Form of Housing

1.1 House Design Guide

BCA CLASS 1
CONSTRUCTION ONLY
1.1 HOUSE DESIGN GUIDE

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INTRODUCTION

Background

Established in July 2018, the SA Housing Authority (SAHA) is a statutory corporation that administers the South Australian Housing Trust (SAHT) Act 1995.

The SAHA consolidates housing-related services and management of the housing stock; including strategy, service delivery, assets and related corporate supports; and plays a key role in enabling and supporting the State’s modern, multi-provider housing system and in establishing an environment that promotes shared responsibility and ownership.

The SAHA is committed to providing housing that is socially and environmentally affordable and sustainable. To help achieve this, a suite of design guidelines for sustainable housing and liveable neighbourhoods that are applicable to all types of new residential construction, both rental and affordable have been developed.

The suite of design guidelines comprise the following:

1.1 House Design Guide
1.2 Amenity Targets
1.3 Apartment Design BCA Class 2 Construction
1.4 Housing Accommodation Schedules
1.5 Affordable and Market Housing
2.1 Land Titling and Service Infrastructure
2.2 Design Guidelines for Site Layouts
2.3 SAHT Universal Housing Design Criteria
2.4 Environmental Sustainability
3.1 Neighbourhood Renewal
3.2 Row and Terrace House Design
4.1 Housing Modifications
4.2 Generic Design Guidelines for House Renovations

Designers must understand and incorporate the requirements of these guidelines on all residential projects that involve land and properties owned by the SAHT. These guidelines assist designers in the interpretation of current policies and practices and include applicable features of the Good Design Guide SA historically published by Planning SA.

Some design compromise is acceptable to take into account site constraints and local planning conditions. All designs will be considered by the SAHA on merit. However, the minimum spatial dimensions needed to meet universal housing living requirements are generally not negotiable.
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This Design Guideline

This guideline both interprets and brings the minimum requirements of the SAHT Amenity Targets up to meet contemporary community expectations.

It is applicable to all house types ranging from single lot detached dwellings through to group developments and multi storey townhouses. These types of buildings are all built in accordance with the Building Code of Australia (BCA) Class 1 construction category. They are generally within the construction capabilities of the cottage building industry.

Excluded from this design guideline is apartment development. This form of residential development is constructed in accordance with the BCA Class 2 construction category and will be generally designed by more experienced architects and design specialists (refer to Design Guideline 1.3 Apartment Design for further information).

The principle requirements remain constant for all housing types. The important attributes include:

- SAHT Universal Housing design spatial requirements;
- Requirement for outlooks and appropriate orientation;
- Provision of access to adequate natural light and ventilation;
- Open space requirements relative to household size determined by bedroom accommodation.
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PARAMETERS

Sustainability
The SAHA is committed to developing sustainable communities with environmental sustainability a major obligation. By targeting this important issue we will reduce the impact of urban development on the environment through specific initiatives in the key areas of energy efficiency, water conservation and reducing waste (refer to Design Guideline 2.4 Environmental Sustainability for further information).

Neighbourhood Amenity and Appearance
New housing development should contribute to an overall improvement in the character and amenity of the neighbourhood in which it is located. Public housing should not be readily distinguishable from new private sector housing particularly with regard to:
- building setbacks from street alignment;
- treatment for elements of front elevations;
- roof pitches and materials; and
- colour schemes.
Where a development of two or more houses are adjacent or in close proximity, designs shall offer a mix of elevation treatments and finishes to provide noticeable variation. For attached housing development linking themes may be appropriate.
To maintain appearance natural finishes such as face brickwork or factory applied colour finishes are preferred.

Privacy
All external private open space be designed to achieve a high level of privacy, avoiding overlooking where possible.

Sense of Address
All housing must have a sense of address from the street or from the access point of a group site. The main entry, street number and letter box must be clearly visible.

