

Queensland Development Code

Mandatory Part 4.1 – Sustainable buildings

Version 1.16

Commenced on 14 August 2026

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Queensland Development Code

The QDC consolidates Queensland-specific *building* standards into a single document.

Note: The QDC covers Queensland matters outside the scope of, and in addition to, the relevant *building* assessment provisions under the *Building Code of Australia (BCA)*.

Building Code of Australia

The BCA refers to Volume One and Volume Two of the National Construction Code (**NCC**) as defined in the *Building Act 1975*, section 12.

The NCC is Australia's primary set of technical design and construction provisions for *buildings*.

Terminology

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

<i>Building Code of Australia</i>	Queensland Development Code
Performance Requirement	Performance Criteria
Deemed-to-Satisfy Provision	Acceptable Solution
Performance solution	Performance (or alternative) solution

Relationship between the BCA and the QDC

The BCA contains *Performance Requirements* that *building work* must comply with. It also contains *building* solutions for those requirements in the form of *Deemed-to-Satisfy* (DtS) Provisions, which are *building* solutions that are deemed to meet the *Performance Requirements*.

Under section 35 of the *Building Act 1975*, if a part of the QDC is inconsistent with the *building* assessment provisions of the BCA, that QDC part prevails to the extent of the inconsistency. This section allows a part of the QDC to vary and take precedence over specific requirements in the BCA. In particular, section 35 allows a part of the QDC to vary *Performance Requirements* in the BCA by setting *performance criteria* that replace or vary the BCA *Performance Requirements*. The section also allows a part of the QDC to vary compliance solutions for particular BCA *Performance Requirements* by setting *Acceptable Solutions* that differ from the DtS Provisions for those *Performance Requirements*.

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

Approval of the QDC part

The chief executive of the department may amend the QDC, including by adding another part to it or replacing a part of it. However, an amendment does not take effect until the chief executive publishes the amendment on the department's website and the new QDC part is a prescribed regulation. The active parts of the QDC are set out in the Building Regulation 2021, Schedule 7.

Chapter 1 Preliminary

1 Name of the Queensland Development Code part

This QDC part may be cited as the *Queensland Development Code, Mandatory Part 4.1 – Sustainable buildings* (QDC part or QDC MP 4.1).

2 Purpose

The purpose of this QDC part is to ensure:

- (a) *class 1 buildings* and *class 2 buildings* are energy and water efficient
- (b) the *electricity* supplied to each *meterable premises* can be measured appropriately; and
- (c) end-of-trip facilities are provided in *major developments* located in *designated local government areas*.

3 Commencement

This version of QDC MP 4.1 commences on 14 August 2026 and replaces MP 4.1 – Sustainable buildings which commenced on 1 May 2024.

Table 1: Commencement

Version	Publication date	Commencement date	Major Changes
1.16	03 August 2026	14 August 2026	Additional thermal performance pathways
1.15*	19 September 2023	1 May 2024	7-star houses and units, and whole-of-home
1.13	1 March 2021	17 September 2020	Added minimum heating/cooling loads for dwellings
1.12	15 January 2013	1 February 2013	Permitted all types of domestic hot water systems
1.11	10 September 2012	1 November 2012	Clarified application to <i>renovations</i>
1.10	10 July 2012	6 August 2012	Removed energy efficient air-conditioners
1.9	27 June 2011	8 July 2011	Clarified application for flood or storm surge areas
1.8	12 November 2010	26 November 2010	Added end-of-trip facilities
1.7	30 July 2010	1 September 2010	Energy efficient air-conditioners all <i>building classes</i>
1.6	13 April 2010	1 May 2010	6-star houses and changes to optional credits
1.5	4 February 2010	1 March 2010	5-star units, including optional credits
1.4	27 November 2009	1 January 2010	Added <i>electricity</i> sub-metering
1.3	24 June 2009	26 June 2009	Delayed date for energy efficient air-conditioners
1.2	3 February 2009	1 March 2009	5-star houses; efficient fixtures and air-conditioners
1.1	16 November 2007	1 January 2008	Clarified application for water efficient toilets

* Note: Version 1.14 was published on 12 July 2023 but was not adopted.

