

**Caroma Opal** products are designed to provide independence and comfort without compromise on style.

All Opal support rails are designed for load bearing up to 1100N (approx. 110kg) and are deemed to comply with AS1428.1-2021 requirements.

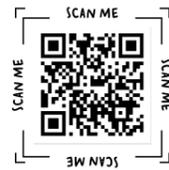


**Opal Basin Mixer** - installed with standard handle which can be replaced with extended handle when needed.



**Opal Optional Care Handle** - installed in the shower recess to show the difference. In addition to the length of the handle the colour indicators are larger than standard tapware

**Opal Support Rail 90 degree angled** - designed to enhance independence by providing additional support and balance in the shower.



Scan QR code to learn more about **Caroma LiveWell Opal Collection**

## Ensuite Products installed

**Caroma Urbane II** products installed in the ensuite, are load-tested to withstand multi-directional force up to 110kg. All ensuite walls have been reinforced to ensure that they can be relied upon when needed.



**Universal Rail** - if being used as a grab rail place towel over the thinner rail



**Universal Toilet Roll Holder** - provides support getting up off the toilet



Scan QR code to learn more about **Caroma Urbane II Universal Accessories**



## Liveable & Adaptable Design

### DESIGNING FOR NOW AND THE FUTURE

Liveable and adaptable design refers to the creation of buildings that are accessible to most people, regardless of age, disability, background, or any other factors.

As household needs evolve, it is significantly more cost-effective to incorporate flexibility into the design of new homes than to rely on retrofitting, which is both more expensive and limited in scope.

The difference between liveable homes, adaptable homes & Specialist Disability Accommodation.

- **Liveable home** - homes with features making them easier for everyone to use, regardless of age, ability, or life stage, by incorporating universal design principles like step-free entry, wider doorways, and reinforced bathrooms for future grab rails, ensuring accessibility for occupants like the elderly, people with disabilities, or families with young children. This approach improves safety and independence, reducing the need for costly renovations later. Based on [Australian Livable Housing Design Guidelines](#).
- **Adaptable home** - a liveable home that also meets Australian Standard AS4299-1995 Adaptable housing, which means it can be easily modified over time to meet changing needs as they age or face temporary or permanent disabilities, without major renovations. This ensures long-term liveability and prevents the need to move as circumstances change.
- **Specialist Disability Accommodation Design** - guidelines under Australia's [NDIS](#) (National Disability Insurance Scheme) for building or modifying homes for people with extreme functional impairment or very high support needs, focusing on independence, safety, and quality of life through categories such as improved liveability, full accessibility, and high physical support.

When designing a multilevel home, ensure it can be adapted to meet the needs of less mobile occupants. Include a wheelchair-accessible bathroom and bedroom (or rooms that can be converted easily) on the ground floor.

Catalina Sustainable Home has achieved Silver Certification from Livable Housing Australia and incorporates a range of additional design features to ensure that future occupants with limited mobility can live independently.

Certification completed by Keira Nicholson from the [Collective Design Agency](#)



### Useful Links & Additional Reading

- Livable Housing Australia Guidelines - [www.accessinstitute.com.au](http://www.accessinstitute.com.au)
- NDIS SDA Design Standards - [www.ndis.gov.au](http://www.ndis.gov.au)
- Your Home Guide - [www.yourhome.gov.au](http://www.yourhome.gov.au)
- National Construction Code Livable Housing Design Standard - [www.ncc.abcb.gov.au](http://www.ncc.abcb.gov.au)
- Australian Network for Universal Housing Design - [www.anuhd.org](http://www.anuhd.org)

## Awards

**Catalina Sustainable Home won eleven awards (national & state), four of which were for liveable and adaptable design.**

HIA Perth & HIA Western Australia awards for Liveable Home

Master Builders WA & Master Builders National awards for Assisted/Adaptable Living



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Visit one of the most sustainable homes in Australia.

