

# Design policy for social housing

# Purpose

The policy establishes the design standards for the construction and purchase of homes for social housing tenants by social housing providers.

The standards may inform maintenance and upgrades as appropriate.

# **Policy context**

The policy incorporates contemporary design principles from the Livable Housing Design Guidelines (4th edition), Residential Development Strategy (July 2013), and the Universal Design and Sustainability Guidelines (Victoria).

The standards reflect principles of environmental and energy sustainability, socially inclusive and sustainable communities, universal design principles to support 'ageing in place', and liveable housing design.

The standards are consistent with industry best practice, including the reduction of home energy use and increasing the financial and social viability of social housing stock.

The standards encourage the use of new innovative developments in design and building materials, including new smart technologies to assist people living with functional impairment.

The standards should also be considered within the context of the anticipated effects of climate change through global warming and the new code for bush fire prone areas, and the current reforms to the Tasmanian planning system.

Policy development – Draft version 1.A: Social housing design policy

Homes Tasmania is introducing a policy development and review framework across Community Infrastructure, Tenancy Services, and Housing and Homelessness Programs.

This policy is being reviewed as part of the Policy Improvement Plan to ensure it aligns with Homes Tasmania's strategic position and operational practices. Until then, this document remains a draft.

# Standards for social housing

#### Standard 1 – New homes will provide for shelter, comfort and security.

The location of new homes will be in well-located suburbs that meet expressed demand and provide reasonable access to jobs, shops, transport, schools and other community services.

# Standard 2 – New homes will provide diversity of well-designed and constructed accommodation that supports the needs of residents in an affordable, environmentally sustainable and socially responsible way, including:

- efficient use of land, water, energy and built infrastructure
- contain urban sprawl and reduce the impact of residential communities on the environment
- encourage urban consolidation
- support infill development and higher-density living opportunities along transport corridors.

# Standard 3 – New homes will increase housing supply and support liveability through sustainable and prosperous communities where people want to live, work and enjoy themselves, considering principles such as:

- strong vibrant communities which are socially inclusive and healthy by design
- social and economic participation
- a greater range of housing types
- meeting changing lifecycle needs
- converting underutilised space above commercial tenancies for residential use
- increased residential density which supports other residential development and contributes to a sense of place in the community and
- a mix of uses and opportunity for the integration of commercial ventures and services or facilities.

# Standard 4 – Energy Efficiency Rating Guidelines will improve environmental sustainability by ensuring that all new properties conform to the National Construction Code of Australia's (2022) minimum 6-star energy efficiency rating.

The planning and design of new residences will be completed by an accredited practitioner to achieve a minimum 6-star energy rating. The design will be subject to a performance-based assessment to ensure it will deliver the 6 -star rating prior to proceeding with the development.

The designer will consider the following issues:

- Tasmania is generally classified as 'Climate Zone 7' and that factor should direct performance-based assessment of design.
- Analysis of the specific site is to occur to identify orientation, prevailing wind direction, topography and any other external factors which may influence the building's performance.
  - Opportunity to align the building's long axis to face a northerly direction should be considered.
  - Vertically staggering the building form may provide opportunity to allow penetration of sunlight deeper into the building.
- Preliminary design must consider the distribution of floor areas, aligning living rooms with the northerly aspect and distribute service and circulation spaces to southern orientations.
  - The planning must consider seasonal variations, allowing for summer cooling and heating in winter.
  - Variation in the sun's transit and elevation must be considered in planning layout incorporating sun shading devices as required.
- Design development should consider room planning, including the size and placement of windows in walls facing different directions.
  - The thermal performance of windows in external walls can be moderated appropriate to the orientation of the walls through sizing or alternatively usage of low emissivity glazing or insulated glazing which includes glass panels separated by an air cavity.
  - Design development considers room volumes and opportunity to partition rooms to mitigate heat loss and reduce unwanted convective air movement.
  - Partitioning can extend to the potential separation of storeys within residential buildings.
- Installation of water tanks are often regulated by planning schemes. However, onsite collection of rainwater, incorporation of water storage tanks and reuse of rainwater for toilet flushing and gardening should be considered in design, where appropriate.
- The features of design that have the potential to impact a building's thermal capacity and which should be carefully considered in good design follow.
  - Thermal Mass
    - Allow permeation of winter sun to heat thermal mass allowing storage of heat and transference of air into the rooms.
    - Restrict summer solar radiation from entering the building, alleviating the need to artificially cool the building.
  - Orientation
    - Locate living rooms on the northern side of the building allowing access to solar gain.
    - Locate less critical non-habitable rooms on the south facing walls.

