** including posts brackets should be checked for bending, stress, fractures and rust.
- **Nuts, bolts, screws and nails:** are generally able to be seen and easier to inspect — look out for signs of rusting and replace as soon as possible.
- **Posts:** are essential for the strength and integrity of the structure — failure can result in serious injury. Timber should be of a species that will not degrade in soil and treated appropriately. Signs of wet rot, fungus type growth and timber that is spongy or fibrous should be fixed immediately.
- **Steel posts:** should be checked for signs of rust and deterioration around the based where water can pool.
- **Bracing:** is used to support the deck or balcony, helping prevent the structure from moving under load — bracing should be checked regularly to ensure there has not been any excessive structural



movement from the stress of swaying and twisting under load. Look for warped, cracked or damaged bracing elements and fixings that are loose or deteriorating.

- **Bearers and joists:** should be checked regularly for signs of warping or cracking. Balustrades anchor points - where the balustrade is fixed to the deck or balcony, wall or post — should be inspected for deterioration. Ensure handrails are securely fastened, glass balustrades are free from chips or cracks and anchor points are free of rust and wear.

Maintain your deck or balcony

Approximately six per cent of Australian houses have a timber deck or balcony and about two per cent of these may cause potentially fatal injuries if they collapsed or if the balustrade or railing failed. These numbers are estimated to be even higher in Queensland.

Deck and balcony collapse or failure is often preventable through regular maintenance.

General deck and balcony maintenance

- Avoid frequently wetting decks and balconies and where possible sweep them instead of hosing.
- If your deck or balcony does get wet, ensure it is adequately ventilated to allow quicker drying.
- Place pot plants on trays and prevent them from overflowing.
- Remove shrubs or vegetation that permanently shade the deck or balcony, and remove creepers from rails or other components, as these prevent moisture from escaping.
- Ensure that timber decking is thoroughly cleaned before coating. Re-apply finishes at regular intervals depending on the finish type and degree of exposure.
- Always avoid using Oregon pine for structural purposes as it has a poor lifespan and durability.

Termites

Termites can be a major problem in timber structures. Look for:

- any softwood that has been used to construct the deck or balcony
- discoloured or blistered paint
- termite mud nests or any build up of soil around the base of the timber
- fine 'sawdust' around or below the timber.

Wet rot and moisture

Wet rot and moisture can cause decay in timber and fixings to rust. To help minimise damage:

- protect timber exposed to the weather by regularly painting or oiling
- reduce dampness on the timber by not allowing water to sit or pool on the deck, for example — keep trays or feet under pot plants
- soil and other debris should be cleared away from bearers or joists and deck posts or supports
- any structural problems need to be addressed immediately.

Coastal elements

The corrosive effects of salt, sand and wind can increase deck and balcony problems. To help protect your structure:

- wooden structures require oil-based paint to be regularly applied on all exposed timber surfaces such as bearers, joists and posts—decking oil alone may not be enough to provide a sufficient barrier against the harsh coastal conditions
- metal structures in coastal areas should be protected with paint or other protective coating. Ideally, this should be done at the time of construction to prevent initial deterioration or rusting
- metal that is left unprotected and starts to rust or corrode should be dealt with promptly to help prevent further deterioration.

For more information, contact:

Building Codes Queensland
Department of Housing and Public Works
buildingcodes@qld.gov.au

