



# Queensland Development Code

Mandatory Part 4.5 – Livable dwellings and  
grading to floor wastes

Version 1.1



**Queensland**  
Government

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## Guide to using the Queensland Development Code part

This guide provides information to help understand the Queensland Development Code (QDC), *Mandatory Part 4.5 – Livable dwellings and grading to floor wastes*. This QDC part applies to class 1 buildings and sole-occupancy units in class 2 buildings.

### Queensland Development Code

The QDC consolidates Queensland specific building standards into a single document, covering matters which are outside the scope of, and in addition to the Building Code of Australia (BCA).

### Building Code of Australia

The BCA refers to volume 1 and volume 2 of the National Construction Code (NCC) as defined in section 12 of the *Building Act 1975*.

### Relationship between the Building Code of Australia and the Queensland Development Code

The requirements under the BCA continue to apply. This QDC part overrides the BCA to the extent that it is inconsistent with the provisions of the BCA.

### Terminology

The following terms are used interchangeably between the BCA and QDC.

Building Code of Australia	Queensland Development Code
Performance requirement	Performance criteria
Deemed to satisfy solution	Acceptable solution
Performance solution	Performance (or alternative) solution

## Chapter 1 – Preliminary

### 1 Name of the Queensland Development Code part

This part of the *Queensland Development Code* (QDC) may be referred to as the *Queensland Development Code, Mandatory Part 4.5 – Livable dwellings and grading to floor wastes* (MP 4.5).

### 2 Purpose

The purpose of this QDC part is to facilitate the adoption of the livable housing design and grading to floor wastes provisions in the BCA (NCC, volume 1 and volume 2) by providing additional acceptable solutions and appropriate transitional arrangements.

### 3 Commencement

P5 and A5 in Chapter 2.2 commence on 22 September 2023.

P1 to P4 and A1 to A4 in Chapter 2.1 commence on 1 October 2023.

### 4 Application

This QDC part applies to the lawful carrying out of building work as indicated by ticks (✓) in the relevant columns in **Table 1**.

**Table 1 – Application of QDC MP 4.5**

Application	Compliance with performance requirements				
	P1	P2	P3	P4	P5
Class 1a building	✓	✓	✓	✓	✓
Class 1b building					✓
Each sole-occupancy unit located on the ground or entry level of a class 2 building	✓	✓	✓	✓	✓
Each sole-occupancy unit located above the ground or entry level of a class 2 building	✓	✓	✓	✓	

### 5 Compliance

Compliance with QDC parts is governed by section 14 of the *Building Act 1975*.

Section 14 of the *Building Act 1975* provides that building work complies with the QDC only if it complies with all relevant performance requirements under the code. The building work complies with a relevant performance requirement only if it achieves a relevant building solution under the code for the requirement. This is only achieved by:

- (a) complying with the BCA deem-to-satisfy provisions or QDC acceptable solutions; or
- (b) formulating a performance solution which complies with the performance criteria or is shown to be at least equivalent to the acceptable solutions; or

(c) a combination of (a) and (b).

## 6 Referral agency

There is no referral agency for this QDC part.

## 7 Associated requirements

These requirements are additional to any requirements in the following:

- *Building Act 1975*
- *Building Regulation 2021*
- BCA (NCC, volume 1 and volume 2)
- *Plumbing and Drainage Act 2018*
- *Plumbing and Drainage Regulation 2019*
- Plumbing Code of Australia (NCC, volume 3).

## 8 Requirements of the Building Code of Australia not varied

Where a requirement of the BCA is not varied by this QDC part, that requirement continues to apply.

## 9 Referenced documents

- (1) The table below sets out the number and title of each document referred to elsewhere in this QDC part.
- (2) The document referenced below that applies is the most recent version published.

Number	Title
-	Australian Building Codes Board and Standards Australia <a href="#">National Dictionary of Building and Plumbing Terms</a>
WMTS-479	Flood stop safety valve
AS 3740	Waterproofing of domestic wet areas
AS/NZS 3500.0	Plumbing and Drainage – Part 0: Glossary of Terms
Version 1.2	Australian Building Codes Board <a href="#">Livable Housing Design Standard v1.2</a>

## 10 Explanatory information

The objectives, functional statements, notes and figures of QDC MP 4.5 are explanatory information only and purely for the purpose of aiding interpretation and to assist in providing guidance on the intent of the performance requirements. They have no regulatory status.

## 11 Exclusions

- (1) P5 and A5 in Chapter 2.2 do not apply to:
  - (a) each sole-occupancy unit located above the ground or entry level of a class 2 building; or
  - (b) a room containing a urinal; or
  - (c) a part of a floor that provides drainage for a shower area.

## 12 Exemptions

- (1) Ending 31 March 2025, the livable housing design provisions in Part H8 of the BCA (NCC, volume 2) and P1 to P4 and A1 to A4 in Chapter 2.1 do not apply to the lawful carrying out of building work and assessment of a building development application for building work for:
- (a) an affected dwelling; or
  - (b) a class 1a building that is located or is to be located on an affected lot.

## 13 Definitions

**ABCB** means the Australian Building Codes Board.

**Acceptable solution** as defined in Schedule 10 to the Building Regulation 2021:

*acceptable solution, for a particular performance criteria, means the acceptable solution for the performance criteria stated in the QDC.*

**Affected dwelling** means a class 1a building that:

- (1) has a floor area of 55 metres<sup>2</sup> or less;
- (2) is wholly or predominantly manufactured off-site;
- (3) is completed prior to 1 October 2023; and
- (4) is installed on or prior to 31 March 2025.

**Affected lot** means a lot with any frontage of 12.5 metres or less in width that is:

- (1) created prior to 1 October 2023; or
- (2) created on or after 1 October 2023 and on or before 31 March 2025 but only if:
  - (a) a properly made application for a development permit for reconfiguring of a lot to create the lot is made prior to 1 October 2023; or
  - (b) the lot is identified in a disclosure plan under the Land Sales Act 1984 prior to 1 October 2023.

