

FITTINGS

Hot water

Instantaneous hot water systems should have their thermostats set at 50°C or less to help prevent scalding.

Hot-water storage systems should be set to at 60°C to inhibit growth of harmful bacteria such as legionella. Incorporate a fail-safe mixing valve on both the bath and shower to avoid scalding.

[See: [Hot Water Service](#)]

Install a tempering valve or an outlet shut-off valve in your existing system to reduce the flow of water to a trickle if it's too hot. When cold water is added and the temperature becomes safe, the valve opens and the flow returns to normal. This can prevent accidents if you have small children or elderly people in your home.

Doors

Install self-closing (but not self-locking) screen doors at external entrances.

Internal door handles should be 1 metre from the floor so young children cannot open them.

Consider latch rather than knob type handles for ease of use by weak or disabled people.

Floors, stairs and ramps

Use ramps instead of stairs where possible.

Observe optimum rise to run ratios for stairs as shown in the following graph:

Ensure that stair rails and balustrades comply with BCA minimum standards. Rails should be at least 1 metre above finished floor level with a maximum 125mm gap between balustrades.

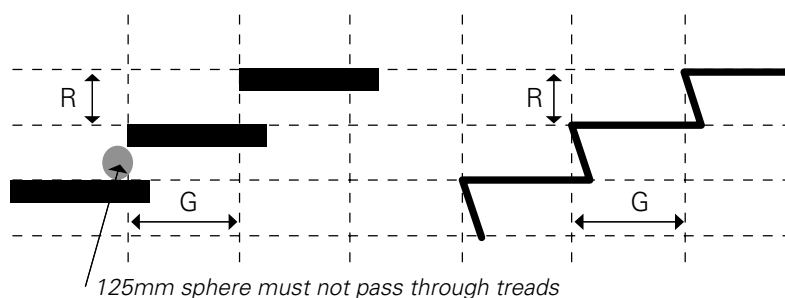


Avoid changes of level within the house and between the house and the outside. Where changes of level are necessary, ensure that they are clearly visible with colour change in floor covering.

Use non-slip, impact absorbing floor surfaces where possible, especially on stairs or ramps and in wet areas.

STAIR RISER AND GOING DIMENSIONS (mm)

Stair type	Riser (R) <small>(see figure below)</small>		Going (G) <small>(see figure below)</small>		Slope relationship <small>(2R+G)</small>	
	MAX	MIN	MAX	MIN	MAX	MIN
Stairs (other than spiral)	190	115	355	240	700	550
Spiral	220	140	370	210	680	590



Source: [Building Code of Australia](#)

Windows

Design windows with easy access for opening, closing and cleaning. Windows should not be able to be opened any more than 100mm by a young child. Grade A safety glazing material should be used for glass up to 1500mm from the floor. Full-length glass panels should be clearly marked.

Ensure that all new glazing complies with relevant Australian standards and bears a manufacturer's stamp certifying compliance.

Wiring and electrical

Carefully plan the provision of power outlets. Insist on an electrical layout plan. It will save you later inconvenience and may save your life.

Install earth leakage devices and circuit breakers to all power outlets.

Provide adequate power points and circuits. This eliminates the need for power boards, which can overload circuitry. It also reduces the need for cords to trail across walkways, where they can trip or electrocute.

Ensure that the switchboard can be easily accessed at night. Safety switches should be used on indoor and outdoor circuits.

Heaters

Ensure fan heaters have a safety switch to cut power off if the fan stops or heater overheats.

Never leave a heater unattended.

Position the heater to avoid intake blockage or material falling on it.

Pets may lie close to heaters and accidentally knock bedding, mats and other materials onto the heater.

Ceiling fans

Position ceiling fans at least 2.4m above floor level to reduce risk of injury.

Bushfires

To protect your home from bushfires in high risk areas:

Position the home on flat ground if possible. Flat ground is safer than sloping ground and gentle slopes are safer than steep slopes. Fire travels and burns much faster uphill than downhill. The bottom of a long slope is safer than the top.

Create an area of reduced fuel between the house and the direction from which bush fires usually approach. Where possible, take advantage of existing fuel-free zones such as roadways, rivers or bare ground to provide a fuel break between your home and any unmanaged grass or bushland. (Councils will advise on fuel free zones).

Establish a wind-break of high-moisture-content trees on the hazardous side of your site (eg Cheese Tree, Pittosporum, Blueberry Ash, Rose Wood, Christmas Bush, Coachwood, Brush Box, Lilly Pilly, etc). This will also help shield your home from radiated heat and flying sparks and embers.

Design the exterior of your home to avoid creating hard-to-get-at spots where debris, such as leaves and twigs can get trapped on the roof, against the walls or under the floor. These spots are likely to trap embers during a fire and are often the source of structural fires when the accumulated debris ignites.

Build on a reinforced concrete slab on level sites. Where the site is on a slope, it may be environmentally preferable to build on posts to minimise site disruption. The floor should be non-flammable and rest on non-flammable supports, and the space between the ground and the floor should be enclosed. Timber should not be used at ground level.

Install double-glazing. It reduces the chance of implosion of windows in severe fires by as much as 50 percent.

A one-pitch roof is the easiest type to protect against bush fire.

Purchase and install plugs to allow flooding of gutters in times of fire. Water overflow from gutters can give some extra protection.

Fit ember proof leaf guards to gutters. Many houses catch fire after embers slide off a roof igniting dry leaves in gutters.

Store all flammable material such as wood piles or petrol containers away from the house.

Ensure that access for fire fighters is clear and check that domestic hoses and taps are in working order.

ADDITIONAL KEY REFERENCES

Kogarah Council (1999). *Better Home Design Guide*. Residential Development Control Plan.

Rural Fire Service Websites.
eg. www.bushfire.nsw.gov.au/main.htm

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