

# smarthousing

For its size, the bathroom is an expensive room to build and can often be even more expensive to renovate. By making smart decisions at the initial design stage, you can avoid common design flaws which significantly reduce the cost of future renovations as well as ongoing running costs. The benefits of this include cost savings for you and a positive impact on our environment.

Importantly, a Smart Housing bathroom is also safer, and will reduce the likelihood of injuries that commonly occur in bathrooms.

## DESIGN

If you are building a new home or renovating the bathroom, consider how user-friendly it can be at the initial stages and how adaptable it can be to meet changing needs into the future.

An **accessible bathroom** can be used by people with a diverse range of abilities and an **adaptable bathroom** can be easily and cost-effectively modified to a similar standard with little or no professional assistance. For example, an accessible bathroom is one located on ground floor level and an adaptable bathroom may have been designed with reinforced walls to allow grab-rails to be installed at a later date.

Allow **natural light and ventilation** into the bathroom. This will help the bathroom to stay dry and deter the growth of mould.



Above: Photo courtesy of Queensland Steel Homes

# BATHROOMS

**Windows** placed over bathtubs should provide security and privacy so they are not required to be opened and closed regularly as this might be awkward and dangerous if people need to climb into the bathtub to do so. Alternatively, the window should be able to be easily reached without having to step into the bathtub.

In homes or units with a **single and separate toilet and bathroom**, the best way to plan for adaptability is to locate the two rooms side by side. This will facilitate the potential removal of the adjoining wall in the future. When building these two rooms as separates, the floor tiles, cornice and skirtings should be constructed prior to the erection of the non-structural partition wall and it is important to ensure plumbing and electrical services are not built within the removable wall. This will easily facilitate a combined bathroom and toilet in the future.

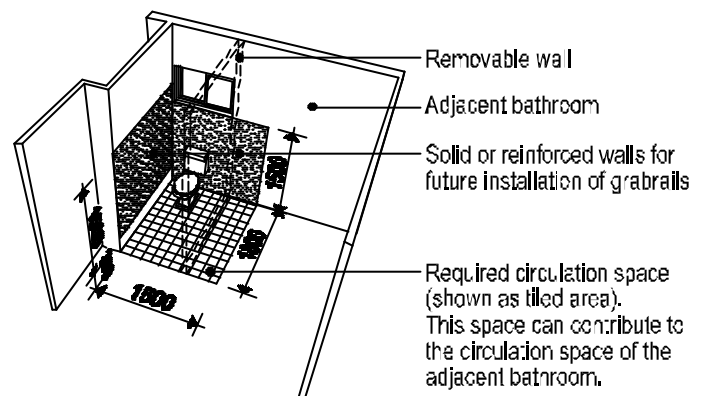


Figure 1: Accessible toilet

**Showers** built with a level, **step-free threshold** (known as hobless showers) will be a safer option than those built with a step, because they minimise the risk of tripping. Other practical benefits of this design include a shower that is easier to clean with a contemporary look.