**Allotment** as defined in Schedule 2 to the Building Act 1975:

*a separate, distinct parcel of land on which a building is to be built, or is built.*

**AS** means Australian Standard developed by Standards Australia.

**AS/NZS** means Australian/New Zealand Standard developed by Standards Australia.

**Basin** as defined in clause 3B.18 of AS/NZS 3500.0 Plumbing and drainage – Part 0:

*Glossary of terms:*

*a fixture for holding water for ablutionary purposes, which may be designed for mounting in a corner, mounted on a floor supported pedestal, attached to a wall by means of brackets and screws, or set in a vanity top.*

**Bath** as defined in clause 3B.19 of AS/NZS 3500.0 Plumbing and drainage – Part 0: Glossary of terms:

*a fixture for containing water, in which the human body may be immersed for ablutionary or treatment purposes.*

**Bathroom** as defined in the National Dictionary of Building and Plumbing Terms:

*a room fitted with a bath or shower or both, a basin, and sometimes a water closet suite.*

**Building** as defined in Schedule 2 to the Building Act 1975:

- (1) A building is a fixed structure that is wholly or partly enclosed by walls or is roofed.
- (2) The term includes a floating building and any part of a building.

**Building Code of Australia (BCA)** as defined in section 12 of the Building Act 1975:

- (1) The Building Code of Australia (or BCA) is the document called 'National Construction Code', volume 1 and volume 2 (including the Queensland Appendixes) published by the entity known as the Australian Building Codes Board (the board).
- (2) The reference to the document called 'National Construction Code' in subsection (1) includes the edition of the code as amended from time to time by amendments published by the board.

**Building development application** as defined in section 6(1) and schedule 2 to the Building Act 1975:

- (1) a development application for a development approval—
  - (a) if the local government is the assessment manager for the application—to the extent the application is for building work that, under the Planning Act 2016, must be assessed against the building assessment provisions; and
  - (b) if a private certifier is the assessment manager for the application—for building work; or
- (2) a change application, other than a minor change application, to change a development approval—
  - (a) if the development approval approves building work—in relation to the building work; or
  - (b) otherwise—to approve building work.

**Building development approval** as defined in Schedule 2 to the Building Act 1975:

a development approval to the extent it approves a building development application.

**Building work** as defined in section 5 and Schedule 2 to the Building Act 1975:

- (1) Building work is—
  - (a) building, repairing, altering, underpinning (whether by vertical or lateral support), moving or demolishing a building or other structure; or
  - (b) excavating or filling—
    - (i) for, or incidental to, the activities mentioned in paragraph (a); or
    - (ii) that may adversely affect the stability of a building or other structure, whether on the land on which the building or other structure is situated or on adjoining land; or
  - (c) supporting, whether vertically or laterally, land for activities mentioned in paragraph (a); or
  - (d) other work regulated under the building assessment provisions.
- (2) For subsection (1)(d), work includes a management procedure or other activity relating to a building or structure even though the activity does not involve a structural change to the building or structure.

**Examples—**

- a management procedure under the fire safety standard relating to a budget accommodation building

- a management procedure under the fire safety standard relating to a residential care building.

**Class**, for a building or structure, means its classification under the BCA.

**Completed** for an affected dwelling means the dwelling is ready to be installed subject to necessary on-site assembly of modules and components.

**Constructed** means assembled or complete part of construction works that results from work on-site.<sup>1</sup>

**Created** in respect of a lot means that the plan of subdivision creating that lot was registered under the Land Title Act 1994 or Building Units and Group Titles Act 1980.

**Deflector** means a strip positioned at the bottom of a shower screen that controls the spread of water from the shower area.

**Demolition** as defined in the National Dictionary of Building and Plumbing Terms:

*the complete or partial dismantling and removal of a building or other complex asset by pre-planned and controlled methods or procedures, and normally carried out prior to redevelopment work.*

**Development permit** as defined in section 49(3) and Schedule 2 of the Planning Act 2016:

*the part of a decision notice for a development application that authorises the carrying out of the assessable development to the extent stated in the decision notice.*

**Door jamb** as defined in the National Dictionary of Building and Plumbing Terms:

*one of the two vertical side members of a door frame.*

**Doorway** as defined in the National Dictionary of Building and Plumbing Terms:

*an access way to a space opened or closed by a door.*

**Fall** as defined in clause 3F.4 in AS/NZS 3500.0 Plumbing and Drainage – Part 0: Glossary of Terms:

*the difference in level over a given length in the direction of flow.*

**Fixture** as defined in the National Dictionary of Building and Plumbing Terms:

*fixed or permanently attached items in a building that cannot be removed without causing damage and would remain upon a change in occupancy, such as a bath, water closet suite, stove, built-in cupboards, etc.*

**Flexible hose assembly** as defined in clause 3F.38 in AS/NZS 3500.0 Plumbing and Drainage – Part 0: Glossary of Terms:

*a hose intended for use between a pipework system and a fixture, fitting, valve, tap, appliance or similar, that is capable of being adapted or bent in any direction without damage.*

*Note: The flexible hose assembly may consist of an inner liner and an outer reinforcement braid or sleeve with secured end connectors to ensure watertightness.*

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<sup>1</sup> Adapted from the definition of 'construction' in the National Dictionary of Building and Plumbing Terms.



**Floor area** as defined in Schedule 2 to the Building Act 1975:

*floor area, for a building, means the gross area of all floors in the building measured over the enclosing walls other than the area of a verandah, roofed terrace, patio, garage or carport in or attached to the building.*

**Floor waste** as defined in Schedule 1 to the BCA (NCC, volume 1 and volume 2):

*a grated inlet within a floor intended to drain the floor surface.*

**Frontage** means the boundary of a lot with an adjoining road.

**Grade or gradient** as defined in clause 3G.14 in AS/NZS 3500.0 Plumbing and Drainage – Part 0: Glossary of Terms:

*an inclination expressed as the ratio or percentage of unit rise to horizontal distance*

**Habitable room** as defined in Schedule 1 to the BCA (Volumes One and Two):

*a room used for normal domestic activities, and—*

- (a) includes a bedroom, living room, lounge room, music room, television room, kitchen, dining room, sewing room, study, playroom, family room, home theatre and sunroom; but*
- (b) excludes a bathroom, laundry, water closet, pantry, walk-in wardrobe, corridor, hallway, lobby, photographic darkroom, clothes-drying room, and other spaces of a specialised nature occupied neither frequently nor for extended periods.*

**Installed** for an affected dwelling means the dwelling has been lawfully constructed on a lot under a building development approval.