4 Application

- (1) This *QDC* part applies to the lawful carrying out of building work as indicated by ticks (✓) in the relevant columns in Table 2, subject to subsection (2).
- (2) This *QDC* part and the relevant *BCA* (*NCC*, Volume Two) provisions do not apply to the lawful carrying out of *building work* to an existing *class 1 building* where:
 - (a) any of the following applies:
 - (i) a *building certifier* has, by written notice given to the owner, certified that the existing *building* has been affected by a flood or storm surge; or
 - (ii) the existing *building* is located in a *natural hazard management area* (flood); or
 - (iii) a local government has, by written notice given to the owner or notice published on the local government's website, declared that the existing *building* is likely to be affected by a future flood or storm surge; and
 - (b) a *building certifier* certifies the work is, or directly relates to, raising the existing *building*.

Note: Reference should also be made to the *Building Act 1975*, sections 36, 37, 61 and 81, which may affect the application of *QDC* MP 4.1.

Table 2 – Application of *QDC* MP 4.1

Application	Performance Criteria						
	1	2	3	4	5	6	7
Construction of <i>new class 1 buildings</i>	✓		✓				
<i>Renovation</i> of a <i>class 1 building</i>	✓						
Construction of <i>new class 2 buildings</i>		✓	✓	✓	✓	✓	
<i>Renovation</i> of a <i>sole-occupancy unit</i> in a <i>class 2 building</i>		✓					
Construction of a <i>new class 5 building</i>				✓	✓	✓	
Construction of a <i>new major development</i> or a <i>major addition</i> to a <i>major development</i> located in a <i>designated local government area</i>							✓

Note: Performance criteria numbering has been updated sequentially for the purpose of this *QDC*, and numbers do not correspond to those used in the previous version.

5 Exemptions

Not applicable to this *QDC* part.

6 Compliance

- (1) This *QDC* part is a *building* assessment provision under section 30(g) of the *Building Act 1975*. Additionally, section 34A(2) provides that, if the assessment manager for a *building* development application is satisfied the application

complies with the *building* assessment provisions, the assessment manager must approve the application.

Note: In accordance with the *Building Act 1975*, section 30(f), the provisions of the *BCA* are also *building* assessment provisions.

- (2) Compliance with the *QDC* is governed by the *Building Act 1975*, section 14, which provides that *building work* complies with the *QDC* and *BCA* only if it complies with all relevant *Performance Requirements*. The *building work* complies with a relevant *Performance Requirement* only if it achieves a relevant *building* solution under this *QDC* part for the requirement. This is achieved by:
- (a) complying with the *Acceptable Solutions* under the *QDC* for the *Performance Requirement*; or
 - (b) formulating a *Performance Solution* which complies with the *Performance Criteria* or is shown to be at least equivalent to the relevant requirement; or
 - (c) a combination of (a) and (b).

Note: This *QDC* part contains seven (7) *Performance Criteria* (P1–P7) and seven (7) *Acceptable Solutions* (A1–A7).

7 Requirements of the *BCA* not varied

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

8 Referral agency—*building work* for end-of-trip facilities

What is a referral agency?

A referral agency is the entity defined in the *Planning Act 2016*, section 54(2) and the *Planning Regulation 2017*, Schedule 9, as a referral agency for development applications pertinent to this *QDC* part.

What is the role of a referral agency?

The role of a referral agency is to provide advice on and conduct assessments for compliance related matters pertinent to a particular part.

Who is the referral agency for this part?

The local government is the referral (concurrence) agency for a *building* development application under the *Planning Regulation 2017*, Schedule 9, Part 3, Division 2, Table 10, Item 1, if:

- (a) the application is for *building work* that is:
 - (i) assessable development under Schedule 9, Part 1; and
 - (ii) for development that *performance criteria* P7 (End-of-trip facilities) of this part of the *QDC* applies to; and
- (b) the *building work* does not comply with the requirements of *acceptable solution* A7 stated in this part.

