Design for Life

Sustainability does not only relate to the environment, it is also about the community, future generations and the quality of life for individuals. Design for Life involves designing or renovating your home for the present but also ensuring it is adaptable to opportunities and challenges that may arise in the future. Considerations such as safety, security, changing lifestyle choices and responses to natural disasters are all important for the long term viability of your home.

This section contains detailed information about:

> The Adaptable House.

> The Healthy Home.

> Safety and Security.

> Bushfires.

3.2 THE ADAPTABLE HOUSE

An Adaptable House is one which is able to respond effectively to changing household needs without requiring costly and energy intensive alterations. The average household is becoming both smaller and older and an increasing number of people are living independently in their later years.

The balance between home and work also places altering demands on our houses as many people choose to work from the office. A single space may act at different times as a nursery, home office, teenage retreat, study or bedroom for an elderly relative.

Designing an Adaptable House would consider the following:

> Easy entry and access from both street and car parking in all weather and light conditions including appropriate layout for garbage cans, garden beds and letterboxes.

> The interior of the house would allow for easy movement between spaces, for example, through slight widening of internal doors and passageways.

> The kitchen should not limit a person's independence for example, lower workspaces to accommodate wheel chair users or non-slip floor finishes.

> At least one bedroom should be accessible to family members who may experience physical limitations.

> In multi-level housing, accessible living spaces should be provided on the ground floor.

3.3 THE HEALTHY HOME

This fact sheet discusses the likely sources of indoor air pollutants and possible associated conditions. It also provides guidance when considering a new build or renovation.

Common sources of indoor air pollutants include:

> Building operation and construction material (eg lead, aesbestos, combustion systems).

> Household products (eg sprays, polishes, air freshners).

> Human indoor behaviour (eg passive smoking, interaction with pets).

There are many ways to manage indoor air quality issues in the home. This fact sheet provides further guidance.

3.4 SAFETY AND SECURITY

Many domestic accidents can be prevented with better building design. Most domestic accidents occur in the bathroom and kitchen. There are many actions that you can take to improve home safety through design, fittings and behaviour. The actions contained in the fact sheet particularly seek to protect children, the elderly and the disabled.

Safety tips include:

> Round bench edges and corners.

> Eliminate cross-traffic routes through the work triangle (area between stove, sink and refrigerator).

> Use slip resistant flooring and avoid steps in bathrooms.

> Install fail-safe mixing valves on both the bath and the shower.

> Ensure that privacy locks on bathroom doors can be opened from the outside in the case of an emergency.

> Provide energy efficient outdoor lighting along paths.

Security measures such as those promoted by 'Crime Prevention Through Environmental Design' can be followed to ensure peace of mind when at home or when away. Security can be improved through maintaining the integrity of doors, windows, sky lights and roofing; through landscaping that avoids dark corners and hidden recesses and provides an open interface with the street and through community surveillance.

3.5 BUSHFIRES

The potential for bushfires is an integral part of Australia's bushland. The functioning of our natural environment requires and accommodates fire. Therefore, buildings sited in this environment similarly need to cope with fire.

Consider the following when designing for a bushfire resistant property:

> Preventing fire ignition sources.

> Avoiding fuel load that could contribute to spread or intensification.

> Creating fire barriers that permit safe movement for people and reduce fire advancement and propagation.

> Creating site surroundings and using construction elements to reduce fire load on buildings.

Meeting the specifications for bushfire resistance can be at odds with some sustainability goals. Environmental design emphasises the use of local materials with low embodied energy and toxicity and high recycled content. Meeting bushfire needs can call on different priorities. For example, recycled timber often does not meet non-combustion rating requirements, fire resistant paint embodies toxins, steel and other non-combustible components have high embodied energy. This fact sheet provides further guidance on design decisions for bush-fire prone areas.

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