Guidelines to Assist You When Selecting Accessible Housing

Modifying an existing house; Building a new home; Purchasing an existing, accessible house.

Guidelines for Accessible Housing
Australian Standards 1428 “Design for Access and Mobility”, Parts 1 and 2, are not designed for private dwellings, however they provide valuable assistance when designing a home or assessing the suitability of an existing dwelling for modification. These Standards provide dimensions appropriate to 80% (Part 1) or 90% (Part 2) of the adult population with disabilities. AS 4299 – 1995 “Adaptable Housing” references both of these documents. Copies of these documents are available from Standards Australia, telephone 9221 6700.

Guidelines for Specific Requirements
When designing or modifying consider:
- Level of function may change, therefore it is important to consider future needs or design for adaptations.
- The needs of people requiring assistance will be different from those who are independent.
- Your home needs to accommodate other family members all with their individual requirements.
- Assessment by an occupational therapist is strongly recommended to ensure that your house will meet your individual needs, both now and in the future.

Consider the Following

Car Parking Facilities
- Require a level surface with a gradient of no more than 1:40.
- Require a car parking space with minimum dimensions of 6.0 metres x 3.8 metres.
- Consider vertical clearance for a van or roof mounted wheelchair hoist.
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The Independent Living Centre provides a free and impartial information and advisory service to help you choose the right product for you.

Accessible Pathways and Ramps to the House
- Should ideally be level.
- Should have an unobstructed width of at least 1000mm.
- Should have a firm slip resistant finish.
- Should be sheltered from the weather.
- Should be well lit at night.
- If a ramp is required and the rise is less than 190mm the gradient should be 1:10.
- If a ramp is required and the rise is more than 190mm the gradient should be 1:14 or less.
- Ramps require 1200mm by 1200mm landing or level space at the top and bottom and at least every 9 metres.
- Ramps require handrails on both sides.

Doorways
- Although preferred width is 850mm clear space, the minimum acceptable width is 800mm. A wider single door style is more convenient than a double door.
- A wider doorway may be needed if:
  - The hallway is less than 1200mm wide.
  - The wheelchair needs to pass through at an angle.
  - The wheelchair is a powered or reclining style.
- Sliding doors should be considered if circulation space at doorways is insufficient.

Door Furniture
- Door handles are best installed at a height of 900-1100mm.
- Lever handles and ‘D’ style handles are preferred.
- An electronic latch may be necessary to assist people unable to use a key.
- A door intercom security system can be installed where required.

Internal Corridors
- Minimise corridors when planning, as changes in direction require greater circulation space.
- Require an unobstructed minimum width of 1000mm. A handrail may be required on one or both sides for ambulant people.
- Require adequate lighting levels (300 lux).

Thresholds
- Are best without a step.
- Any weather strip or doormat should be no higher than 5mm.
- Any threshold ramps have a maximum rise of 35mm and should be not longer than 280mm with a 1:8 gradient. The sides should be tapered where the ramp does not abut a wall.
- Use aluminium sliding doors which can be “dropped” into a concrete slab to minimise changes in levels.
- Closely spaced drainage grilles at external doorways, level with the pathway, assists with water run off.
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Floor Surfaces
- Should be slip-resistant vinyl sheeting, tiles or low/close pile carpet

Windows
- Sills should be at a maximum height of:
  - 730mm above floor level in the living room.
  - 600mm above floor level in the bedroom.
- Opening mechanisms should be light to operate with large handles or winding mechanisms which are within easy reach.

The Living Room Requires
- A minimum circulation space of 2250mm diameter to turn a wheelchair 360°.
- All power points and switches to be positioned within easy reach at 900-1100mm above the floor. Large rocker switches are easier to operate.
- The telephone to be at an accessible height within the range of 750-850mm above the floor.
- Adequate lighting levels (300 lux).

Kitchen
- Bench height should be between 750mm and 850mm, with 1550mm clear space between opposing benches (higher if individual needs dictate).
- Toe recess of 200mm high by 150mm deep will accommodate a wheelchair footplate.
- The sink height between 750mm and 850mm, with sink bowl at a maximum depth of 150mm. Insulation of pipes to the underside of the sink may be necessary.
- The tap handle(s) should be located within 300mm of the front of the sink.
- The work surface beside the stove should be 820mm long, 600mm deep, with knee space underneath.
- Work tops and cook tops should be flush to allow safe sliding of pots and pans.
- The oven should be adjacent to the bench with bottom of oven at bench height.
- Storage shelving should be adjustable.
- Use of drawers as storage allows easy access.
- At least one shelf of all cabinets or shelves above a work surface should have a maximum depth of 400mm and be located no higher than 1200mm above the floor level.
- A microwave oven should be 750-1200mm above the floor.
- Doors and drawers should have D-handles (80–100mm wide).
- Handles of cupboards should be at the top of lower cupboards and the bottom of upper cupboards.
- All floor surfaces should be slip-resistant.
- Install recess task lighting over work surfaces.

Bathroom
- Combined shower and toilet facilities can minimise room size whilst maximising (overlapping) circulation space.
- The shower recess should be a minimum of 1160mm x 1100mm with no hob or step, and preferably only two fixed walls.
- Provide a wheel in shower recess by omitting any hob or step.
- To assist drainage, slope the shower recess floor at 1:50 down to the waste outlet. Grade the rest of the bathroom floor 1:70.
- Provide an 80 mm waste outlet located centrally towards the back of the recess. Horizontal grilles provide more efficient drainage.
- A floor length shower curtain attached to a suspended/slot/rail, either self-supporting or with weights in the bottom, helps control splashing or draughts.
- All floor surfaces should be slip-resistant.
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- Grab rails should have a diameter of 30-50mm, although some people may prefer 25-28mm.
- Grab rails should be fixed at a height of 800-810mm in the shower recess and beside the toilet. They may need to be higher or lower for individual needs. Consider using a grab rail as a towel rail for extra support.
- A vertical grab rail with a sliding showerhead support should be used in the shower for showering whilst sitting on a shower chair or commode.
- A thermostatic mixing valve may be necessary.
- Tap(s) in the shower recess should be at a height of 900-1100mm, or lower if preferred, and within easy reach from outside the recess.
- Style of tap: Lever or capstan taps with ½ turn or ¼ turn spindles are preferred.
- Hand basin: The height to top of the basin should be 770-800mm with sufficient clearance to allow knee access, approximately 640-650mm under the basin.
- Mirrors should be angled or lowered to 900mm above the floor.
- The distance from the front of the pan to rear wall should be 800mm to allow for side transfer or to accommodate an over-toilet commode. (Greater for reclined commodes).
- The height of the flush control should be 1100mm maximum.
- The height of the grab rails should be 800-810mm from the floor at the side and at the rear of the pan. Higher or lower according to individual needs.

References

AS 4299 – 1995 Adaptable Housing.

Acknowledgment


Further information:

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