**Linear drain** as defined in clause 1.3.15 in AS 3740 Waterproofing of domestic wet areas:

*a longitudinal floor waste containing a channel, waste outlet, and grating.*

*Note: Also known as a shower channel or strip grate.*

**Lot** has the same meaning as allotment.

**Maintenance** as defined in the National Dictionary of Building and Plumbing Terms:

*regular routine technical and administrative actions, taken during an item's service life, aimed at retaining it in a state in which it can perform its required functions.*

**NCC** means the National Construction Code.

**Performance criteria** as defined in Schedule 10 to the Building Regulation 2021:

*performance criteria, for building work, means the particular performance criteria for the building work stated in the QDC.*

**Performance requirement** as defined in Schedule 2 to the Building Act 1975:

*performance requirements means any of the following—*

- (a) the performance requirements under the BCA;*
- (b) the performance criteria under the QDC;*
- (c) a requirement for the assessment of building work for which a discretion may need to be exercised under this Act.*

**Properly made application** means an application that complies with sections 51(1) to 51(3) of the Planning Act 2016, or that the assessment manager accepts under sections 51(4)(c) or 51(4)(d) of the Planning Act 2016.

**Reconfiguring a lot** as defined in Schedule 2 to the Planning Act 2016:

- (a) creating lots by subdividing another lot; or
- (b) amalgamating 2 or more lots; or
- (c) rearranging the boundaries of a lot by registering a plan of subdivision under the Land Act or Land Title Act; or
- (d) dividing land into parts by agreement rendering different parts of a lot immediately available for separate disposition or separate occupation, other than by an agreement that is—
  - (i) a lease for a term, including renewal options, not exceeding 10 years; or
  - (ii) an agreement for the exclusive use of part of the common property for a community titles scheme under the Body Corporate and Community Management Act 1997; or
- (e) creating an easement giving access to a lot from a constructed road.

**Renovation** means any alterations or addition to an existing class 1a building or a sole-occupancy unit in an existing class 2 building.

**Repair** as defined in the National Dictionary of Building and Plumbing Terms:

returning an item to an acceptable condition by the renewal, replacement or mending of worn, damaged or degraded parts.

**Sanitary compartment** as defined in Part 4.1 of the Livable Housing Design Standard v1.2:

a room or space containing a toilet.

**Sanitary drainage** as defined in Schedule 1 to the Plumbing and Drainage Act 2018:

an apparatus, fitting or pipe for collecting and carrying discharges from sanitary plumbing, or from a fixture directly connected to a sanitary drain, to a sewerage system, on-site sewage facility or greywater use facility, including—

- (a) disconnector gullies; and
- (b) bends at the base of stacks or below ground level; and
- (c) for connection to an on-site sewage facility—a pipe, other than a soil or waste pipe, used to carry sewage to or from the facility; and
- (d) pipes, above ground level, installed using drainage principles.

**Sanitary plumbing** as defined in Schedule 1 to the Plumbing and Drainage Act 2018:

an apparatus, fitting, fixture or pipe, above ground level, for carrying sewage to a sanitary drain.

**Shower area** as defined in Schedule 1 to the BCA (NCC, volume 1 and volume 2):

the area affected by water from a shower, including a shower over a bath and for a shower area that is—

- (a) enclosed – the area enclosed by walls or screens including hinged or sliding doors that contain the spread of water to within the space; or
- (b) unenclosed – the area where, under normal use, water from the shower rose is not contained within the shower area.

**Shower screen** as defined in clause 1.3.33 in AS 3740 *Waterproofing of domestic wet areas*:

*panels, doors or glazing system enclosing or partially enclosing a shower area.*

**Sole-occupancy unit** as defined in Schedule 1 to the BCA (NCC, volume 1 and volume 2):

*a room or other part of a building for occupation by one or joint owner, lessee, tenant, or other occupier to the exclusion of any other owner, lessee, tenant, or other occupier and includes—*

- (a) a dwelling; or*
- (b) a room or suite of rooms in a Class 3 building which includes sleeping facilities; or*
- (c) a room or a suite of associated rooms in a Class 5, 6, 7, 8 or 9 building; or*
- (d) a room or suite of associated rooms in a Class 9c building, which includes sleeping facilities and any other area for the exclusive use of a resident.*

**Toilet** as defined in the *National Dictionary of Building and Plumbing Terms*:

*a room or booth fitted with a water-closet and/or urinal and which often includes a basin for washing of hands.*

**Vessel** as defined in Schedule 1 to the BCA (NCC, volume 1 and volume 2):

*an open, pre-formed, pre-finished concave receptacle capable of holding water, usually for the purpose of washing, including a basin, sink, bath, laundry tub and the like.*

**Water closet** as defined in clause 3W.15 in AS/NZS 3500.0 *Plumbing and Drainage— Part 0: Glossary of Terms*:

*a compartment in which a WC pan is installed.*

**Water closet cistern** as defined in clause 3C.25.2 in AS/NZS 3500.0 *Plumbing and Drainage – Part 0: Glossary of Terms*:

*a flushing cistern designed to be installed in conjunction with a WC pan, which incorporates a mechanism (normally a float control valve) to control the water level.*

**Water closet (WC) pan** as defined in clause 3W.16 in AS/NZS 3500.0 *Plumbing and Drainage – Part 0: Glossary of Terms*:

*a receptacle in the form of a bowl incorporating a water seal used in conjunction with a flushing device for the disposal of human wastes.*

**Water bar** means a vertical insert of a semi-circular shape at the threshold into a shower area installed to prevent the passage of water beyond the shower area.