9 Associated requirements

The following legislation and codes include requirements that apply to the application of this *QDC*. These requirements are additional to the requirements in the *QDC* part:

- *Body Corporate and Community Management Act 1997*

- *Building Act 1975*
- Building Regulation 2021
- *BCA (NCC, Volume One and Volume Two)*
- *Electricity Act 1994*
- Electricity Regulation 2006
- *Electrical Safety Act 2002*
- Electrical Safety Regulation 2013
- *Plumbing and Drainage Act 2018*
- Plumbing and Drainage Regulation 2019
- Queensland Plumbing and Wastewater Code
- Plumbing Code of Australia (*NCC, Volume Three*)
- *Planning Act 2016*
- Planning Regulation 2017
- *Water Efficiency Labelling and Standards (Queensland) Act 2005*
- *Water Supply (Safety and Reliability) Act 2008*

10 Referenced standards

- (1) Table 3 sets out the number, reference year and title of each Australian Standard referred to in this QDC part.
- (2) The Australian Standards are the editions as amended from time to time by Standards Australia and as referenced by the *BCA*.
- (3) Unless otherwise stated a reference to a standard listed below is a reference to the most recent edition of that standard.

Table 3 – Referenced standards

Australian Standard Number	Year	Title
AS 62053.21	–	Electricity metering equipment – Particular requirements Part 21: Static meters for AC active energy (classes 0.5, 1 and 2)
AS 1284.1	–	Electricity metering Part 1: General purpose induction watthour meters
AS 2890.3	1993	Parking facilities Part 3: <i>Bicycle</i> parking facilities

11 Definitions

Note: The format of the definitions reflects the source document they have been accessed from. This may result in some inconsistencies in the numbering conventions.

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

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

Alterations as defined in the *Building Act 1975*, Schedule 2:

alterations, to an existing *building* or structure, includes additions to the *building* or structure.

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

Building—

- (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 certifier as defined in *Building Act 1975*, section 8:

- (1) A *building certifier* is an individual who, under Chapter 6, Part 3 [of the *Building Act 1975*], is licensed as a *building certifier*.
- (2) A reference to *building certifier* includes a reference to a private certifier.
- (3) In Chapter 6 [of the *Building Act 1975*], the term also includes a reference to a former *building certifier*.

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 One and Volume Two (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.

BCA climate zone means a *climate zone* as defined in Schedule 1 of the *BCA (NCC, Volume One and Volume Two)*:

Climate zone means an area defined in Figure 2 and in Table 3 for specific locations, having energy efficiency provisions based on a range of similar climatic characteristics.

Note: Schedule 1 of this QDC part provides a map of the *BCA climate zones* occurring in Queensland and describes their prevailing climatic conditions.

Bicycle means a two-wheeled vehicle designed to be propelled primarily by human power, whether or not it has an auxiliary motor, but does not include a vehicle with an auxiliary motor capable of generating a total power output of more than 250 watts.

Bicycle parking and storage facility means an area or structure used for parking, storage or securing of *bicycles*, which provides a level of security for the *bicycle* in accordance with the security classifications provided in AS 2890.3:1993 (including QDC modifications as specified in Schedule 3).

Building work as defined in section 5 of 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 (RCB) relating to a residential care *building*

Change room means a room where an occupant is able to change clothes in privacy, either individually or on a gender basis and that contains washbasins, mirrors, showers and *sanitary compartments*.

Class as defined in Schedule 2 of the *Building Act 1975*:

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

Commercial office building means a *class 5 building* as classified under the *BCA*.

Common area means an area of *common property*.

Common property means the lot allocated to the body corporate for the *community titles scheme*.

Community titles scheme has the meaning given in the *Body Corporate and Community Management Act 1997*, section 10.

Customer as defined in the *Electricity Act 1994*, section 23(1):

a person who is a *customer* under the *National Energy Retail Law (Queensland) Act 2014* (Qld), section 5(1).

Deemed-to-Satisfy Provision as defined in Schedule 1 of the *NCC*:

Deemed-to-Satisfy Provision: means provisions which are deemed to satisfy the *performance requirements*.

Deemed-to-Satisfy Solution as defined in Schedule 1 of the *NCC*:

Deemed-to-Satisfy Solution: means a method of satisfying the *Deemed-to-Satisfy Provisions*.

Designated local government area means:

- (1) the area of a local government, as identified in Schedule 2; or
- (2) for a local government not identified in Schedule 2:
 - (a) the area identified in a local government planning scheme as a *designated local government area* for the purpose of this part of the *QDC*; or

- (b) the area identified by a local government resolution as a *designated local government area* for the purpose of this code where notice of the resolution is published:
 - (i) in a newspaper that is circulating generally in the local government area; or
 - (ii) on the local government's website.