- Orientation of outdoor living spaces to the western façade will increase potential for reducing penetration of low summer sun from entering a building.
- Location of wardrobes on the western walls can have the cumulative effect of increasing the thermal efficiency of bedrooms.
- Windows
  - Winter
    - Provide windows to the north elevation that have an area of approximately 20-25 per cent of the room's floor area.
    - Ensure eave overhang is appropriately designed to allow wanted ingress of sunlight whilst restricting summer sunlight.
    - Windows with a low U-value reduce heat when blinds are open.
    - Provide north-facing windows which have a high Solar Heat Gain Coefficient (SHGC) which will maximise passive solar gain.
  - Summer
    - Provide eave overhang or adjustable shading devices which will restrict hot summer sun from entering a dwelling.
    - Provide windows with low SHGC on the east elevation that will transfer heat from morning sun.
    - West facing windows with low SHGC.
- Draft sealing
  - Ensure windows and doors are sealed with flexible strips and draft-excluding devices.
  - Seal all construction joints and gaps between junctions of materials and around service pipes.
  - Provide self-closing draft exclusion devices around exhaust fans.
  - Avoid usage of solid fuel combustion heaters with non-closing flues. Other design features may include the provision of a vestibule.
- Ventilation
  - Provide operable windows on opposite sides of rooms that will allow cross flow ventilation.
  - Configuration of windows may optimise the window's performance.
    eg typically windows on the windward side of the dwelling are smaller than windows on the leeward side, thus optimising air flow volumes.
  - Provide window openings at different heights which will allow convective air flow movements.
- o Insulation
  - Installation of ceiling insulation with a Total R-value of 4.0 which may include roof sarking (foil roof and wall insulation).
  - Installation of wall insulation with a Total R-value of 2.5 including wall frame sarking.

- Windows, clear double-glazed window systems for larger windows.
- Insulate underside of suspended unenclosed sub-floor spaces with insulation with a Total R-value of 1.5.
- Insulate the perimeter of concrete slab on grade.
- Insulate internal walls with a Total R-value of 2.0 between conditioned and unconditioned spaces.
- Typically, this may be dividing walls between living spaces and a garage.

**Notes:** The information relating to maximising energy efficiency in buildings is provided as a general guide; there are many variables that will influence a building's assessed energy rating. These variables include: the building fabric, fenestration, building orientation, distribution of rooms, climatic zone and installed systems.

The performance of an energy efficient building relies upon the building's design, its construction and the ongoing management of the building by its occupants.

As new technologies are proven, other cost-effective sustainable features such as solar hot water heaters and solar heat pump systems should be incorporated within buildings.

# Standard 5 – Livable Housing Design Guidelines, and universal housing design principles, will apply to new developments.

- New homes will be constructed to meet the changing needs of residents across their lifetime by ensuring they are:
  - easy to enter and move around in
  - capable of easy and cost-effective adaptation for the specific needs of aged people and people with disabilities as per guidance from the Livable Housing Design Guidelines:
    - Silver level generally
    - Gold level for kitchen, laundry and bedrooms.
- Specialist housing for people with significant disabilities should be a minimum of Gold level and Platinum Level wherever possible.
- The Livable Housing Design Guidelines will provide direction when planning for the construction of new residential developments. At a minimum, new accommodation should provide:
  - safe and continuous path of travel
  - level entrance into the building
  - internal doors and corridors that facilitate comfortable and unimpeded movement between spaces
  - o a toilet on the ground (or entry) level that provides easy access
  - o bathroom that contains a hob-less (step free) shower recess
  - kitchen and laundry space which is designed to support ease of movement between fixed benches and to support easy adaptation
  - space on the ground (or entry) level that can be used as a bedroom

- light switches and power points which are located at heights that are easy to reach for all home occupants and allow for home occupants to easily and independently open and close doors and safely use tapware.
- The Livability Guidelines should be referenced during planning of all new construction projects, when considering the attributes of potential purchase of properties and when significant upgrading programs are planned. The guidelines are available at <u>https://www.abcb.gov.au/news/2022/new-livable-housing-designrequirements</u>

### **Detailed elements of design**

The minimum design requirements for minimum external inclusions provide the minimum of Silver level under the Livable Housing Design Guidelines.

Provide a safe and continuous path of travel gradient not greater than 1:14.

