

An innovative housing and support project

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Overview

- About the Summer Foundation
- Why build housing demonstration projects?
- Abbotsford Project VIC
- Hunter Project NSW
- Accessible Housing for people with significant disabilities report
- What next?
- Key challenges







HOW WE DO IT



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FOUNDATION**

Building better lives
for young people in nursing homes

Why establish the Demonstration Projects?

- Research highlights need for wider range of housing and support models for people under 65 as an alternative to aged care facilities
- Integrated thinking across building design, technology and support approach - how they work together to support greater independence
- Need opportunities to refine model through action research and independent evaluation
- Change paradigm of housing for people with significant disabilities – NDIS provides new opportunities.



The Abbotsford Project: Melbourne, VIC





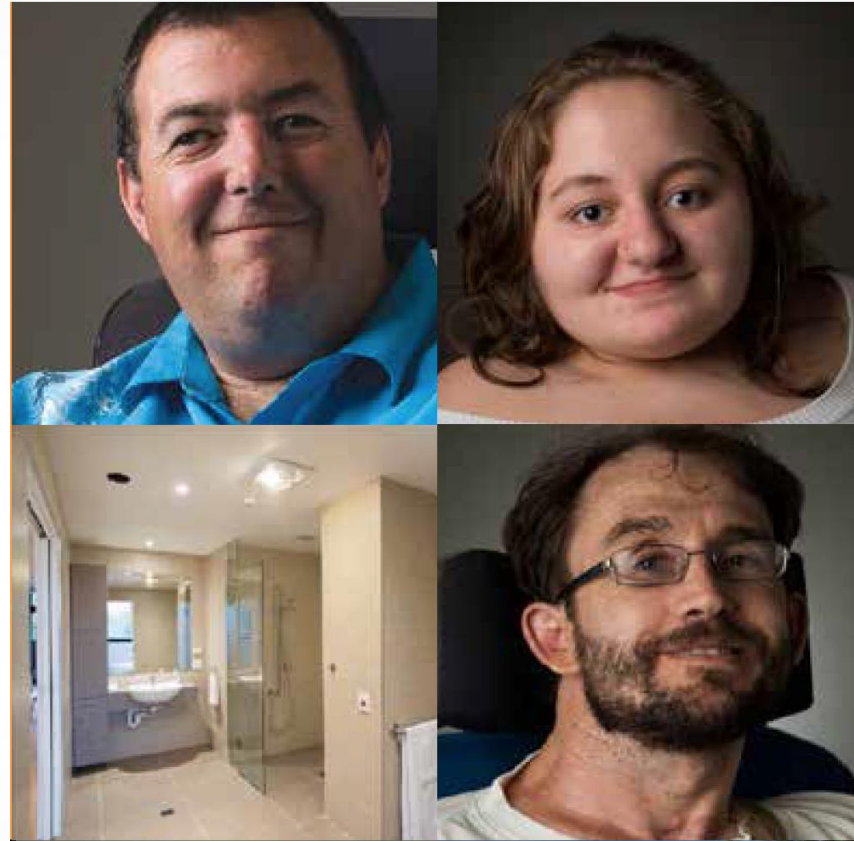
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for young people in nursing homes

Target Group

People who:

- have acquired or late onset disabilities
- want to enhance capacity to live more independently
- need access to 24/7 support
- have ability to be left alone
- can alert staff if help required
- would have greater opportunities to maintain life roles i.e. with family, friends, etc.



Purpose of Demonstration Projects

Implement & refine model in a NDIS funding context that shows:

The provision of:

-  well located
-  good quality
-  well designed accessible and adaptable housing
-  smart home technology; and
-  an independence enhancing support approach

Results in:

-  increased quality of life
-  increased independence
-  reduced life time care costs