Outdoor and Indoor Spaces
There should be a strong relationship between outdoor and indoor living spaces which will create easy surveillance, access opportunities and a sense of space.
Locate clotheslines to avoid overshadowing from dwellings.
Universal Housing

Generally, all new build housing must comply with the SAHT Universal Housing Design Criteria (refer Design Guideline 2.3 for further information).

Shape of Housing and Sites

The shape and configuration of the house will often be determined by the maximum allowable site density established by local government planning requirements, which will impact on size of allotments, size of house footprint and number of levels, and the demand profile of the prospective occupants.

Single Lot House Siting and Orientation

When siting a house consideration must be given to proper orientation, ie, north facing living spaces and overshadowing, site topography, servicing, significant natural features, cross ventilation and prevailing weather conditions.

Ensure the house design fits the allotment and is within the building envelope (where applicable) and with regard to easements and required setbacks.

Maximise the street frontage without compromising orientation.

Consider all existing infrastructure including servicing points, crossovers and traffic calming devices.

External to the site consider the location of street trees, service poles and pits, neighbours’ trees, and the like. In particular buildings or trees that may have a future impact on solar access to living spaces or on any solar appliances to be installed at the property.

Group Housing Sites

Designers are encouraged to utilise a range of house designs in refining their solutions to maximise site yields and accommodate particular site constraints, eg, incorporating significant trees, rear corner lots, servicing, orientation, street frontage, etc.

Optimise surveillance of the street and other external open spaces. Incorporate Crime Prevention through Environmental Design (CPTED) principles.

Public street accessibility and maximised view of potential delivery services, eg, meals on wheels, medical and personal access cabs, are essential.

Provide good levels of external lighting for common access areas. Good site signage and clearly numbered units are essential.
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Housing Sites for the Aged

Housing form may be the same as any single person housing and single storey housing is preferred.

All housing for aged persons is to comply with the SAHT Universal Housing Design Criteria.

Sites should be located close to neighbourhood facilities and amenities.

Parking space for emergency vehicles should be located in close proximity to each house.

The front entrance to each house must be located to minimise distance from a driveway for the convenience of assistance workers, taxis, meals on wheels, and the like.

Future Title Boundaries and Zero Lot Line Requirements

All building rules/requirements for construction on boundaries must be met where there is potential for future boundaries. All attached houses must comply with fire separation and stormwater disposal requirements.

Rainwater collection arrangements and gutters must not pass over common walls or future boundary lines.

Use of box gutters is not acceptable.

Refer to Design Guideline 2.1 Land Titling and Service Infrastructure for further information on titling arrangements.
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INTERNAL LAYOUT

General
Internal layouts must meet the needs of the occupants and provide adequate levels of amenity.
Living and sleeping areas should be separated to provide privacy and heating/cooling efficiencies.
Refer Design Guidelines 1.4 Housing Accommodation Schedules for actual room sizes and 1.2 Amenity Targets for fixtures and fittings.

Internal Living Spaces
Ready access from the dining space to the kitchen is essential. This area may form part of the kitchen or be a separate room. Where combined, a clear definition of spaces is required.
A combined living/dining space is preferred for 2 bedroom housing.
Separate living/dining rooms are preferred for 3 bedroom housing.
Combined spaces may be provided to suit a particular allotment or orientation.
A separate living room must be provided for 4 or more bedroom housing, together with an additional family room. May be separate or combined with the dining space.
Avoid thoroughfares through living rooms and direct vision into the living room from the front door.
Direct sliding door access to outdoor living spaces from the living or dining rooms is essential.
All separate or combined living spaces must be isolated from passageways via a door, creating efficiently heated/cooled rooms.

Bedrooms
Bedrooms should be located close to each other, creating a sleeping zone. Where possible they should be separated with wardrobes, alcoves or wet areas to provide privacy.
Adequate wardrobes must be provided in the main bedroom of single storey housing, and to all upper level bedrooms of 2 storey housing.
Avoid opening bedroom doors directly onto living spaces.

Wardrobe Requirements
Allow clearance for floor coverings of room to run into the wardrobe.
Build the wardrobes up to the ceiling.
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**Kitchen**

- Surveillance of the primary outdoor space from the kitchen or living areas should be easily achievable.
- The layout of the kitchen must be efficient and allow for easy movement between refrigerator, cooking space and the sink.
- Ready access to dining space from the kitchen is essential.