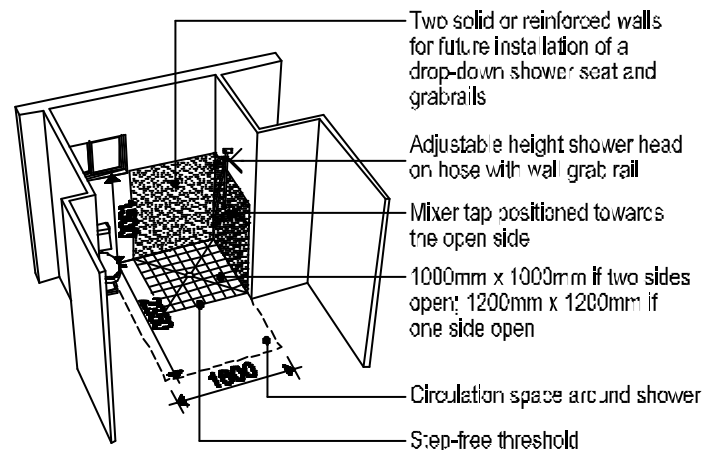
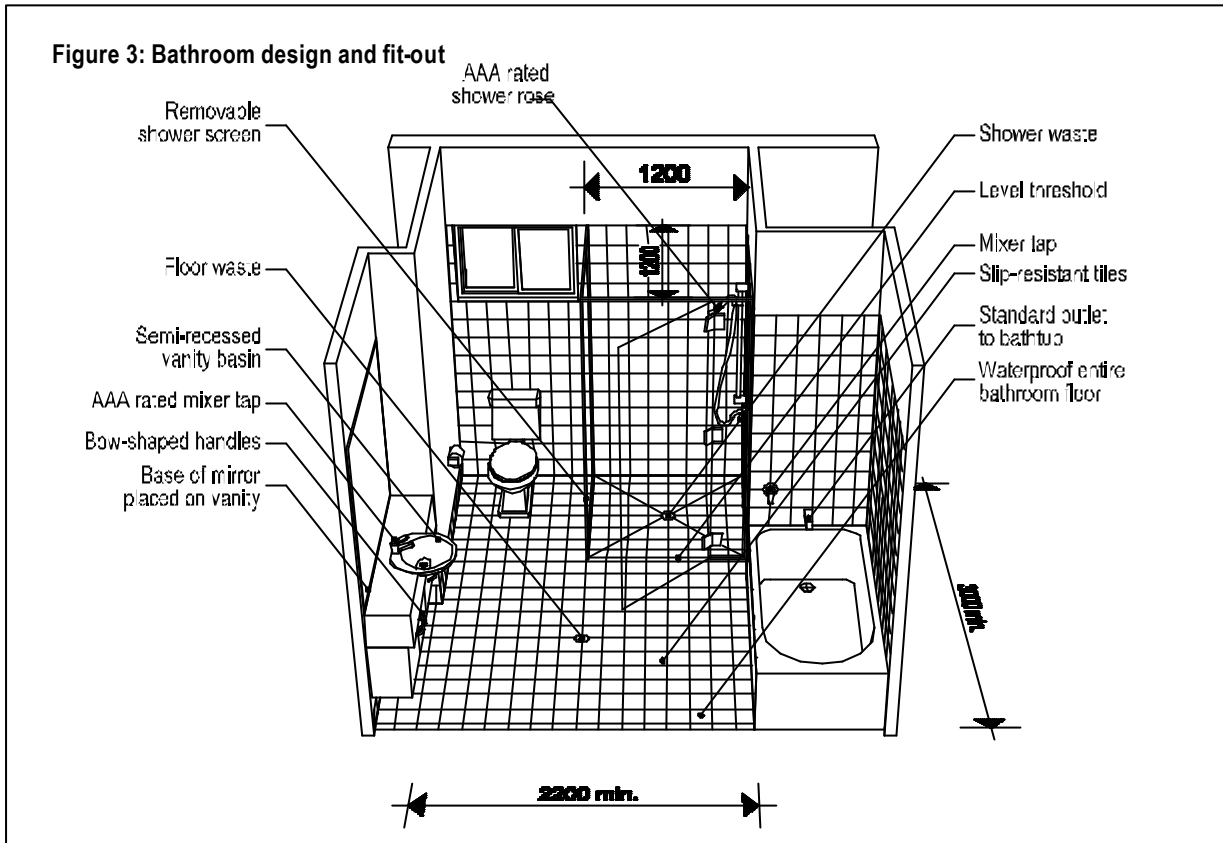


Figure 2: Accessible shower

**Figure 3: Bathroom design and fit-out**



## CONSTRUCTION

It is recommended that you **recess and waterproof** the entire concrete or framed bathroom floor and screed the height of the floor to a **level door threshold**. This will remove a common tripping hazard at the door.

**Fix structural plywood to the wall framing** adjacent to the shower and toilet before fixing the wall lining. This can be achieved at little or no cost during construction and will allow the installation of standard grab rails in the future.

Locating the **vanity waste pipe** in the wall behind the basin will free up storage space beneath and allow for the future installation of a wider range of vanity units, including 'off the floor' designs.

## FINISHES

It is best to lay a **slip-resistant, hard wearing floor**. Install the cupboards over the tiles. This will easily allow for the **vanity** cabinet to be replaced if necessary in the future.

It is recommended that the vanity bench has **rounded edges** to prevent injuries in case of a fall and a **contrasting colour splashback** to clearly discern it from the vanity.

**D-shape or bow-shape handles** on the vanity unit are easier for people of all abilities to use and easier to see than small or concealed handles.

## FITTINGS

Install mixer taps throughout the bathroom and at least **AAA Water Conservation Rating** fittings to the shower and vanity basin. Install a standard outlet at the bathtub.

Taps should be easy to reach. Locate the shower mixer tap on the open or door side of the shower to reduce the risk of scalding when turning the shower on or off.

If you are renovating, install a hot water **temperature control device** as a safety feature. This is mandatory in new homes.

A **child-proof, lockable cupboard** will provide safe storage of poisons or medicines, keeping them out of children's reach.

The bathroom is a common place for people to collapse if they are unwell. In the interest of safety and accessibility in the event of an incident, it is best to install **privacy latches** on the inside of bathroom doors rather than locks.

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