

55.0731/07/2018
VC148**APARTMENT DEVELOPMENTS****Purpose**

Clause 55.07 sets out requirements for an apartment development.

55.07-124/01/2020
VC160**Energy efficiency objectives**

To achieve and protect energy efficient dwellings and buildings.

To ensure the orientation and layout of development reduce fossil fuel energy use and make appropriate use of daylight and solar energy.

To ensure dwellings achieve adequate thermal efficiency.

Standard B35

Buildings should be:

- Oriented to make appropriate use of solar energy.
- Sited and designed to ensure that the energy efficiency of existing dwellings on adjoining lots is not unreasonably reduced.
- Sited and designed to ensure that the performance of existing rooftop solar energy systems on dwellings on adjoining lots in a General Residential Zone, Neighbourhood Residential Zone or Township Zone are not unreasonably reduced. The existing rooftop solar energy system must exist at the date the application is lodged.

Living areas and private open space should be located on the north side of the development, if practicable.

Developments should be designed so that solar access to north-facing windows is optimised.

Dwellings located in a climate zone identified Table B4 in should not exceed the maximum NatHERS annual cooling load specified in the following table.

Table B4 Cooling load

NatHERS climate zone	NatHERS maximum cooling load MJ/M ² per annum
Climate zone 21 Melbourne	30
Climate zone 22 East Sale	22
Climate zone 27 Mildura	69
Climate zone 60 Tullamarine	22
Climate zone 62 Moorabbin	21
Climate zone 63 Warrnambool	21
Climate zone 64 Cape Otway	19
Climate zone 66 Ballarat	23

Note: Refer to NatHERS zone map, Nationwide House Energy Rating Scheme (Commonwealth Department of Environment and Energy).

Decision guidelines

Before deciding on an application, the responsible authority must consider:

- The design response.

- The size, orientation and layout of the site.
- The existing amount of solar access to abutting properties.
- The availability of solar access to north-facing windows on the site.
- The annual cooling load for each dwelling.
- The extent to which an existing rooftop solar energy system on an adjoining lot is overshadowed by existing buildings or other permanent structures.
- Whether the existing rooftop solar energy system on an adjoining lot is appropriately located.
- The effect of overshadowing on an existing rooftop solar energy facility on an adjoining lot.

55.07-2

13/04/2017
VC136

Communal open space objective

To ensure that communal open space is accessible, practical, attractive, easily maintained and integrated with the layout of the development.

Standard B36

Developments with 40 or more dwellings should provide a minimum area of communal open space of 2.5 square metres per dwelling or 250 square metres, which ever is lesser.

Communal open space should:

- Be located to:
 - Provide passive surveillance opportunities, where appropriate.
 - Provide outlook for as many dwellings as practicable.
 - Avoid overlooking into habitable rooms and private open space of new dwellings.
 - Minimise noise impacts to new and existing dwellings.
- Be designed to protect any natural features on the site.
- Maximise landscaping opportunities.
- Be accessible, useable and capable of efficient management.

Decision guidelines

Before deciding on an application, the responsible authority must consider:

- Any relevant urban design objective, policy or statement set out in this scheme.
- The design response.
- The useability and amenity of the communal open space based on its size, location, accessibility and reasonable recreation needs of residents.
- The availability of and access to public open space.

55.07-3

13/04/2017
VC136

Solar access to communal outdoor open space objective

To allow solar access into communal outdoor open space.

Standard B37

The communal outdoor open space should be located on the north side of a building, if appropriate.

At least 50 per cent or 125 square metres, whichever is the lesser, of the primary communal outdoor open space should receive a minimum of two hours of sunlight between 9am and 3pm on 21 June.

Decision guidelines

Before deciding on an application, the responsible authority must consider:

- The design response.
- The useability and amenity of the primary communal outdoor open space areas based on the urban context, the orientation of the building, the layout of dwellings and the sunlight it will receive.