- Minimum clear width of 1000 mm:
  - o even, firm, slip-resistant surface
  - cross-fall not more than 1:40 from the street entrance and/or parking area to a dwelling that is level.
- One level entrance into the building:
  - minimum clear opening width of 820 mm
  - a level transition and threshold (maximum vertical tolerance of 5 mm between abutting surfaces is allowable provided the lip is rounded or bevelled)
  - o reasonable shelter from the weather
  - a level landing 1 200 mm x 1 200 mm provided at the entrance door
  - where the threshold at the entrance exceeds 5 mm, a ramped threshold of up to 56 mm compliant with AS1428.1 (2001) is to be provided
  - where the parking area forms part of the access pathway to the dwelling, the space should incorporate minimum dimensions of 3 200 mm in width x 5 400mm in length and an even, firm and slip-resistant surface.
- Internal doors and corridors that facilitate comfortable and unimpeded movement between spaces:
  - a minimum clear opening width of 820 mm and a level transition and threshold (maximum vertical tolerance of 5 mm between abutting surfaces is allowable providing the lip is rounded or bevelled)
  - internal corridors/passageways should provide a minimum clear width of 1000 mm.
- A toilet on the ground (or entry) level that provides easy access:
  - o minimum clear width of 900 mm between wall if located in a separate room
  - minimum 1200 mm clear circulation space forward of the toilet pan exclusive of the swing of the door
  - if the toilet is located within the ground or entry level bathroom, the toilet pan should be located in the corner of the room to enable installation of grab rails.

- A bathroom that contains a hob-less (step free) shower recess:
  - Slip resistant, hob-less (step free) shower recess. Shower screens are permitted if they can be removed at a later date.
  - Shower recess should be located in the corner of the room to enable the installation of grab rails at a future date.
  - Reinforced walls around the toilet, shower and bath to support the safe installation of grab rails at a later date.
- Except for walls constructed of solid masonry or concrete, the walls around the shower, bath (if provided) and toilet should be reinforced to provide a fixing surface for the safe installation of grab rails.
  - The fastenings, wall reinforcement and grab rails combined must be able to withstand 1100 N of force applied in any position and in any direction.
- The walls around the toilet are to be reinforced by installing noggins with a minimum thickness of 25 mm and sheeting with a thickness of at least 12 mm.
- The walls around the bath are to be reinforced by installing noggins with a minimum thickness of 25mm and sheeting with a thickness of at least 12 mm.
- The walls around the hob-less (step-free) shower recess are to be reinforced by installing noggins with a minimum thickness of 25 mm and sheeting with a thickness of at least 12 mm.
- Hob-less/step free shower recesses to have adjustable/detachable hand-held shower roses or be easily adaptable to allow the same.
- Kitchen and laundry spaces are designed to support ease of movement between fixed benches and to support easy adaptation:
  - o provide at least 1200 mm clearance in front of fixed benches and appliances
  - where practicable, floor finishes should be non-slip and extend under the kitchen and laundry cabinetry to enable cupboards to be moved without affecting flooring
  - where bench areas in kitchens adjoin the oven and/or cook top they must allow easy placement of hot pots and pans.
- Space on the ground (or entry) level that can be used as a bedroom:
  - o provides at least 10 m<sup>2</sup> of space with one wall a minimum length of 3 m
  - provides a minimum path of travel of at least 1000 mm on at least one side of the bed.
- Light switches and power points are located at heights that are easy to reach for all home occupants:
  - light switches should be positioned in a consistent location that is between 900 mm and 1100 mm above the finished floor level and horizontally aligned with the door handle at the entrance to a room
  - power points should be installed not lower than 300 mm above the finished floor level.

- Home occupants are able to easily and independently open and close doors and safely use tapware:
  - doorways to feature door hardware installed between 900 mm and 1100 mm above the finished floor
  - doorways to feature D-pull style door hardware and basins, sinks and tubs to feature lever and capstan style tap hardware with a central spout
  - family/living room features clear space to enable the home occupant to move in and around the room with ease.
- Windowsills are installed at a height that enables home occupants to view the outdoor space from either a seated or standing position:
  - windowsills on the ground (or entry) level in the living areas and bedroom spaces should be positioned no higher than 1000 mm above the finished floor level to facilitate natural surveillance
  - window controls to be easy to operate with one hand and located within easy reach from either a seated or standing position.
- Landscaping
  - Each unit must provide a sunny courtyard, or other appropriate private space accessible from the dwelling, that provides protection from inclement weather conditions, privacy from the public and allows supervision from within the house.
  - All areas, other than those required by Council to have special treatment, are to be grassed. Instant turf must be laid and maintained by the proponent until the Date of Completion. Grass areas to have a minimum fall of 2 per cent away from buildings. All areas to be ripped to depth of at least 150 mm and gypsum spread at manufacturer's rates.
  - Garden bed areas must be of low maintenance design and use plantings that require limited watering.
  - Garden areas to be weed matted and have a minimum 100 mm cover in a material comparable to 20 mm graded washed rock to the Superintendent's approved type and colour.
  - Retaining walls to be in a concrete block dry stack material approved by the Superintendent or if walls are higher than dry stack specification, then concrete block cement filled to the appropriate design requirements in a colour approved by the Director of Community Infrastructure's representative and constructed to the Supervising Engineer's requirements, including drainage and waterproofing to the rear of walls and backfilled.
  - Any retaining walls over 1000 mm need to be fenced to the required building standard to ensure safety and areas that are hard to access to be treated as a garden bed with weed matting and have a minimum 100 mm cover in a material comparable to 20 mm graded washed rock to the Superintendent's approved type and colour and plantings that require limited watering.
  - Any decks, landings and ramps are to be of concrete construction with handrails (where required) constructed of a maintenance free material, ie powder coated steel or aluminium.
  - Steps to doorways or footpaths must be avoided in all design and construction.