Hunter Region, NSW





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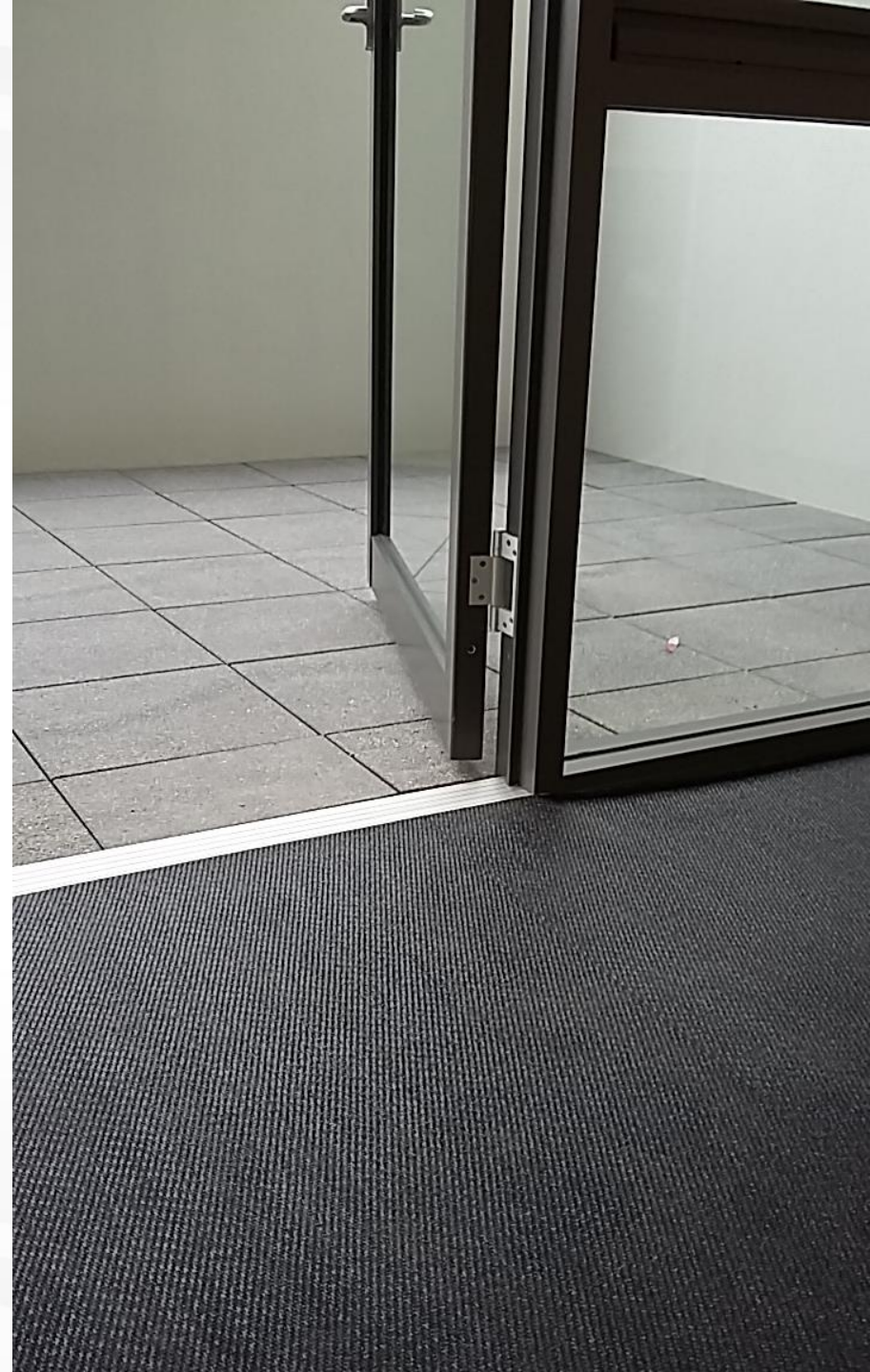
Building better lives
for young people in nursing homes





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Hunter Demonstration Project

- Independent living for people with significant disabilities
- **10 accessible apartments** within apartment development of **110 units**
 - 2 x 1.5 bedrooms
 - 6 x 2 bedrooms
 - 2 x 3 bedrooms for families
- All 10 units have customisable features + technology
- Additional apartment base for support staff
- Support focus on capability building to support independence and inclusion
- First tenants will move in June 2016



Workshops & Tours

www.trybooking.com/LIQX



ACCESSIBLE HOUSING

FOR PEOPLE WITH SIGNIFICANT DISABILITIES

THE NEED FOR A MORE CONTEMPORARY DESIGN FRAMEWORK
A DISCUSSION PAPER



A COLLABORATION BETWEEN



SUPPORTING PARTNER



Purpose of the Report

- To share collaborative insights arising from practical experience in exploring how to design more innovative housing options for people with significant disabilities that support people to live more independently.
- Act as a catalyst for stimulating wider discussion about development of a more appropriate design framework, or even new standards, for housing people with significant disabilities.



Design Objectives of Innovative Housing Projects

- Design is driven by Universal Design Principles.
- Design supports people to live with greatest level of independence.
- Creation of home environments, rather than institutional.
- Design that supports people to stay connected with family and friends.
- Design that facilitates efficient delivery of support.
- Housing that is functional, durable, flexible and cost effective.
- Housing that can be sold on the open market, if required.