55.07-4

31/07/2018
VC148

Deep soil areas and canopy trees objective

To promote climate responsive landscape design and water management in developments to support thermal comfort and reduce the urban heat island effect.

Standard B38

The landscape layout and design should:

- Be responsive to the site context.
- Consider landscaping opportunities to reduce heat absorption such as green walls, green roofs and roof top gardens and improve on-site storm water infiltration.
- Maximise deep soil areas for planting of canopy trees.
- Integrate planting and water management.

Developments should provide the deep soil areas and canopy trees specified in Table B5.

If the development cannot provide the deep soil areas and canopy trees specified in Table B5, an equivalent canopy cover should be achieved by providing either:

- Canopy trees or climbers (over a pergola) with planter pits sized appropriately for the mature tree soil volume requirements.
- Vegetated planters, green roofs or green facades.

Table B5 Deep soil areas and canopy trees

Site area	Deep soil areas	Minimum tree provision
750 - 1000 square metres	5% of site area (minimum dimension of 3 metres)	1 small tree (6-8 metres) per 30 square metres of deep soil
1001 - 1500 square metres	7.5% of site area (minimum dimension of 3 metres)	1 medium tree (8-12 metres) per 50 square metres of deep soil or 1 large tree per 90 square metres of deep soil
1501 - 2500 square metres	10% of site area (minimum dimension of 6 metres)	1 large tree (at least 12 metres) per 90 square metres of deep soil or 2 medium trees per 90 square metres of deep soil
>2500 square metres	15% of site area (minimum dimension of 6 metres)	1 large tree (at least 12 metres) per 90 square metres of deep soil or 2 medium trees per 90 square metres of deep soil

Note: Where an existing canopy tree over 8 metres can be retained on a lot greater than 1000 square metres without damage during the construction period, the minimum deep soil requirement is 7% of the site area.

Decision guidelines

Before deciding on an application, the responsible authority must consider:

- Any relevant plan or policy for environmental sustainability in the Municipal Planning Strategy and the Planning Policy Framework.
- The design response.
- The suitability of the proposed location and soil volume for canopy trees.
- The ongoing management of landscaping within a development.
- The soil type and drainage patterns of the site.

55.07-5

26/10/2018
VC154

Integrated water and stormwater management objectives

To encourage the use of alternative water sources such as rainwater, stormwater and recycled water.

To facilitate stormwater collection, utilisation and infiltration within the development.

To encourage development that reduces the impact of stormwater run-off on the drainage system and filters sediment and waste from stormwater prior to discharge from the site.

Standard B39

Buildings should be designed to collect rainwater for non-drinking purposes such as flushing toilets, laundry appliances and garden use.

Buildings should be connected to a non-potable dual pipe reticulated water supply, where available from the water authority.

The stormwater management system should be:

- Designed to meet the current best practice performance objectives for stormwater quality as contained in the *Urban Stormwater - Best Practice Environmental Management Guidelines* (Victorian Stormwater Committee, 1999).
- Designed to maximise infiltration of stormwater, water and drainage of residual flows into permeable surfaces, tree pits and treatment areas.

Decision guidelines

Before deciding on an application, the responsible authority must consider:

- Any relevant water and stormwater management objective, policy or statement set out in this scheme.
- The design response.
- Whether the development has utilised alternative water sources and/or incorporated water sensitive urban design.
- Whether stormwater discharge from the site will adversely affect water quality entering the drainage system.
- The capacity of the drainage network to accommodate additional stormwater.
- Whether the stormwater treatment areas can be effectively maintained.
- Whether the owner has entered into an agreement to contribute to off-site stormwater management in lieu of providing an on-site stormwater management system.

55.07-6

13/04/2017
VC136

Noise impacts objectives

To contain noise sources in developments that may affect existing dwellings.

To protect residents from external and internal noise sources.

Standard B40

Noise sources, such as mechanical plants should not be located near bedrooms of immediately adjacent existing dwellings.

The layout of new dwellings and buildings should minimise noise transmission within the site.