**Waterstop** as defined in clause 1.3.33 in AS 3740 *Waterproofing of domestic wet areas*:

*vertical extension of the waterproofing system forming a barrier to prevent the passage of moisture in the floor or vertically in a wall.*

*Note: This includes hobs, nib walls, door angles, and any other vertical barrier that forms an integral part of the waterproofing system.*

**Weir** means a graded rise of the floor surface at the entrance to a wet area to retain dampness or water overflow from fixtures within a room.

*Note: the maximum grade of a weir must not exceed a 1:8 gradient.*

**Wet area** as defined in the *National Dictionary of Building and Plumbing Terms*:

*an area within a building supplied with water from a water supply system, which includes bathrooms, showers, laundries and sanitary compartments and excludes kitchens, bar areas, kitchenettes or domestic food and beverage preparation areas.*

**WMTS-479** means *WaterMark Technical Specification administered and managed by the ABCB.*

## Chapter 2 – Performance criteria and acceptable solutions

### 1 Application of livable housing design provisions

#### **i** Explanatory information

##### Objective

The objective is to ensure that housing is designed to meet the needs of the community, including older people and people with a mobility-related disability.

##### Functional statement

A dwelling should be designed such that it is—

- (a) easy to enter; and
- (b) easy to navigate in and around; and
- (c) capable of easy and cost effective adaptation; and
- (d) responsive to the changing needs of occupants.

Source: G7O1/G7F1 in the BCA (NCC, volume 1) and H8O1/H8F1 in the BCA (NCC, volume 2).

#### **P1 Performance criteria**

- 1) Repair and maintenance to a class 1a building must comply with H8P1 in the BCA (NCC, volume 2).
- 2) Repair and maintenance to each sole-occupancy unit in a class 2 building must comply with G7P1 in the BCA (NCC, volume 1).

#### **A1 Acceptable solution**

- 1) Subject to A1(2):
  - (a) Repair and maintenance to a class 1a building must comply with H8D1 and H8D2 in the BCA (NCC, volume 2).
  - (b) Repair and maintenance to each sole-occupancy unit in a class 2 building must comply with G7D1 and G7D2 in the BCA (NCC, volume 1).
- 2) Repair and maintenance are not required to comply with the Livable Housing Design Standard where the part of the class 1a building or sole-occupancy unit being repaired and maintained did not comply with the Livable Housing Design Standard prior to the repair or maintenance being undertaken.

#### **P2 Performance criteria**

- 1) Renovations to a sanitary compartment or bathroom in a class 1a building must comply with H8P1 in the BCA (NCC, volume 2).
- 2) Renovations to a sanitary compartment or bathroom in each sole-occupancy unit in a class 2 building must comply with G7P1 in the BCA (NCC, volume 1).

#### **A2 Acceptable solution**

- 1) Subject to A2(2) to A2(6):
  - (a) Renovations to a sanitary compartment or bathroom in a class 1a building must comply with H8D1 and H8D2 in the BCA (NCC, volume 2).
  - (b) Renovations to a sanitary compartment or bathroom in each sole-occupancy unit in a class 2 building must comply with G7D1 and G7D2 in the BCA (NCC, volume 1).

- 2) Renovations to a sanitary compartment or bathroom are not required to comply with the following in the Livable Housing Design Standard:
  - (a) Part 3.1 (clear opening width);
  - (b) Part 3.2 (threshold);
  - (c) Part 4.2 (circulation space); and
  - (d) Part 6 (reinforcement of bathroom and sanitary compartment walls).
- 3) A2(2)(a) does not apply if the renovation involves demolition of the existing doorway to the sanitary compartment or bathroom.
- 4) A2(2)(c) does not apply if the renovation increases the size of the sanitary compartment.
- 5) A2(2)(d) does not apply if the renovation exposes the wall frame of the sanitary compartment or bathroom.
- 6) Where a renovation exposes the wall frame of the sanitary compartment or bathroom, only the section of the wall frame exposed is required to comply with Part 6 (reinforcement of bathroom and sanitary compartment walls) of the Livable Housing Design Standard.

Note:

- A2 does not affect the requirements in Part 5 of the Livable Housing Design Standard to provide at least one shower with a hobless and step-free entry.
- If there is already a complying sanitary compartment or bathroom, a renovation to the non-complying sanitary compartment or bathroom will not trigger the requirements in the Livable Housing Design Standard.
- A building certifier will continue to have a discretion to require building work to comply with:
  - earlier building assessment provisions in accordance with section 61 of the *Building Act 1975*, for example where general safety and structural standards would not be at risk; and
  - the Livable Housing Design Standard in accordance with section 81 of the *Building Act 1975*, for example where the renovations represent more than half the total volume of the existing building or structure.

### **P3 Performance criteria**

- 1) A class 1a building must be provided with a sanitary compartment that facilitates independent access and use and is located on the ground or entry level that complies with H8P1 in the BCA (NCC, volume 2).

### **A3 Acceptable solution**

- 1) Subject to A3(2) and A3(3), a class 1a building must include at least one sanitary compartment that complies with H8D2 in the BCA (NCC, volume 2) (a compliant sanitary compartment).
- 2) If there is no habitable room on the ground or entry level of the class 1a building, a compliant sanitary compartment can be located on either:
  - (a) the ground or entry level; or
  - (b) the lowest level of the class 1a building with a habitable room.
- 3) A sanitary compartment that is located on the ground or entry level must be a compliant sanitary compartment.

### **P4 Performance criteria**

- 1) A class 1a building must be provided with a shower that facilitates independent access and use that complies with H8P1 in the BCA (NCC, volume 2).
- 2) Each sole-occupancy unit in a class 2 building must be provided with a shower that facilitates independent access and use that complies with G7P1 in the BCA (NCC, volume 1).