[www.catalinasustainablehome.com.au](http://www.catalinasustainablehome.com.au)



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# Livable Housing Design

The Catalina Sustainable Home has achieved Silver certification from Livable Housing Australia. The following seven core design elements form the basis of this certification. While these elements may not meet the specific needs or abilities of every occupant, they are considered to provide the greatest overall benefit. Incorporating these features into the initial design of a home can significantly reduce or eliminate the need for costly access-related retrofitting in the future.

Research indicates a 60 percent chance that a house will be occupied by a person with a disability at some point over its life. This person is likely to be someone you know – a parent, child, sibling or friend.



- 1. Dwelling Access**  
Step-free non-slip access from the front pathway to the front door via the driveway
- 2. Dwelling Entrance**  
920mm wide entry door with flush threshold provides a step free transition into the home.  
  
The porch provides a large landing area out of the weather.
- 3. Internal Doors and Corridors**  
920mm doors installed throughout, providing easy access with mobility aids.  
  
Minimal corridors are used in the design for easier manoeuvrability. The entry corridor is 1m wide.

- 4. Toilet**  
Ensuite toilet has clear circulation space, and is placed in the corner to allow for future grab rails if required.
- 5. Shower**  
The ensuite shower is hobless and features slip-resistant flooring. It is located in the corner to allow for future installation of grabrails if required. The shower screen is easily removable, enabling full wheelchair access.
- 6. Reinforcement of ensuite walls**  
All ensuite walls have been reinforced to enable grab rails to be installed safely and economically in the future.
- 7. Internal Stairways**  
Not applicable for single storey homes.

Livable Housing Australia have an additional 8 elements (silver and gold), Catalina Sustainable Home has incorporated some of these items, however, did not include in the additional certification.

- 8. Kitchen Space**  
The distance between cabinets exceeds 1.2m to support ease of movement. Tiled floors are slip-resistant and run under the cabinets, making it easier and more cost-effective to retrofit in the future. Task lighting has been installed above benchtops.
- 9. Laundry Space**  
The distance between cabinets exceeds 1.2m to support ease of movement. Tiled floors are slip-resistant and run under the cabinets, making it easier and more cost-effective to retrofit in the future.
- 10. Bedroom Space**  
The main bedroom is 17.8m<sup>2</sup>, excluding the walk-in robe area, providing plenty of space around the bed with mobility aids.

- 11. Switches & Powerpoints**  
The centre of light switches and powerpoints is at a consistent level, which makes it easier for people with vision impairment. Powerpoints that are lower to the floor are all over 30cm, making them easier to reach for all.
- 12. Door and Tap Hardware**  
Door handles are at a consistent height with light switches, this makes it easier for people with vision impairment to find. Tapware to basins and sinks are lever which make it easier for people with limited mobility to use.
- 13. Family/Living Room Space**  
The living room is large enough to allow for ease of movement around furniture with mobility aids.

- 14. Window Sills**  
All windows are positioned to enable people to see outside from both seated and standing positions. Windows and doors can all be opened from either sitting or standing positions.
- 15. Flooring**  
Tiled and timber flooring are slip-resistant (P4 Rating). Where the two surfaces meet, there is less than 5mm difference minimising trip hazards.



Download the **Livable Housing Design Guidelines** from Access Institute by scanning the QR Code



## Additional Accessibility Elements - Outside

The Catalina Sustainable Home includes the following design elements and products to increase accessibility for future homeowners.

### 1. External Doors

All external doors have flush thresholds, with no step or height difference, making the home safer and easier to access for people using wheelchairs.

### 2. Pathways

All paths around the home are accessible, making it easy for people using wheelchairs or mobility aids to get around. This includes access to the raised garden beds.