Noise sensitive rooms (such as living areas and bedrooms) should be located to avoid noise impacts from mechanical plants, lifts, building services, non-residential uses, car parking, communal areas and other dwellings.

New dwellings should be designed and constructed to include acoustic attenuation measures to reduce noise levels from off-site noise sources.

Buildings within a noise influence area specified in Table B6 should be designed and constructed to achieve the following noise levels:

- Not greater than 35dB(A) for bedrooms, assessed as an LAeq,8h from 10pm to 6am.
- Not greater than 40dB(A) for living areas, assessed LAeq,16h from 6am to 10pm.

Buildings, or part of a building screened from a noise source by an existing solid structure, or the natural topography of the land, do not need to meet the specified noise level requirements.

Noise levels should be assessed in unfurnished rooms with a finished floor and the windows closed.

Table B6 Noise influence area

Noise source	Noise influence area
Zone interface	
Industry	300 metres from the Industrial 1, 2 and 3 zone boundary
Roads	
Freeways, tollways and other roads carrying 40,000 Annual Average Daily Traffic Volume	300 metres from the nearest trafficable lane
Railways	
Railway servicing passengers in Victoria	80 metres from the centre of the nearest track
Railway servicing freight outside Metropolitan Melbourne	80 metres from the centre of the nearest track
Railway servicing freight in Metropolitan Melbourne	135 metres from the centre of the nearest track

Note: The noise influence area should be measured from the closest part of the building to the noise source.

Decision guidelines

Before deciding on an application, the responsible authority must consider:

- The design response.
- Whether it can be demonstrated that the design treatment incorporated into the development meets the specified noise levels or an acoustic report by a suitably qualified specialist submitted with the application.
- Whether the impact of potential noise sources within a development have been mitigated through design, location and siting.
- Whether the layout of rooms within a dwelling mitigates noise transfer within and between dwellings.
- Whether an alternative design meets the relevant objectives having regard to the amenity of the dwelling and the site context.

55.07-7

13/04/2017
VC136

Accessibility objective

To ensure the design of dwellings meets the needs of people with limited mobility.

Standard B41

At least 50 per cent of dwellings should have:

- A clear opening width of at least 850mm at the entrance to the dwelling and main bedroom.
- A clear path with a minimum width of 1.2 metres that connects the dwelling entrance to the main bedroom, an adaptable bathroom and the living area.
- A main bedroom with access to an adaptable bathroom.
- At least one adaptable bathroom that meets all of the requirements of either Design A or Design B specified in Table B7.

Table B7 Bathroom design

	Design option A	Design option B
Door opening	A clear 850mm wide door opening.	A clear 820mm wide door opening located opposite the shower.
Door design	Either: <ul style="list-style-type: none"> ▪ A slide door, or ▪ A door that opens outwards, or ▪ A door that opens inwards that is clear of the circulation area and has readily removable hinges. 	Either: <ul style="list-style-type: none"> ▪ A slide door, or ▪ A door that opens outwards, or ▪ A door that opens inwards and has readily removable hinges.
Circulation area	A clear circulation area that is: <ul style="list-style-type: none"> ▪ A minimum area of 1.2 metres by 1.2 metres. ▪ Located in front of the shower and the toilet. ▪ Clear of the toilet, basin and the door swing. The circulation area for the toilet and shower can overlap.	A clear circulation area that is: <ul style="list-style-type: none"> ▪ A minimum width of 1 metre. ▪ The full length of the bathroom and a minimum length of 2.7 metres. ▪ Clear of the toilet and basin. The circulation area can include a shower area.
Path to circulation area	A clear path with a minimum width of 900mm from the door opening to the circulation area.	Not applicable.
Shower	A hobless (step-free) shower.	A hobless (step-free) shower that has a removable shower screen and is located on the furthest wall from the door opening.
Toilet	A toilet located in the corner of the room.	A toilet located closest to the door opening and clear of the circulation area.

55.07-8

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VC136

Building entry and circulation objectives

To provide each dwelling and building with its own sense of identity.