Electricity includes electric current, electrical energy and the like, and any related physical qualities.

Electricity meter means a device that measures and records the production or consumption of *electricity*.

Electricity sub-meter means a device that measures and records the production or consumption of *electricity* that either:

- (1) has an accuracy class of 1 or better under AS 62053.21; or
- (2) complies with AS 1284.1.

Employee as defined in the *Industrial Relations Act 2016*, section 8:

- (1) An *employee* is an individual who is employed, or usually employed, by an employer.
- (2) Also, *employee* includes the following persons:
 - (a) For Chapter 2, Part 3, Divisions 9, 11 and 12, a national system *employee* within the meaning of the *Commonwealth Fair Work Act 2009*, section 13, including a national system *employee* mentioned in section 30M of that Act;
 - (b) For Chapter 7, a worker under the *Work Health and Safety Act 2011*, Section 7, other than a worker under the *Commonwealth Fair Work Act 2009* who may apply for an order under Chapter 6, Part 6-4B of that Act in relation to the bullying;
 - (c) a person who is a member of a *class* of persons declared to be *employees* under section 465;
 - (d) for a proceeding for an offence or for payment or recovery of amounts—a former *employee*;
 - (e) an outworker;
 - (f) an apprentice;
 - (g) a trainee.

End-of-trip facility means a facility within a *building* or on-site that is *required* to be constructed in compliance with P7(1).

Entrance means a main path into a *building* that is not for emergency use.

Floor area means:

- (1) for a *Class 1 building* as defined in Schedule 2 of 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*.

- (2) for *Class 2 to Class 9 buildings* as defined in Schedule 1 of the *BCA (NCC, Volume One)*:

Floor area for the purposes of Volume One means—

- (a) in relation to a *building*: the total area of all *storeys*; and
- (b) in relation to a *storey* — the area of all floors of that *storey* measured over the enclosing walls, and includes—
 - (i) the area of a mezzanine within the *storey*, measured within the finished surfaces of any external walls; and
 - (ii) the area occupied by any internal wall or partitions, any cupboard, or other built-in furniture, fixture or fitting; and
 - (iii) if there is no enclosing wall, an area which has a use that contributes to the fire load or impacts on the safety, health or amenity of the occupants in relation to the provisions of the *BCA*;
- (c) in relation to a room — the area of the room measured within the internal finished surfaces of the walls, and includes the area occupied by any cupboard or other built-in furniture, fixture or fitting;
- (d) in relation to a fire compartment — the total area of all floors within the fire compartment measured within the finished internal surfaces of the bounding construction, and if there is no bounding construction, includes an area which has a use which contributes to the fire load; and
- (e) in relation to an atrium: the total area of all floors within the atrium measured within the finished surfaces of the bounding construction and if no bounding construction, within the external walls.

(3) for an *outdoor living area*, means the area measured over its finished floor surface.

Full-time equivalents for workforce numbers include full-time aggregates of part-time and casual *employee* hours.

Hospital means a *class 9a building* as classified under the *BCA*.

Locker means a compartment for storage that can be securely locked.

Major addition means any addition to an existing *major development* that results in additional *floor area* of at least 1000 m².

Major development means a:

- (1) *commercial office building* with a *floor area* greater than 2000 m²; or
- (2) *shopping centre* with a *floor area* greater than 2000 m²; or
- (3) tertiary education facility with a *floor area* greater than 2000 m²; or
- (4) *hospital* with a *floor area* greater than 2000 m²; or
- (5) development specified in a local government planning scheme as a *major development* for the purposes of this part of the *QDC*.

Note: A local government may specify additional development to be *major development*.

Meter label means a label of white heat-resistant material with black lettering fixed by means of screws, rivets or glue that clearly identifies each *meterable premises*.

Meterable premises means:

- (1) the *sole-occupancy unit* of a *class 2 building* or *class 5 building* that is or will be connected to a supply of *electricity*, except where a *sole-occupancy unit* in a *class 2 building* or *class 5 building* has, or will have, an *electricity meter* as a *customer* of a *retail entity* or *special approval holder*; or
- (2) each *storey* of a *class 5 building* that is or will be connected to a supply of *electricity* where more than one *sole-occupancy unit* for that *storey* has not been

identified at the time of the *building's* development approval for *building work*, except where a *storey* of a *class 5 building* has or will have an *electricity meter* as a *customer* of a *retail entity* or *special approval holder*.