Analysis of Design Specifications

Examining the impact of:

- **AS 1428.1**
- **Livable Housing Australia (LHA) 'Platinum' level**

Why not AS 4299 (Adaptable Housing)?

Finding that the term 'adaptable' is quite different for designing for people with significant disability at an early stage of development.



AS1428.1-2009 CLAUSE NUMBER	STANDARD MET HUNTER UNITS	STANDARD MET TAC UNITS	HUNTER UNITS - DIFFERENCES / ENHANCEMENTS TO THE CLAUSE	TAC UNITS - DIFFERENCES / ENHANCEMENTS TO THE CLAUSE	OVERALL IMPACT OF DIFFERENCES / ENHANCEMENTS TO THE CLAUSE	COMMENTS
13.3 CIRCULATION SPACES AT DOORWAYS ON CAPT No cross fall steeper than 1:40, if door is power-operated the dimension adjacent to the door does not apply for a front of approach	⊗ NO (HOWEVER automation can achieve element)	⊗ NO (HOWEVER automation can achieve element)	Clearance zones forward of doors are met; latch side clearances met except for E006 bath, bed 1 external door, bed 1 and 2 and M400 second Bath Pre-wiring to all doors provided to allow automation if needed	Clearance zones forward of doors are met; latch side clearances met except for bathrooms and entry doors Pre-wiring to all doors provided to allow automation if needed	Latch side clearance would increase (greater floor area) Some increase in build cost (pre-wiring) Design flexibility preferred to increased cost = retrofit of door motorisation hardware possible	
13.4 DISTANCE BETWEEN PASSAGES DOORS ON CAPT Max. length 1450mm	✔ YES	✔ YES				
13.5 DOOR CONTROLS Lock controllable with one hand	✔ YES	✔ YES	Door hardware requested to comply with standard, mounted at 1000mm AFFL	As per Hunter Project	Pre-wiring provisions increase building cost Suit the needs of those with significant disability (esp. those who have significantly reduced arm / hand strength)	
Distance between handle and back plate/door (in the centre) between 35 - 45mm	✔ YES	✔ YES				
D pull handle, requiring less than 20N of force to operate door	✔ YES (no door closers to manual doors)	✔ YES (no door closers to manual doors)	Door closers omitted on manual doors (typical) to keep force to operate less than 20N			
Min. 25mm DIA push button (powered doors) proud of the surface; shall activate door before button fully pressed	⚡ EXCEEDED (sensitive touch alternative provided)	⚡ EXCEEDED (sensitive touch alternative provided)	All internal and external door heads pre-wired for future door opening devices Pre-wiring to external doors provides capacity for control via tablet or wall button			

ASPECT	ASSESSMENT CRITERIA	AS 1428.1	LIVABLE HOUSING DESIGN GUIDELINES 'PLATINUM'
INTERNAL DOORS AND CORRIDORS	Does this design requirement suit the needs of people with significant disability?	Yes, however not for a residential home Having to comply with circulation space requirements for all internal doors within a home is not reasonable due to excessive spatial requirements. This can be mitigated by installing auto door openers for individuals that need them.	Yes – To a limited extent Door minimum clear opening width of 900mm is reasonable however 950mm is better suited for large wheelchairs.
	Is there a spatial impact compared with standard residential construction?	Yes – Significant Additional floor circulation on both sides of internal doors	Yes - Slight Slightly wider internal corridor widths
	Is there an increased financial impact compared with standard residential construction?	Yes Additional cost for floor area and wider doors	Yes – Slight Additional slight cost for floor area and wider doors
	Does this design requirement result in an environment which is less home-like?	No	No
	Does this design requirement result in a lack of design flexibility ?	Yes – Significant The required circulation space on both sides of internal doors is significant	No 1200mm wide corridors are reasonable
	OVERALL CONCLUSION:	NEGATIVE Compliance requirements are too restrictive in terms of circulation space at internal doors	POSITIVE Compliance requirements are reasonable however door clear opening width should be minimum 950mm
ACCESSIBLE BATHROOM, TOILET AND SHOWER	Does this design requirement suit the needs of people with significant disability?	Yes – To a limited extent Grabrail provision doesn't always suit the individual Many occasions the individual won't require them	Yes – To a limited extent Doesn't deliver complete requirements for an accessible bathroom
	Is there a spatial impact compared with standard residential construction?	Yes – Significant Additional floor circulation space that is not always required	Yes – Slight Additional floor circulation space for toilet and shower. More flexibility in application than AS 1428.1
	Is there an increased financial impact compared with standard residential construction?	Yes – Significant Additional cost for floor area, fixtures and fittings	Yes – Slight Additional slight cost for floor area and reinforcement of walls. Allows less expensive fixtures and fittings than 1428.1
	Does this design requirement result in an environment which is less home-like?	Yes Delivers a commercial type public accessible bathroom with grabrails that may not be required	No Delivers home-like bathroom environment
	Does this design requirement result in a lack of design flexibility ?	Yes – Significant Allows almost no design flexibility	No Allows good design flexibility particularly for grabrail provision
	OVERALL CONCLUSION:	NEGATIVE Compliance requirements are not appropriate for residential home-like property	POSITIVE Compliance requirements are appropriate however do not deliver complete design framework. Require 'Platinum Plus' design requirements