**Kitchen Design**

Kitchens should be set out in a simple L or U shape located in a discrete but not necessarily separate area adjacent to dining or meals space. Straight line and galley type kitchens are generally not acceptable. The kitchen work area should not be part of a shared circulation area or thoroughfare.

Where the kitchen is part of a shared dining and living space, as in smaller houses and apartments, care should be taken to screen scullery functions from view. Ways of achieving this include the use of alcove or nook arrangements. Alternatively open kitchen benches may be screened using a high level servery or breakfast bar arrangement.

For safety reasons cook tops and upright stoves require a minimum of 400mm of adjacent bench space on both sides. Wall ovens require 400mm of bench space on at least one side.

A fridge space of 900mm is to be allowed for the residents' own refrigerator. This space should be located at the end of the joinery run so as to allow for varying unit sizes. Alcoves are to be avoided as they restrict refrigerator sizes.

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Figure 1 - Kitchen Benches and Stove
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Overhead cupboards may be used to supplement storage space in apartments and larger houses. Full height pantries must be provided with construction up to ceiling height (refer Housing Accommodation Schedules for appropriate widths).

Figure 2 - Kitchen Benches with Overhead Cupboards

<table>
<thead>
<tr>
<th>House Type</th>
<th>Useable 600 mm wide bench space including sink unit *</th>
<th>Sink Unit minimum size</th>
<th>Pantry cupboard face dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Bedroom</td>
<td>Range from 2.50m to 3.90m</td>
<td>single bowl single drainer</td>
<td>450mm to 600mm</td>
</tr>
<tr>
<td>2 Bedroom</td>
<td>Range from 2.80m to 4.20m</td>
<td>1½ bowl single drainer</td>
<td>450mm to 600mm</td>
</tr>
<tr>
<td>3 Bedroom</td>
<td>Range from 3.20m to 4.80m</td>
<td>1½ bowl single drainer</td>
<td>600mm to 750mm</td>
</tr>
<tr>
<td>4 Bedroom and larger</td>
<td>Minimum 4.00m</td>
<td>double bowl single drainer</td>
<td>minimum 750mm preferred</td>
</tr>
</tbody>
</table>

* measured along centre line of bench and the longer dimension assumes a U shape kitchen.
Laundry

Laundries facilities must be provided in a separate room for family housing with 2 or more bedrooms.

Laundry facilities can be incorporated within the bathrooms as a combined wet area for non family housing with 1 or 2 bedrooms, usually in apartment or row housing developments.

Laundries should be graded to a floor trap, well lit and naturally ventilated, usually by means of a window or a fan that leads direct to the outside. Direct access to outside is most desirable, however a full height sliding door is not acceptable as natural ventilation cannot be achieved without compromising security. A traditional dogleg door frame is acceptable. The laundry room may also provide a rear entry door to the dwelling.

For novel or innovative town housing where the laundry may be annexed off a garage area the natural ventilation principles in the previous paragraph must apply. The garage door opening cannot be used for provision of natural ventilation.

Figure 3 - Laundry Facilities
Bathroom and WC

Generally, bathrooms and WC's should be located away from living spaces, close to bedrooms and on an external wall. Where possible they must be well lit and naturally ventilated spaces.

WC's can be incorporated within the combined wet areas for housing with 1 and 2 bedrooms. Room sized to comply with the SAHT universal housing design requirements.

A separate, second WC must be provided for housing with 3 or more bedrooms and on the ground floor of 2 storey housing so that there is a facility at each level. The separate WC compartment must include a small hand basin.

A second usually smaller bathroom, typically with a shower, handbasin and toilet, must be provided for housing with 4 or more bedrooms. For the larger houses the second bathroom can more readily be designed to meet the SAHT universal housing design requirements.