To ensure the internal layout of buildings provide for the safe, functional and efficient movement of residents.

To ensure internal communal areas provide adequate access to daylight and natural ventilation.

Standard B42

Entries to dwellings and buildings should:

- Be visible and easily identifiable.
- Provide shelter, a sense of personal address and a transitional space around the entry.

The layout and design of buildings should:

- Clearly distinguish entrances to residential and non-residential areas.
- Provide windows to building entrances and lift areas.
- Provide visible, safe and attractive stairs from the entry level to encourage use by residents.
- Provide common areas and corridors that:
 - Include at least one source of natural light and natural ventilation.
 - Avoid obstruction from building services.
 - Maintain clear sight lines.

Decision guidelines

Before deciding on an application, the responsible authority must consider:

- The design response.
- The useability and amenity of internal communal areas based on daylight access and the natural ventilation it will receive.

55.07-9

13/04/2017
VC136

Private open space above ground floor objective

To provide adequate private open space for the reasonable recreation and service needs of residents.

Standard B43

A dwelling should have private open space consisting of:

- An area of 15 square metres, with a minimum dimension of 3 metres at a podium or other similar base and convenient access from a living room, or
- A balcony with an area and dimensions specified in Table B8 and convenient access from a living room.

If a cooling or heating unit is located on a balcony, the balcony should provide an additional area of 1.5 square metres.

Table B8 Balcony size

Dwelling type	Minimum area	Minimum dimension
Studio or 1 bedroom dwelling	8 square metres	1.8 metres
2 bedroom dwelling	8 square metres	2 metres
3 or more bedroom dwelling	12 square metres	2.4 metres

Decision guidelines

Before deciding on an application, the responsible authority must consider:

- The design response.
- The useability and functionality of the private open space, including its size and accessibility.
- The amenity of the private open space based on the orientation of the lot, the wind conditions and the sunlight it will receive.
- The availability of and access to public or communal open space.

55.07-10

13/04/2017
VC136

Storage objective

To provide adequate storage facilities for each dwelling.

Standard B44

Each dwelling should have convenient access to usable and secure storage space.

The total minimum storage space (including kitchen, bathroom and bedroom storage) should meet the requirements specified in Table B9.

Table B9 Storage

Dwelling type	Total minimum storage volume	Minimum storage volume within the dwelling
Studio	8 cubic metres	5 cubic metres
1 bedroom dwelling	10 cubic metres	6 cubic metres
2 bedroom dwelling	14 cubic metres	9 cubic metres
3 or more bedroom dwelling	18 cubic metres	12 cubic metres

Decision guidelines

Before deciding on an application, the responsible authority must consider:

- The design response.
- The useability, functionality and location of storage facilities provided for the dwelling.

55.07-11

24/01/2020
VC160

Waste and recycling objectives

To ensure dwellings are designed to encourage waste recycling.

To ensure that waste and recycling facilities are accessible, adequate and attractive.

To ensure that waste and recycling facilities are designed and managed to minimise impacts on residential amenity, health and the public realm.

Standard B45

Developments should include dedicated areas for:

- Waste and recycling enclosures which are:
 - Adequate in size, durable, waterproof and blend in with the development.
 - Adequately ventilated.
 - Located and designed for convenient access by residents and made easily accessible to people with limited mobility.
- Adequate facilities for bin washing. These areas should be adequately ventilated.
- Collection, separation and storage of waste and recyclables, including where appropriate opportunities for on-site management of food waste through composting or other waste recovery as appropriate.
- Collection, storage and reuse of garden waste, including opportunities for on-site treatment, where appropriate, or off-site removal for reprocessing.
- Adequate circulation to allow waste and recycling collection vehicles to enter and leave the site without reversing.
- Adequate internal storage space within each dwelling to enable the separation of waste, recyclables and food waste where appropriate.