ASPECT	ASSESSMENT CRITERIA	AS 1428.1	LIVABLE HOUSING DESIGN GUIDELINES 'PLATINUM'
HOME AUTOMATION AND FUTURE PROVISIONS	Does this design requirement suit the needs of people with significant disability?	No compliance requirement or design guideline.	No – No compliance requirement or design guideline.
BALCONY OR EXT. DECKING	Does this design requirement suit the needs of people with significant disability?	No compliance requirement or design guideline.	No – No compliance requirement or design guideline.
EXT. DOORS (OTHER THAN MAIN ENTRANCE)	Does this design requirement suit the needs of people with significant disability?	No compliance requirement or design guideline.	No – No compliance requirement or design guideline.
CLOTHES LINE	Does this design requirement suit the needs of people with significant disability?	No compliance requirement or design guideline.	No – No compliance requirement or design guideline.
STUDY AREA	Does this design requirement suit the needs of people with significant disability?	No compliance requirement or design guideline.	No – No compliance requirement or design guideline.
COMMON AREAS AND AMENITIES (EXT. BBQ, ENTERTAINING AREAS ETC.)	Does this design requirement suit the needs of people with significant disability?	No compliance requirement or design guideline.	No – No compliance requirement or design guideline.
LETTERBOX	Does this design requirement suit the needs of people with significant disability?	No compliance requirement or design guideline.	No – No compliance requirement or design guideline.
HEATING AND AIR CONDITIONING	Does this design requirement suit the needs of people with significant disability?	No compliance requirement or design guideline.	No – No compliance requirement or design guideline.
STRUCTURAL PROVISION FOR CEILING HOIST	Does this design requirement suit the needs of people with significant disability?	No compliance requirement or design guideline.	No – No compliance requirement or design guideline.
ADDITIONAL GPO'S FOR EQUIPMENT	Does this design requirement suit the needs of people with significant disability?	No compliance requirement or design guideline.	No – No compliance requirement or design guideline.
ACCESSIBLE APPLIANCES	Does this design requirement suit the needs of people with significant disability?	No compliance requirement or design guideline.	No – No compliance requirement or design guideline.
EMERGENCY COMMUNICATION	Does this design requirement suit the needs of people with significant disability?	No compliance requirement or design guideline.	No – No compliance requirement or design guideline.
FIRE DETECTION AND SUPPRESSION	Does this design requirement suit the needs of people with significant disability?	No compliance requirement or design guideline.	No – No compliance requirement or design guideline.
OCCUPATIONAL HEALTH AND SAFETY	Does this design requirement suit the needs of people with significant disability?	No compliance requirement or design guideline.	No – No compliance requirement or design guideline.
COMMUNICATION TECHNOLOGY TO CARE PROVIDERS	Does this design requirement suit the needs of people with significant disability?	No compliance requirement or design guideline.	No – No compliance requirement or design guideline.
STORAGE	Does this design requirement suit the needs of people with significant disability?	No compliance requirement or design guideline.	No – No compliance requirement or design guideline.



Insights, Issues and Implications

AS 1428.1

- Little relevance to residential housing.
- Adds considerable cost.
- Considerable spatial impact.
- Doesn't support individual facilitation.
- Not home like, more institutional.
- Industry expectation that AS 1428.1 must be used for compliance.