## A4 Acceptable solution

- 1) Subject to A4(2) to A4(6):
  - (a) A class 1a building must include a shower that complies with H8D1 and H8D2 in the BCA (NCC, volume 2).
  - (b) Each sole-occupancy unit in a class 2 building must include a shower that complies with G7D1 and G7D2 in the BCA (NCC, volume 1).
- 2) A shower that complies with A4(3) to A4(6) is deemed to be an enclosed shower for the purposes of AS 3740 clause 2.2.1 and in the ABCB Housing Provisions 10.2.17 in the BCA.
- 3) A shower that does not have a step-down or linear drain at the entry into the shower area must have a water bar with a maximum height of 5 millimetres installed above and sealed to the waterstop at the shower entry and a shower screen door with a deflector.<sup>2</sup>
- 4) A shower with a step-down into the shower area must have a lip with a maximum height of 5 millimetres at the shower entry and:
  - (a) A shower screen door with a deflector<sup>3</sup>; or
  - (b) A shower screen door or deflector which abuts to the lip at the shower entry.<sup>4</sup>
- 5) A shower with a linear drain at the entry of the shower must have a shower screen door positioned:
  - (a) Above the intersection between the linear drain and the area outside the shower;<sup>5</sup> or
  - (b) Over the top or inside the linear drain that defines the shower area.<sup>6</sup>
- 6) A shower screen door that is located above the intersection between the linear drain and the area outside the shower area must be fitted with a deflector.

### Note:

- Waterproofing outside of an enclosed shower area must comply with F2D2 in the BCA (NCC, volume 1) and H4D3 in the BCA (NCC, volume 2).
- If there is already a complying shower, any additional shower is not required to comply with the requirements in the Livable Housing Design Standard.
- Figures A4(3) to A4(4)(b) are for informative purposes only.

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<sup>2</sup> See Figure A4(3).

<sup>3</sup> See Figure A4(4)(a).

<sup>4</sup> See Figures A4(4)(b).

<sup>5</sup> See Figure A4(5)(a).

<sup>6</sup> See Figures A4(5)(b).

Figure A4(3)

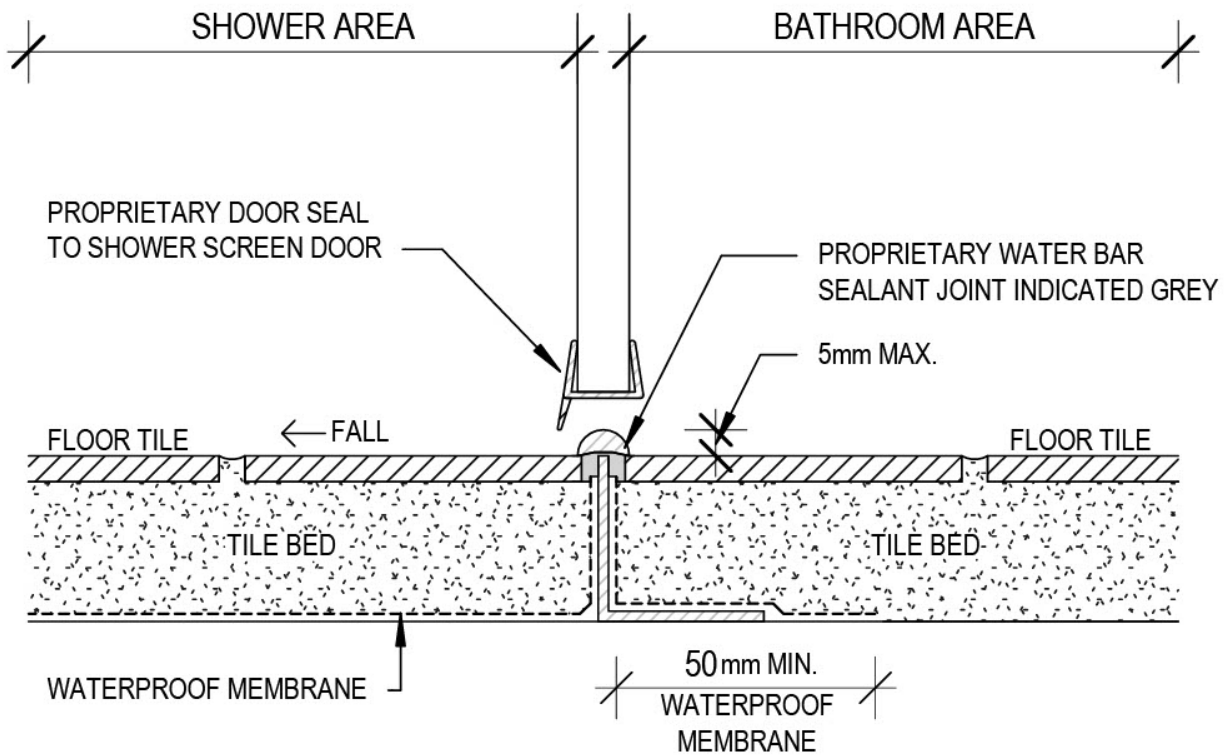
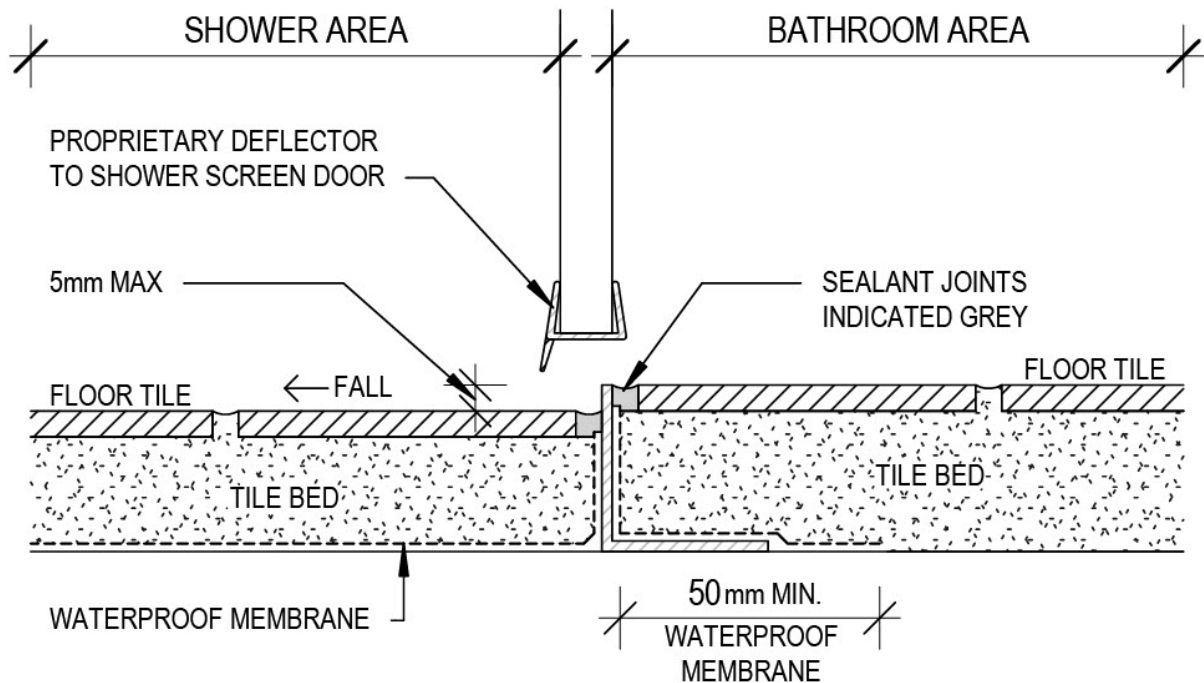


