

## Home Safety Design Guide

*This guide has been prepared by Caulfield Krivanek Architecture in conjunction with Kidsafe to provide information to home owners considering undertaking home improvements, renovations or an extension.*

The most common injuries in homes can be categorized into three age groups; young children, adults, seniors. Many injuries can be prevented with good, thoughtful design. All three age groups will visit or live in your home, so you should consider the following:



*A family friendly backyard*

### Children

Every year in Australia an estimated 320,000 children under the age of 15 are treated in hospital because of accidents, many of which happen in their homes.

- The design should allow the establishment of a “child safety zone” inside the house and supervised play area outside
- There should be no connection between areas where children play and driveways or garages
- Door handles for all external doors and ‘danger areas’ such as laundries, bathrooms, garages and sheds, should be set 1500 mm from floor level to prevent toddler access
- There should be a maximum of ten steps in a stair before a change in direction, and stairs should ideally be carpeted
- There should be no sharp corners to benches, built in furniture (and loose furniture if possible)
- Sliding aluminium windows should be restricted to a maximum opening size of 125mm
- A medicine cupboard in the main bathroom, should be mounted at 1500mm from floor level
- Ensure that safety switches are installed if the home is not being re-wired
- Ensure that hot water services are limited to 50°C

## Adults

Every year in Australia an estimated 130,000 adults are treated in hospital for fall, slip and trip injuries that happen in the home; many of the more serious injuries are due to falls from ladders and roofs. Another 45,000 are treated for cutting and piercing injuries that happen in the home from contact with glass, knives and tools.

- Installing gutter guards will minimise ladder maintenance
- Limit the use of highly polished or slippery floor surfaces particularly in wet areas or near stairs
- Keep roof designs simple and preferably less than 20-degree pitch to minimise maintenance and the probability of slipping. Alternatively, install safety harness anchor points

## Seniors

Many injuries to seniors occur from falls in and around the home. Most of the precautions listed previously apply, but the following are most relevant to seniors.

- Steps and changes in level should be obvious, well-lit and where possible incorporate hand rails
- Step free shower bases minimise bathroom falls
- Provide adequate power points to minimise the use of extension leads and power boards, one of the most common causes of tripping hazards

**Note:** Injury data for Australia has been estimated from Victorian injury data provided by the Victorian Injury Surveillance Unit (VISU) at Monash University Injury Research Institute (MIRI), HomesafeKids and Kidsafe then estimated for Australia on a pro rata population basis.