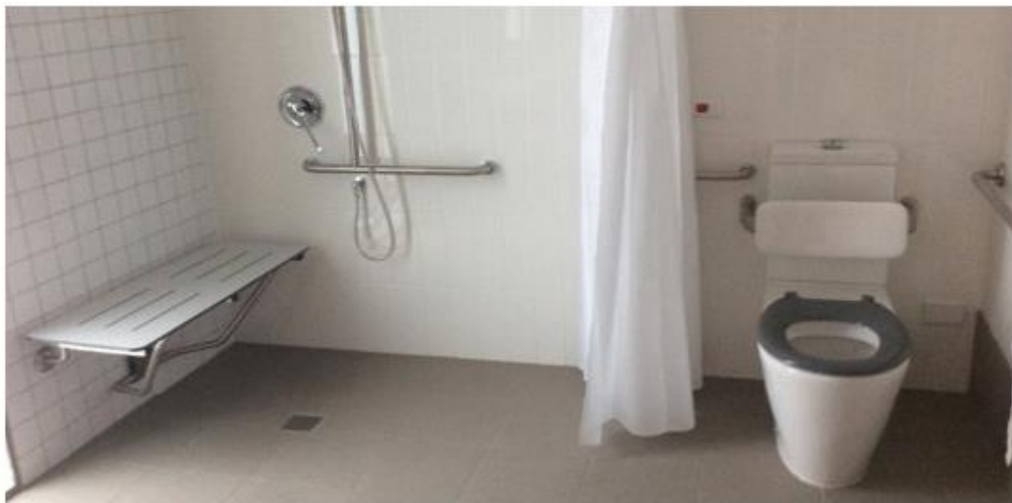


Insights, Issues and Implications

Livable Housing Design Guidelines 'Platinum'

- Positive platform in which to start, however not enough.
- Only marginal cost impact.
- Considerable spatial impact, however not as significant as AS 1428.1
- Better supports individual facilitation, however questionable.
- Very home like.
- Voluntary compliance with poor uptake.





- An example of an 'institutionalised' bathroom compliant to AS 1428.1 within a BCA Class 3 development. Note the requirement for grabrails, shower seat, shower curtain and backrest behind the toilet.



- Example of a home like bathroom compliant to Platinum Standard in a BCA Class 2 dwelling.



What is an Appropriate Design Framework?

- Incorporation of Universal Design Principles.
- Compliance to LHA Platinum 'Plus'.
- Creation of home environment, rather than institutional.
- Adaptability to sit the individual needs of the tenant across time.
- Integration of assistive technology.
- Consideration of how support is delivered within the home.
- Durability, low maintenance, cost effectiveness.
- Ability to sell the home as an attractive asset on open market.



A Successful Design Brief

To achieve desired design outcomes for people with significant disabilities, there is currently no single access standard to deliver well designed, innovative, highly accessible housing.

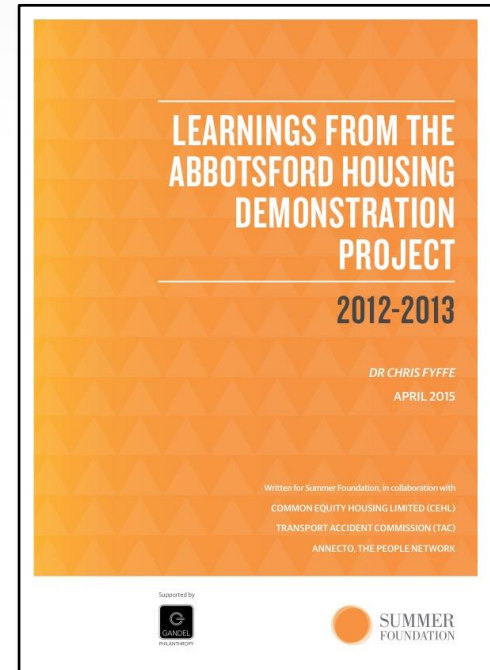
Create a design brief in collaboration with –

- Access consultant
- Architect
- Clinical therapist

But above all, input from people with disabilities about what design features will support them to live with greater independence!



What Next?



Next version of design report

- Photos of design elements
- Cost of adaptable features vs standard features

What Next? – Housing Projects

Learn by doing – Will not do the same thing

Funding – Social investment and SDA payments

Density – Focus on high and medium density

Strategic – Potential for replication and scale

- Public housing renewal sites
- Housing associations
 - multiple potential sites over the next 5-7 years
 - commitment to generating and sharing knowledge
- Large property groups



What Next? - Knowledge

Videos

- Virtual tour
- Technology Demonstration

Evaluation Framework

- Tenant outcomes
- Essential elements of support model
- Built design
- Technology

Document knowledge generated in collaboration with partners



Key Challenges

Transition from Welfare Model to a Mature Market

Limited Data

- Demand – who, what where?
- Vacancy management
- Supply – Where is existing accessible stock?

Informed and empowered consumers

- Resources needed to build capacity
- Housing resources services







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