### 3. Parcelbox/Letterbox

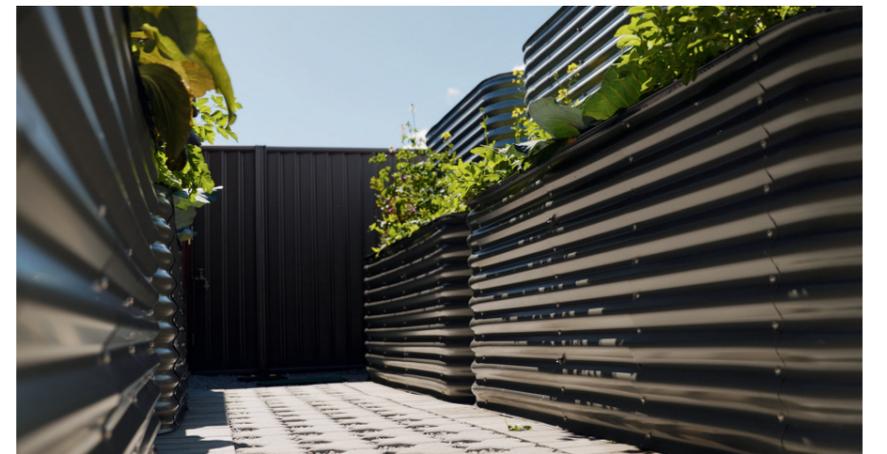
A combined parcel box and letter box installed at a height that is easy to access from a seated or standing position.

### 4. Drying Court

The drying court is located directly outside the laundry, with access through a 920mm door with a flush threshold

### 5. Raised Garden Beds

Raised garden beds have been installed to make the vegetable garden easier to work in, whether standing or seated. Additional space has been provided in front of the shed to allow easier access for wheelchair users.



## Additional Accessibility Elements - Inside

### 1. Flooring

Tiled Omnistone flooring and ASP engineered timber flooring were chosen as they provide a slip-resistant surface.

Skirting boards are recessed into the stud-framed walls to limit protrusions in hallways.

### 2. Internal Doors

All internal doors are either 870mm or 920mm wide, allowing for easy access throughout.

### 3. Garage Access

Access from the garage to the house features a flush threshold, ensuring the garage is level with the rest of the home and eliminating trip hazards when carrying shopping inside.

### 4. Colour Contrast

A colour contrast between materials helps people with reduced visibility navigate around the home.

At Catalina Sustainable Home, we have opted for darker flooring throughout to contrast with the lighter walls and darker door hardware on lighter coloured doors.

The benchtops and base cabinets are in contrasting colours, and the island cabinets are a different colour from the main cabinets.



### 5. Kitchen Cabinets & Appliances

- Oven - A wall oven was chosen instead of under-bench ovens, with its height set to allow heavy or hot items to be transferred to the benchtop without bending or stretching.
- A Häfele Ropox Flexi electric bench has been installed in the pantry as an adjustable workspace, allowing use from sitting to standing.
- Häfele Hawa Concepta 3 pivot door to enable easier access to the Ropox flexi bench and pantry.
- Häfele Kesseböhmer LeMans corner units have been installed to improve access, reducing the need to reach or stretch inside corner cupboards.
- The fridge is positioned to allow access without obstructing people working at the benchtops.
- The island bench features two different heights, allowing people to work comfortably either sitting or standing.

### 6. Walk in robe

The walk-in robe is designed for easy access and includes a Häfele pull-down rail, allowing the top rail to be lowered for use from a seated position.

### 7. Ensuite

In addition to the LHA design elements, it has also been fitted out with fittings and fixtures from Caroma for life independent living range.

Items that can also be used as grab rails (tested to withstand multi-directional force of 110kg)

- Caroma Opal 90-degree support rail
- Caroma Urbane II towel rails
- Caroma Urbane II toilet roll holder

Mixer lever tapware has been selected for ease of use with limited mobility. An extended handle has been installed in the shower recess.

Tap location in the shower allows carers to adjust water temperature without reaching inside the shower and getting wet.

Semi-recessed basins provide space underneath for walking frames and reduce the need to stretch to reach the taps.

### 8. Laundry

The washing machine is centrally located, providing ample space for easy access. It is installed in a cupboard on top of a drawer with a pullout shelf. Elevating the washing machine reduces bending and reaching when loading and unloading clothes, while the pullout shelf accommodates the laundry basket, eliminating the need to lift it from the floor.