Figure A4(4)(a)





Figures A4(4)(b)

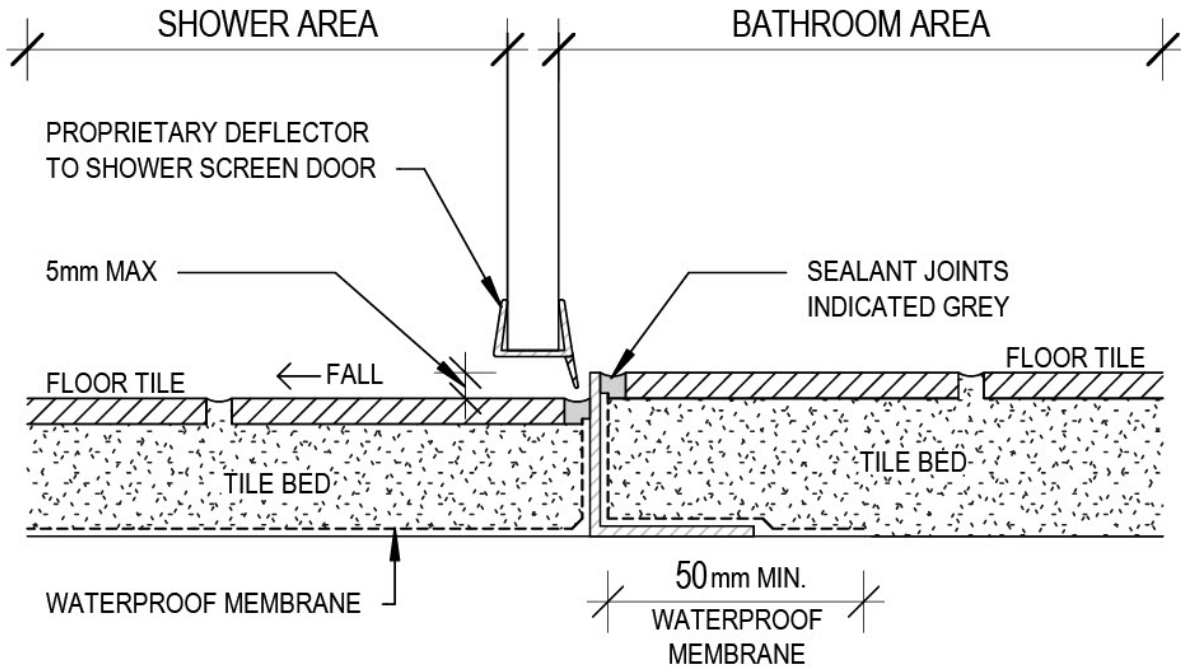
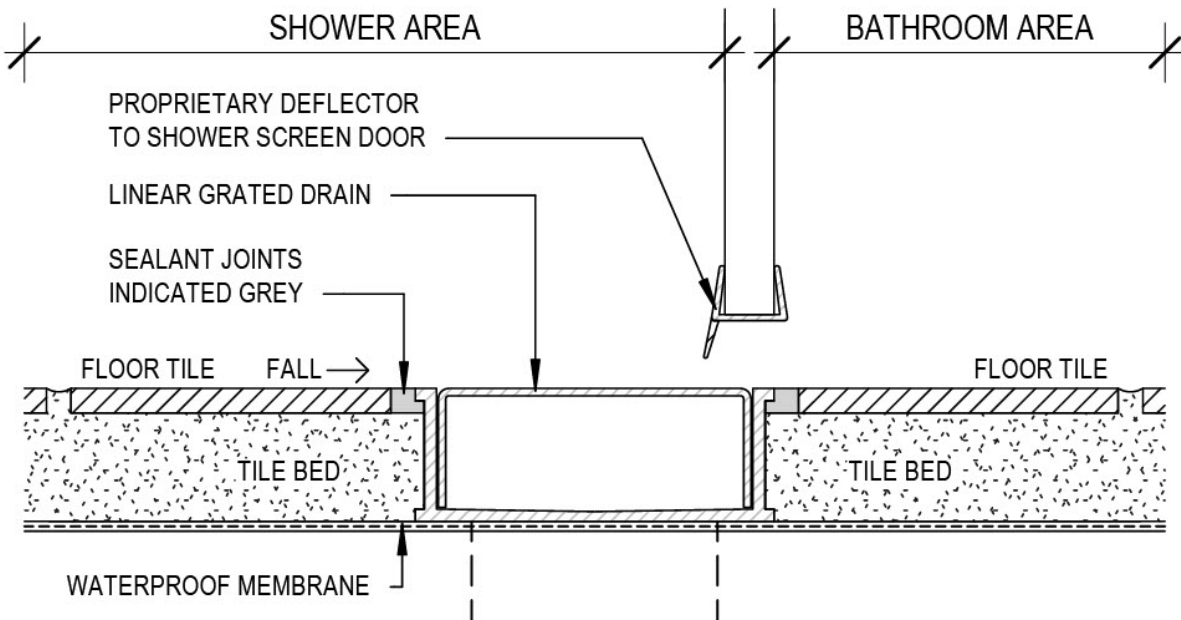
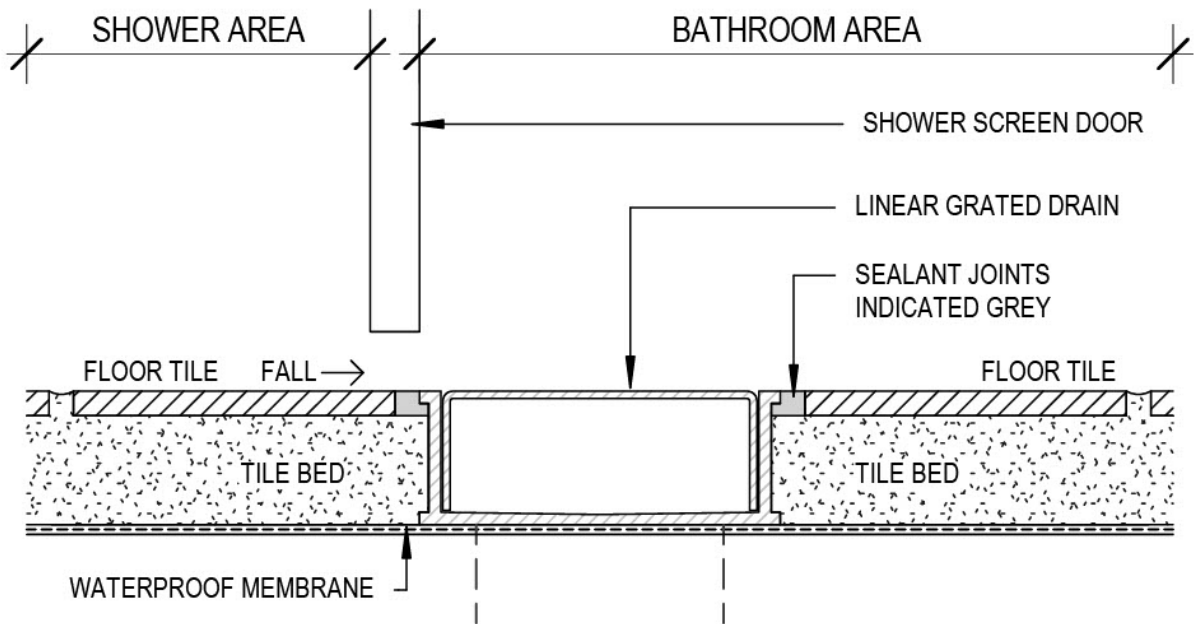
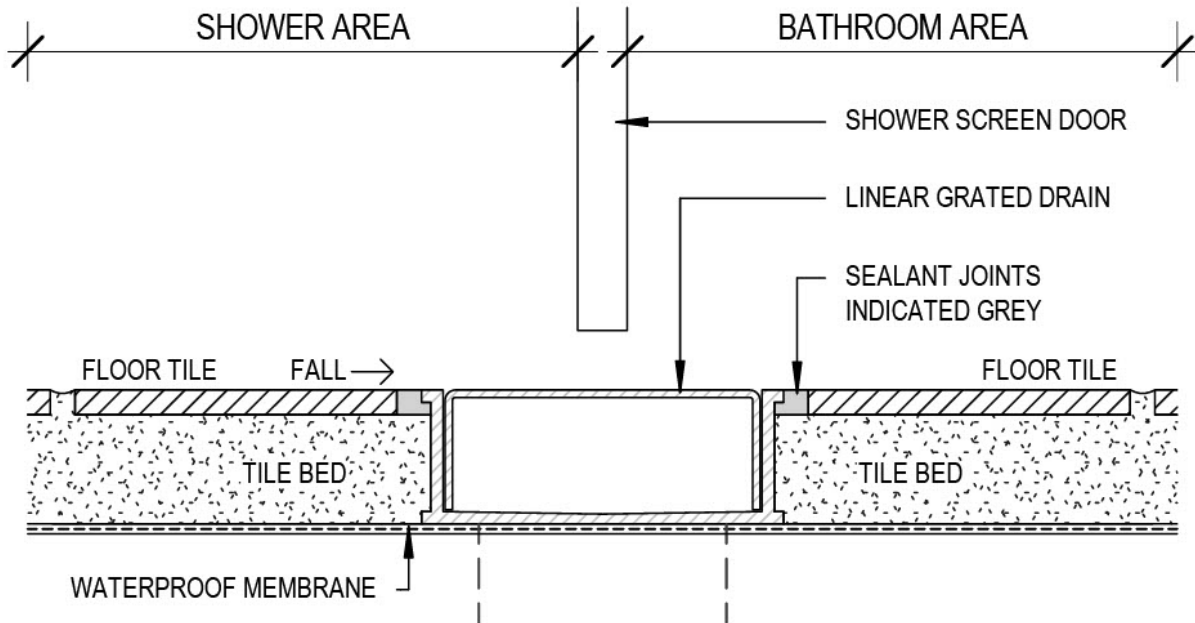


Figure A4(5)(a)



Figures A4(5)(b)



## 2 Grading to floor wastes

### **i** Explanatory information

#### Objective

The objective of this Part is to—

- (a) safeguard occupants from illness or injury and protect buildings from damage caused by—
  - (i) internal water from wet areas; and
  - (ii) the accumulation of internal moisture in the building; and
- (b) protect other property from damage caused by redirected internal water from wet areas.