Figure 4 - Bathroom Facilities

Location of WC
It is desirable to locate toilet pans on outside walls for ease of construction and to reduce sound transmission to other rooms. An alternative location is on an adjoining wall protected by a built in robe unit.
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Figure 5 - Vanity Basin and Towel Rails

Wet area wall and floor tiling is to be provided and set out in accordance with the SAHT fixtures and fittings schedule.

Figure 6 - Semi-recessed Basin

Option for wall hung semi-recessed basin used for SAHT universal housing design requirements.

Tile Grouting
The colour of the grout for the floor tiling shall be medium grey or colour matched to the tiles. White grout is not to be used for floor tiling as it is likely to discolour.
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Circulation
The layout of internal areas must provide direct and adequate circulation space with regard to the SAHT universal design requirements.

All housing, including 2 or more storeys, must accommodate easy furniture movements.

Entrances, Verandahs and Porches
All front entries should be protected from the weather. Eaves protection only over entries is not acceptable.

The front door should be clearly visible from the street. Where this is not possible, use screens or paving to help identify the front entrance. Sidelights should be provided to allow for natural lighting in the front hall or passage area.

Shelter from the prevailing weather must be considered to rear entries. Porches are preferred.

 Provision of Natural Light to Non-Habitable Rooms
For internal bathrooms and long passages where external windows are not practical, designers should provide an appropriate roof light. For long passages adjacent to open sided carports a small or high-level window can be used to “borrow” light.

Roof lights can also be considered where natural lighting levels are reduced or compromised, such as where bathroom windows look out into carports.

A 500mm x 500mm minimum skylight or a tube-light is acceptable.
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CAR PARKING AND SHELTER

Garages and Carports

Provide secure parking where required by councils. This may be reduced for aged housing sites, single bedroom units and transit orientated development.

Generally, a minimum clear covered area of 3000mm width x 6000mm depth in accordance with AS 2890 (Parking Facilities Set) is required for single car place, with an additional 600mm in width where possible to allow for persons with physical disabilities to exit or enter their vehicle. Where site conditions dictate, the 600mm space can be against the side fence provided there is no central carport post and no set-down to perimeter paving. For garages, a minimum clear covered space is 3600mm width x 6000mm depth (measured to behind roller door). The width of 3600mm is required to meet access requirements determined for SAHT universal housing design requirements.

It is preferable that carports and garages are constructed under the main roof of the house or at least linked to the main roof.

A free standing carport or garage may be acceptable for corner allotments or other special circumstances. The carport or garage shall be generally sited behind the house front alignment and include masonry front piers and steel posts to the rear. Open sided carports are to be a minimum of 600mm off the boundary. Garages must be located on the side boundary (zero lot line) or 1000mm off the boundary with full perimeter paving.

Allow the following for additional off street visitor car parking in addition to the provision of the sheltered secure space.

- 1 and 2 bedroom group housing sites: One additional car park for every two dwellings anywhere on the site. The total number of places, including secure sheltered spaces may be reduced on housing sites for the aged
- 2 and 3 bedroom housing: One additional car park usually located in front of the secured car park to provide two places,
- 4 or more bedrooms: An additional car park may be required to provide three off-street places. End to end parking of more than two vehicles is to be avoided.

For larger family housing of five bedrooms or more a double garage or carport is required and should be a minimum of width of 6000mm.
Aged Housing and Single Bedroom Units: Particular Requirements

For single bedroom units, one open lot car park directly related to unit is sufficient for vehicle parking.

However houses or dwelling units without carports must have a secured and weather proof storage area for parking and recharging an electric scooter. A roofed verandah within the curtilage of a secure private space capable of sheltering an electric scooter may be acceptable. An external electrical outlet must also be provided for battery charging. Standing area required for electric scooters is 1500mm x 800mm with the verandah at least 1500mm wide with a minimum length to include an adjacent doorway. Where facing the prevailing weather, additional strategies should be applied including screens or extended eaves.

Picture 1 - Electric Scooter
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PRIVATE OPEN SPACE

For consistency an area for private open space amenity has been determined by the SAHA. It is in accord with most metropolitan councils although it is recognised that there are variations between individual councils.