- Full landscaping plans including fences, retaining walls, garden planting, lawn areas, rock garden beds, pathways, clotheslines, garden sheds and the R.L. levels of all floor heights, driveways, storm water drains, landings and pathways are to be supplied at time of Development Application and are to be approved by the Superintendent and signed off by the Director of Community Infrastructure.
- These plans must be carried over to the Building and Plumbing Application planning process and form the landscaping aspect of the "as constructed" plans.
- Section site plans with contours and driveway levels must be included.
- Garages, carports and parking spaces
  - Each unit must have a garage or attached carport. The carport should be located next to or near the main dwelling, in accordance with AS 4299-1995 where achievable.
  - Garages, carports and parking spaces must be of a minimum internal size of 6.0 m x 3.8 m and be adequately lit with sensor lighting.
  - Each unit should have a carport or a garage with a minimum internal clearance height of 2.5 m including this clearance height at the entry point to the garage or carport.
  - Garages are to be fitted with electric roller door.
  - Carports are to have covered access to dwelling and, where practical, be fitted with a roller door to provide privacy and storage.
  - Levels of carparks and driveways to meet AS 4299-1995 with level, step-free access to each unit where achievable.
- Driveways
  - Each house or unit is to have a driveway with a minimum width of 3.8 m and made of concrete or hot mix, capable of carrying vehicles up to 4.5GVM.
  - Pedestrian footpaths with a minimum width of 1200 mm must be provided for residents entering and moving between units in the complex. Footpaths must be clearly separated from driveways with no steps to entrances or to driveways.
  - Paths to be less than 1:14 to allow for access and handrails fitted where required.
  - Site plans must show all R.L.s level to driveways, drains and paths and must be approved by the Superintendent prior to forming.
  - Where required for the purpose of drainage, kerbs are to be allowed for to ensure storm water is retained and directed to storm water drains.
- Garden shed
  - Each unit is to have a Colorbond<sup>®</sup> garden shed with a minimum volume of
    6.0 m<sup>3</sup> to be fixed to a rebated concrete slab with minimum thickness of 75 mm.
- Clothesline
  - Each house or unit must have a clothesline with minimum of 25m of line.
  - A concrete footpath with a minimum width of 1200 mm must be constructed to the clothesline from the unit.

- The clothesline and its access from the unit must be suitable for persons in a wheelchair.
- Preference is given to fold-a-lines that can be adjusted to height on their mounting posts/fixing point.

#### Legislative and policy framework

This Policy adheres to relevant legislation and overarching policy directions including:

- Anti-Discrimination Act 1998
- National Construction Code 2022
- Livable Housing Design Guidelines
- Universal Housing Design Principles
- Tasmania's Residential Strategy (May 2013)
- The Australian Government's Renewable Energy Target (RET) Scheme, and Carbon Pollution Reduction Scheme
- Homes Tasmania's Strategic Asset Management Plan

### **Responsibilities and delegations**

Decisions on the implementation of minimum standards for new housing developments are the responsibility of Homes Tasmania. Homes Tasmania delegates responsibility for constructing or purchasing new social housing developments to the Director of Community Infrastructure

# Disclaimer

This is a state-wide policy and must not be reinterpreted so that subordinate policies exist. Should discrete operational differences exist, these should be expressed in the form of an operating procedure or protocol that must be approved at the same level as this policy.

# Audit and compliance

Failure to comply with this policy, without providing a good reason for doing so, may lead to disciplinary action.

Compliance with this policy is monitored by the Director of Community Infrastructure.

# **Our contact details**



Community Infrastructure 1300 665 663



HousingProjects@homes.tas.gov.au



https://www.homestasmania.com.au