#### Functional statement

A building including internal wet areas is to be constructed in a way that protects people, the building and other property from the adverse effects of internal water from wet areas.

A building is to be constructed to avoid the likelihood of—

- (a) the creation of unhealthy or dangerous conditions; and
- (b) damage to building elements, caused by dampness or water overflow from bathrooms, laundries and the like.

A building is to be provided with suitable means for the sanitary disposal of wastewater.

Source: F2O1/F2F1/F2F2 in the BCA (NCC, volume 1) and H4O1/H4F1/H4F3 in the BCA (NCC, volume 2).

### P5 Performance criteria

- 1) Class 1 buildings must comply with H4P1 in the BCA (NCC, volume 2).
- 2) Each sole-occupancy unit on the ground or entry level of class 2 buildings must comply with F2P1 and F2P2 in the BCA (NCC, volume 1).

### A5 Acceptable solution

- 1) Subject to A5(2) to A5(7):
  - (a) Class 1 buildings must comply with H4D1 to H4D3 in the BCA (NCC, volume 2).
  - (b) Each sole-occupancy unit on the ground or entry level of class 2 buildings must comply with F2D1 to F2D4 in the BCA (NCC, volume 1).
- 2) Where a floor waste is installed—
  - (a) the fall of a floor plane to the waste must have a:
    - (i) minimum continuous fall of 1:100; and
    - (ii) maximum continuous fall of 1:80<sup>7</sup> or
  - (b) each entrance to the wet area must have a linear drain that extends across the full extent of the entrance to the wet area and is connected to sanitary plumbing or drainage; or
  - (c) each entrance to the wet area must have a weir that:
    - (i) extends across the full extent of the entrance to the wet area;
    - (ii) is at least 10 millimetres above the height of the floor waste; and
    - (iii) has a maximum gradient of 1:8 and be located anywhere within the door jamb for an entrance to the wet area or within 100 millimetres of the door jamb for the wet area; or
  - (d) each entrance to the wet area must have a weir that:

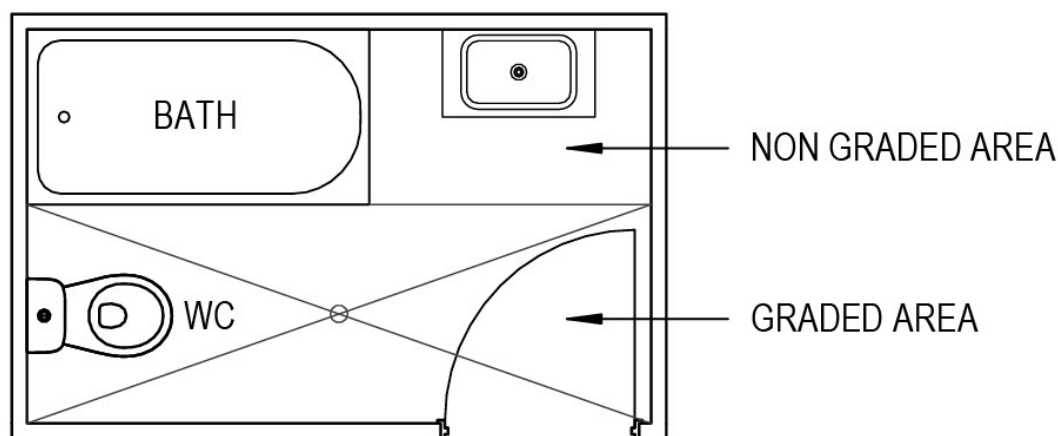
<sup>7</sup> The grades prescribed in A5(2)(a)(i) and (ii) have been varied to align with AS 3740:2021 Waterproofing of domestic wet areas.

- (i) is at least 10 millimetres above the height of the floor waste; and
- (ii) the fall of the floor plane from the entrance of the wet area does not exceed 1:80; or
- (e) all:
  - (i) vessels (such as a basin or bath) in the wet area must be provided with in-built overflow protection; and
  - (ii) water closet cisterns in the wet area must incorporate an internal overflow which directs any overflowing water to the water closet pan; and
  - (iii) flexible hose assemblies used for the connection of fixtures contained in the wet area must be fitted with flood stop safety valves approved under WMTS-479<sup>8</sup>.
- 3) If all vessels and fixtures comply with A5(2)(e), the floor does not have to be graded.
- 4) If each entrance to the wet area has a linear drain or a complying weir, the floor does not have to be graded.
- 5) Any area of the floor that is separated from the entrance by a graded area does not have to be graded.<sup>9</sup>
- 6) A5(5) only applies if all fixtures in a wet area are located on:
  - (a) a graded floor area that complies with the gradients referred to in A5(2)(a)(i) and A5(2)(a)(ii); or
  - (b) an ungraded area that is separated from the entrance by a graded floor area that complies with gradients referred to in A5(2)(a)(i) and A5(2)(a)(ii).
- 7) For the purposes of A5(5), 'separated from the entrance by a graded floor area' means that water cannot flow out of the entrance without passing over a graded area that complies with the gradients referred to in A5(2)(a)(i) and (ii).

Note:

- The acceptable gradient within a shower area should be no less than 1:80.<sup>10</sup>
- The reference to 'complying weir' in A5(4) means a weir which complies with A5(2)(c) or A5(2)(d).
- Figures A5(5) is for informative purposes only.

Figure A5(5)



<sup>8</sup> Water Mark Technical Specification 479 Flood stop safety valve.

<sup>9</sup> See Figure A5(5).

<sup>10</sup> This acceptable gradient aligns with section (a) in 10.2.14 'Shower area requirements' and 10.2.12 'Construction of wet area floors – falls' in the ABCB Housing Provisions.