For 1 and 2 bedroom dwellings a minimum of 20m² private open space area per bedroom is sustainable with a minimum useable rectangles of 3m x 5m (15m²) and 5m² other (alleyway, and the like).

For family housing, 3 bedroom and larger, the application of a 4m x 6m (24m²) minimum rectangle of open space as part of the total private open space is generally accepted by planning authorities.

The rectangle is a simple design tool that ensures side access alleyways are not counted for minimum useable area.

Extent of Useable Private Open Space

<table>
<thead>
<tr>
<th>Dwelling Type</th>
<th>Minimum Total Area</th>
<th>Minimum Useable Rectangle</th>
<th>Reduce Area in Higher Density Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 bedroom</td>
<td>20m² area</td>
<td>3m x 5m = 15m²</td>
<td>15m² area</td>
</tr>
<tr>
<td>2 bedroom</td>
<td>40m² area</td>
<td>3m x 5m = 15m²</td>
<td>30m² area</td>
</tr>
<tr>
<td>3 bedroom</td>
<td>60m² area</td>
<td>4m x 6m = 24m²</td>
<td>45m² area</td>
</tr>
<tr>
<td>4 bedroom</td>
<td>80m² area</td>
<td>4m x 6m = 24m²</td>
<td>60m² area</td>
</tr>
<tr>
<td>5 bedroom</td>
<td>100m² area</td>
<td>4m x 6m = 24m²</td>
<td>75m² area</td>
</tr>
</tbody>
</table>

Notes

- Clothes drying, bin storage, rainwater tank, plant and equipment are not included within the Minimum Useable Rectangle except that for a one bedroom dwelling a retractable clothesline may intrude into the space.
- Up to 30% of the total area may be included under a pergola or verandah.
- Allow 20m² area of private open space for each additional bedroom.

For above ground level flats and apartments, different requirements can apply and balcony space is acceptable in higher density multi storey housing.

For the minimum requirements refer to Design Guideline 1.3 Apartment Design BCA Class 2 Construction.
SOLAR CLOTHES DRYING

Due to limited yard space fold down clothes lines are to be used for all housing.

Clothes lines must be offset from walls and fences when specified by the manufacturer.

Refer to the SAHT fixtures and fittings schedule for clothes line sizes.
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HOUSE FABRIC

These design guidelines are also supported by a range of SAHT technical specifications used in the acquisition process for building maintenance and new construction works.

The outcomes expected from the application of both these design guidelines and the SAHT technical specifications for housing to be built include:

Floors
Floors must be level, smooth, nonslip, weatherproof and structurally sound. The surface must be prepared to accept scheduled finishes or applied coverings.

External Walls
External walls must be structurally sound and weatherproof. Footings must also be structurally sound. They should be insulated against heat loss/gain and where appropriate against excessive noise. Materials should be low maintenance and not rely on recoating to maintain integrity and durability.

Windows
Window designs are to be kept simple and generally rectangular (to industry sizing) for ease of furnishing with blinds or curtains. Bay and multiple windows are discouraged due to the expense and difficulty of providing window treatments.

Sill heights should be approximately 750mm above floor level for bedrooms and 450mm to 600mm for living spaces. Full height windows are not preferred, except sliding door access to living spaces.

Internal Walls
All walls and ceilings must be consistent, true and in sound condition. All doors, locks, architraves, skirtings and cornices must be in sound condition and should be consistent throughout the house.

For occupants with specific special needs, increased robustness of wall linings may need to be considered.

Roofs and Gutters
Roofs and gutters must be structurally sound, weatherproof, free of leaks and securely fixed. They must dispose of rainwater effectively to the street water table, storage tank or detention device, as stipulated and required by the local Water Industry, development approvals, appropriate codes and standards. Particular attention is to be given to ensure as much roof area as possible is collected by the rainwater tank and that minimum building code requirements are met.