Waste and recycling management facilities should be design and managed in accordance with a Waste Management Plan approved by the responsible authority and:

- Be designed to meet the better practice design options specified in *Waste Management and Recycling in Multi-unit Developments* (Sustainability Victoria, 2019).
- Protect public health and amenity of residents and adjoining premises from the impacts of odour, noise and hazards associated with waste collection vehicle movements.

Decision guidelines

Before deciding on an application, the responsible authority must consider:

- The design response.
- Any relevant waste and recycling objective, policy or statement set out in this scheme.

55.07-12

13/04/2017
VC136

Functional layout objective

To ensure dwellings provide functional areas that meet the needs of residents.

Standard B46

Bedrooms should:

- Meet the minimum internal room dimensions specified in Table B10.
- Provide an area in addition to the minimum internal room dimensions to accommodate a wardrobe.

Table B10 Bedroom dimensions

Bedroom type	Minimum width	Minimum depth
Main bedroom	3 metres	3.4 metres
All other bedrooms	3 metres	3 metres

Living areas (excluding dining and kitchen areas) should meet the minimum internal room dimensions specified in Table B11.

Table B11 Living area dimensions

Dwelling type	Minimum width	Minimum area
Studio and 1 bedroom dwelling	3.3 metres	10 sqm
2 or more bedroom dwelling	3.6 metres	12 sqm

Decision guidelines

Before deciding on an application, the responsible authority must consider:

- The design response.
- The useability, functionality and amenity of habitable rooms.

55.07-13

13/04/2017
VC136

Room depth objective

To allow adequate daylight into single aspect habitable rooms.

Standard B47

Single aspect habitable rooms should not exceed a room depth of 2.5 times the ceiling height.

The depth of a single aspect, open plan, habitable room may be increased to 9 metres if all the following requirements are met:

- The room combines the living area, dining area and kitchen.
- The kitchen is located furthest from the window.
- The ceiling height is at least 2.7 metres measured from finished floor level to finished ceiling level. This excludes where services are provided above the kitchen.

The room depth should be measured from the external surface of the habitable room window to the rear wall of the room.

Decision guidelines

Before deciding on an application, the responsible authority must consider:

- The design response.
- The extent to which the habitable room is provided with reasonable daylight access through the number, size, location and orientation of windows.
- The useability, functionality and amenity of the dwelling based on layout, siting, size and orientation of habitable rooms.
- Any overhang above habitable room windows that limits daylight access.

55.07-14

13/04/2017
VC136

Windows objective

To allow adequate daylight into new habitable room windows.

Standard B48

Habitable rooms should have a window in an external wall of the building.

A window may provide daylight to a bedroom from a smaller secondary area within the bedroom where the window is clear to the sky.

The secondary area should be:

- A minimum width of 1.2 metres.
- A maximum depth of 1.5 times the width, measured from the external surface of the window.

Decision guidelines

Before deciding on an application, the responsible authority must consider:

- The design response.
- The extent to which the habitable room is provided with reasonable daylight access through the number, size, location and orientation of windows.
- The useability and amenity of the dwelling based on the layout, siting, size and orientation of habitable rooms.

55.07-15

13/04/2017
VC136

Natural ventilation objectives

To encourage natural ventilation of dwellings.

To allow occupants to effectively manage natural ventilation of dwellings.

Standard B49

The design and layout of dwellings should maximise openable windows, doors or other ventilation devices in external walls of the building, where appropriate.

At least 40 per cent of dwellings should provide effective cross ventilation that has:

- A maximum breeze path through the dwelling of 18 metres.
- A minimum breeze path through the dwelling of 5 metres.

- Ventilation openings with approximately the same area.

The breeze path is measured between the ventilation openings on different orientations of the dwelling.

Decision guidelines

Before deciding on an application, the responsible authority must consider:

- The design response.
- The size, orientation, slope and wind exposure of the site.
- The extent to which the orientation of the building and the layout of dwellings maximises opportunities for cross ventilation.
- Whether an alternative design meets the relevant objectives having regard to the amenity of the dwelling and the site context.