The BCS Age Friendly Home Overview

The BCS Age Friendly Home is being developed by BCS as a demonstration to older Australians that they can stay in their home for a longer period of time, after simple renovations and installing technology. The major areas in any home renovation are the kitchen and the bathroom; however we have renovated the entire home. The process has included installing ramps, widening doors and hallways, making bathrooms and kitchens safe and bringing the laundry inside.

The gardens have been made safe, private and secure, with sensory plants, wandering paths and a raised garden bed for pottering. Eventually the garden will be developed to include water features, seats and a potting bench.

The colours in the home have been selected to allow a modern feel that is warm and welcoming. Each of the smaller rooms has a feature wall to give differentiation and some subtle identification. The carpet has been chosen carefully to provide 'rollability' for those using wheelchairs and a firm surface to accommodate walking frames and unsteady feet. It is made of solution six dyed nylon and will not stain or absorb odours. It meets BCA standards for low VOC (volatile organic compounds) emissions and flammability, and it meets BCS standards for environmentally friendly products – with a backing that is made from recycled materials (motor vehicle windshields) and is 100% recyclable.

The corridors have been widened to allow easy movement for everyone, including wheelchair users, space around the doors allows for easy access for people who use wheelchairs.

Glass in the front windows has had a safety film applied to prevent injuries should there be a fall. Any glass below 1 metre should be safety glass.

We have provided technology to allow independence and security, contact with the outside world in the case of an emergency or to bring information to the resident.

Few people actually look forward to the day when they are ready to enter a nursing home – we intend to show them that they can stay at home safely and securely for longer. However, it must be said that age friendly does not really mean old age, the design principles used in the Aged Friendly Home work well for small children and mothers with strollers just as well as for older members of the family.

Laundry Renovation

The home we have renovated is a small brick veneer cottage approximately 30 years old. We were fortunate that the internal walls were timber stud walls with gyprock lining and not load bearing. This enabled us to demolish the wall that divided the third small bedroom and the hallway and convert that bedroom into an internal laundry and a sewing or media room.
The laundry opens onto the hallway; the doors have been hinged to allow them to open flat against the wall and are opposite the bathroom. We have used a combined washer and dryer to save space. The unit has been installed on a plinth to increase the height for loading and unloading, making it suitable for older people and those in wheelchairs. The laundry contains a small tub, an exhaust fan and a light that automatically turns on when the doors are opened; turning off once the doors close.

The philosophy behind this laundry renovation was one of convenience and meeting the needs of older residents who wish to stay in their own homes. The original laundry was outside and was accessed by steps from the back porch. This was converted to an outside toilet. Completing normal household activities is a matter of pride for some of our older residents; daily washing is a task that can be completed efficiently within the home. The laundry is compact, functional and easily accessible, providing an option to use the dryer or hang out the washing if preferred or able.

To demonstrate how areas in a home may be disguised, the laundry doors have been painted the same colour as the walls, as have the door jambs and architraves. This has made the laundry less obvious and perhaps not at all noticeable to a family member with dementia. The bathroom door opposite has been painted a dark blue to make it very noticeable. These subtle differences in the home can make life a little easier for carers of those with dementia.

Bathroom Renovation

Prior to most renovations and particularly bathroom renovations a hazardous materials audit is recommended to ensure that asbestos is identified. Our bathroom had asbestos behind the wall tiles; this was removed using approved methods for demolition and disposal.

The home had a separate bathroom and toilet, the wall between the two was removed and the space made into a suitable size for an accessible bathroom, complying with AS1428.1. The demolition revealed termite damage which needed rectification and a need for a further inspection by a suitably qualified pest manager. The bathroom attempts to demonstrate that it is not necessary for a compliant bathroom to look institutional. It demonstrates that there are design options in the bathroom that can help to manage problems associated with dementia. The walls are a different colour to the floor, allowing clear delineation between the two. The toilet seat is not white, in our case we have chosen a navy blue seat and a navy blue hand rail – clearly visible to a vision impaired resident or a resident with dementia. The other grab rails are white to demonstrate that they can look less institutional. The shower is hobless, removing any trip hazards from the bathroom.

The hand basin is suitable for a person in a wheelchair, with a lever tap, fitted with an extended lever for easy reach. The floors are non-slip tiles, non-institutional but functional. The shower has the facility to install or remove, quite simply, a shower seat, the same system will be used to install or remove drop
down rails beside the toilet. The walls have been lined with plywood to enable the simple installation of more grab rails should they be necessary.

The lighting for the bathroom can either be manually controlled or can be programmed to come on at 30% once a movement sensor in the bedroom has been activated at night. The path to the bathroom can be lit to provide way finding and safety. The light can be turned off at a programmed time after activation, based on the residents own patterns of behaviour.

The bathroom is designed to provide functionality and safety for aged and frail residents who wish to stay in their home longer, while demonstrating some design features to assist carers of people living with dementia. It has been fitted with a duress alarm for emergency contact with the call centre or a nominated person.

Kitchen Renovation

A kitchen can be a place of great joy for many older residents, proving their independence and allowing some meaningful contribution to the household. It must however be safe and functional – many older kitchens are not either of these. The philosophy driving the kitchen renovation was safety and independence.

The kitchen of the home was completely gutted and the configuration changed to allow compliance with senior living planning policies for circulation space. The design was based on age friendly, dementia and mobility criteria, attempting to demonstrate a little of each. The overhead cupboards were designed with glass doors to provide people with dementia clear vision on where everyday things are kept. Solid doors were used to disguise other cupboards. One of the overhead cupboards is movable, it can electronically move forward and down, up to 400mm, to meet the user, the bench which includes the sink will move up and down, electronically, to allow seated and standing residents to use the kitchen comfortably. Water can be monitored to send an alert if the water runs for extended periods of time.

Appliance selection includes a space saving single dish drawer dishwasher, a two plate cook top, an oven at bench height and a small refrigerator with a‘d’ pull style handle and a freezer at the bottom. The smaller cook top allows more bench space; the oven at bench height allows the cook to remove cook ware from the oven, placing it immediately on the bench, at the same level. The single dish drawer dishwasher demonstrates a modern appliance that is easy to use, compact and saves water.

All drawers and cupboards will be fitted with ‘d’ pull handles that are easy to grasp for older residents whose hands may not be quite so flexible and troubled by arthritis.
Furniture

The furniture has been selected for its functionality and again to demonstrate that ‘aged and frail’ suitability does not necessarily mean that it does not have style. The materials selected are continence proof, provide good colour contrast with the floor and are comfortable. They seats and lounges have good lumbar support, sturdy arm rests promote independence by allowing a frail resident to sit and stand with minimal assistance.

The curtains are fire retardant and have been selected to give a modern comfortable feel to the house, without loosing the traditional feel that appeals too many of the older generations.

The blind in the main bedroom is motorised to allow opening and closing from the bed or from a remote location. This is a feature often seen in modern automated homes at the higher end of the scale; however it was felt that the ability to open the blind and see the sky and the trees for a person in bed could be a wonderful feature.

Work in Progress

A video intercom that provides keypad access is currently being investigated. This will allow a resident to view someone at the front door on the television screen or the telephone handset and then allow or deny entry either by a code on the telephone handset or a remote device similar to a car remote. The door lock will be on an electric strike that will be controllable from a remote location to allow access for emergency services.