Other House Fabric aspects are covered under the design guideline 1.2 Amenity Targets.
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HOUSING ACCOMMODATION SCHEDULES

House Accommodation Summary Table for Rental Use

<table>
<thead>
<tr>
<th>House Type (by Accommodation)</th>
<th>Living Areas Limited to</th>
<th>Building Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single bedsit apartment without laundry (single person only)</td>
<td>minimum 38m²</td>
<td>Suitable for apartment and mews use only</td>
</tr>
<tr>
<td>Single bedsit apartment or mews units (single person only with laundry included)</td>
<td>42m² to 55m²</td>
<td></td>
</tr>
<tr>
<td>1 bedroom apartment or mews unit (single/ couple only with laundry included in bathroom)</td>
<td>55m² to 65m²</td>
<td>Suitable for apartment, mews or special group sites</td>
</tr>
<tr>
<td>2 bedroom apartment or mews unit (single/ couple only with laundry included in bathroom)</td>
<td>65m² to 75m²</td>
<td></td>
</tr>
<tr>
<td>2 bedroom dwelling non family (couple only with optional separate laundry)</td>
<td>65m² to 80m²</td>
<td>Suitable for group or shared sites only</td>
</tr>
<tr>
<td>2 bedroom dwelling small family (couple with 1 child only)</td>
<td>75m² to 90m²</td>
<td></td>
</tr>
<tr>
<td>3 bedroom dwelling (family with up to 4 children)</td>
<td>110m² to 125m²</td>
<td>Family housing suitable for street fronted sites, attached, semi-detached and detached configurations.</td>
</tr>
<tr>
<td>4 bedroom dwelling (family with up to 6 children)</td>
<td>145m² to 160m²</td>
<td>Suitable for multi level development.</td>
</tr>
<tr>
<td>5 bedroom dwelling (family with up to 8 children)</td>
<td>170m² to 190m²</td>
<td></td>
</tr>
<tr>
<td>6 bedroom dwelling (family with up to 10 children)</td>
<td>180m² to 210m²</td>
<td></td>
</tr>
</tbody>
</table>

Notes: Floor areas exclude carport/garage, porches and verandahs, but include all walls.

Floor areas will increase slightly (around 10 to 15%) to allow for vertical circulation (stairs) in 2 storey construction. Increases in area may also be required for elongated or unusual site configurations.

All areas allow for circulation to suit universal access.

Inner city developments may require smaller housing units in response to the built form and specific client groups.

Refer to the design guideline 1.4 Housing Accommodation Schedules for tables on details of accommodation in the various houses types.

Special Needs Housing

Special needs housing will generally require a specific brief for designers to respond to the housing requirements and in specific cases may require larger internal spaces, to cater for disability or carer requirements.

Non-Family Housing

A distinction between small non family housing and family housing is the provision of a bath within the bathroom and separation of laundry facilities usually within a laundry room. A bath is considered to be a design requirement for occupation that allows for the inclusion of children.
MULTI STOREY HOUSING

Individual dwellings that are multi storey will comprise mainly two storey house types, all usually of BCA class 1 type construction.

Other dwelling types are mainly apartments, (refer to Design Guideline 1.3 Apartment Design BCA Class 2 Construction for further details).

Amenity

Generally in the Adelaide area two storey housing provides living areas at ground level with sleeping zones at upper levels.

Family house types are preferred to justify provision of upper and lower level toilet accommodation.

Two toilets are required, one associated with day-time living and another adjacent to sleeping areas.

- one toilet will generally be included in an upper level bathroom usually associated with the bedroom areas, and
- the second (downstairs) toilet will require hand washing facilities.

Floor areas may be increased by around 10 to 15% to allow for additional vertical circulation and duplicated wet areas.

Internal layout must be zoned to separate sleeping and living activities and to ensure efficient heating and cooling. In particular:

- compartmentalise to reduce heat loss; and
- allow for natural ventilation and the capture of cross flow breezes.

Where practical, laundry facilities should be on the ground floor with direct access to ground level external private open space for solar drying.

Vehicle accommodation for individual dwellings may be undercrofted, attached or freestanding, as on corner sites. Roofing, materials and finishes must be related to the architectural style and design of the associated dwelling.

For 4 bedrooms and larger multi storey housing consider the provision of one bedroom on the ground floor or entry level.
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Internal Stairs

Flights must be straight with no winders.

Minimum width of treads 1000mm with 820mm between handrails or balustrades. Risers and goings in accordance with BCA Volume 2.

At each change of direction a landing is required which must be a simple square or rectangle shape.

Skews or splayed arrangements (on plan) are discouraged.

Balustrade and a continuous handrail on one side to comply with BCA Volume 2.

Lighting fixtures in stair wells must be arranged to allow for ease of lamp replacements by the occupier. Wall mounted fixtures are a suitable option.

Visitability and Access Requirements

Stepless access to upper levels is usually not achievable. Nevertheless it is expected that space arrangements and fit out requirements should be adhered to.

In larger multi-storey family housing of four bedrooms or more the provision of one bedroom and a bathroom at entry level will allow for universal housing requirements to be achieved on the ground floor. The upper level bedroom and bathroom accommodation will not need to meet universal guidelines.
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Balconies
Balcony areas are not normally provided off sleeping accommodation. Exceptions may be required to include particular outlooks, cross flow breezes and other environmental or locality circumstances.

External Private Open Space
Service access for wheelie bins must be provided. Where terrace housing is proposed this can be achieved via a garage or carport.

Side alleyways must comply with SAHT minimum requirements 1000mm wide, but 1800mm wide is preferred to create a useable space and maximise natural light to side windows.

Construction Requirements for Multi Level and Attached Housing
Low maintenance, environmentally sustainable fixtures, fittings, materials and finishes are the preferred option within the overriding parameter of value for money.

Floor Systems
- May be lightweight within individual dwellings and all BCA class1 buildings.

Separating Wall Construction (party and common walls)
- Must be demonstrated to comply with BCA requirements for sound transmission and fire separation.
- Plumbing drainage and service lines should not be run through common walls. In wet areas consider battening out wall linings to create service access spaces.

Upper Level Wall Finishes, Eaves and High Level Fascias
- Must be low maintenance construction due to accessibility.
- Masonry external cladding is preferred.
- Prefinished materials can be considered on merit.

Roof Design
- Box gutters are not acceptable.
- Roofs must not fall or drain in such a way as to compromise future land divisions or land titling arrangements for row and terrace housing.
- Roofs should maximise opportunities for the collection of rainwater.
- Allow for future location of appropriately orientated solar collection equipment.
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Services and Ducting

- Location of upper floor wet areas will impact on lower floor accommodation due to dropped ceilings, waste stacks and acoustics.
- Vertical co-location of wet areas is preferred to take advantage of the efficiencies of single plumbing stacks.
- Lower ceilings can be considered in kitchen areas and wet areas, however isolated bulkheads are discouraged.
- Allow for vertical ducts for future mechanical ventilation between levels.
- Allow for mechanical ventilation (to be ducted to outside) of enclosed toilets, wet areas and kitchen exhausts.

Kitchen Design

In some narrow building types, townhouses and apartments the kitchen or meals preparation area may not be on an external wall. Nevertheless requirements for mechanical ventilation in the vicinity of the cooktop will need to be addressed. The design solutions will need to take into account extract fan unit capacity and duct length and space provision for horizontal or vertical locations for ducting to outside.

Recirculating range hoods will not be acceptable in any circumstance, due to clogging of filters.

Privacy and Overlooking

Planning authority requirements pertaining to overlooking issues are not appropriate within SAHT sites. The SAHT prefers to promote passive surveillance and applies CPTED principles.

Within group housing developments, compromises in respect to overlooking are acceptable subject to:

- internal window furnishing arrangements (curtains or blinds) can be demonstrated to provide shielding;
- sleeping areas are not considered critical due to limited use and provision for curtains or blinds;
- staggering or offsetting window arrangements between facing dwellings; and
- provision of pergolas can be used to assist in maintaining privacy from overlooking.