NatHERS means Nationwide House Energy Rating Scheme.

NatHERS accredited software means a software tool accredited under *NatHERS*.

Natural hazard management area (flood) means an area designated as a *natural hazard management area* (flood) by a local government under the Building Regulation 2021, section 8.

NCC means the National Construction Code.

New means *new building work* and does not include *renovations* to an existing *building*.

Occupants means the number of persons accommodated in the *building*, as calculated in accordance with *BCA* (*NCC*, Volume One) Table D2D18 (Area per person according to use) and for the purposes of calculating *occupants* in Schedule 4, '*hospital*' means 'patient care areas', '*shopping centre*' means 'shop', 'tertiary education facility' means 'school' and '*commercial office building*' means 'office'.

Outdoor living area means an external space that:

- (1) is directly accessible from, and attached to, a living area of a *class 1 building* or *sole-occupancy unit* in a *class 2 building*, such as a lounge, kitchen, dining and family rooms; and
- (2) has a minimum *floor area* of 12.0 m² and a minimum dimension in all directions of 2.5 metres; and
- (3) is fully covered by an impervious roof; and
- (4) has:
 - (a) for a *class 1 building* – two or more sides open or capable of being readily opened, not including the connection between the internal living area and the *outdoor living area*; or
 - (b) for a *sole-occupancy unit* in a *class 2 building* – at least one side open or capable of being readily opened, not including the connection between the internal living area and the *outdoor living area*, and
- (5) has at least 900 mm between each side mentioned in paragraph (4) and an allotment boundary or an obstruction to the breeze path, such as a *building*, fence or other structure.

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 of 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.

Performance solution as defined in Schedule 2 of the *Building Act 1975*:

Performance solution means a material, system, method of *building* or other thing, other than the following, intended to be used by a person to comply with relevant *performance requirements*—

- (a) if the relevant *performance requirements* are under the *BCA*—a *building* solution under the *BCA* that complies with the *Deemed-to-Satisfy Provisions* under the *BCA* for the *performance requirements*;
- (b) if the relevant *performance requirements* are under *QDC*—an *Acceptable Solution* under the *QDC* for the *performance requirements*.

Queensland Development Code (QDC) as defined in Section 13 of the *Building Act 1975*:

Queensland Development Code (QDC) means—

- (1) The *Queensland Development Code* (or *QDC*) is the parts, or aspects of the parts, of the document called '*Queensland Development Code*' that are prescribed by regulation.
- (2) A regulation made under this section must state the day on which the part or aspect of the part takes effect.
- (3) The chief executive must publish the *Queensland Development Code* on the department's website.

Raised floor construction means a *building* form in which at least 50% of the total *floor area* of the *building* is over an *unenclosed space*.

Relevant BCA provisions means Part H6 Energy efficiency in the *BCA* (*NCC*, Volume Two).

Renovation means any *alterations* or addition to an existing *class 1 building* or the *sole-occupancy unit* of a *class 2 building* requiring *building* development approval.

Required as defined in *BCA*, Schedule 1:

Required means *required to satisfy a Performance Requirement or a Deemed-to-Satisfy Provision of the BCA as appropriate*.

Retail entity has the meaning given in the *Electricity Act 1994*.

Sanitary compartment as defined in Schedule 1 to the *BCA* (*NCC*, Volume One and Volume Two), means a room or space containing a closet pan or urinal.

Shopping centre means premises comprising two or more individual tenancies that is comprised primarily of shops and which function as an integrated complex.

Shower means a separate and lockable compartment equipped with a showerhead.

Small home means a detached *class 1 building* with a *floor area* of 50 m² or less.

Special approval holder as defined in section 57 and Schedule 5 to the *Electricity Act 1994*, means a *special approval holder* is a person who has a special approval.

Software rating means a star energy rating (out of 10 stars), calculated using *NatHERS accredited software*.

Sole-occupancy unit as defined in Schedule 1 to the *BCA* (*NCC*, Volume One and Volume Two), means 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:

- (1) a dwelling; or
- (2) a room or suite of rooms in a *Class 3 building* which includes sleeping facilities; or
- (3) a room or a suite of associated rooms in a *Class 5, 6, 7, 8 or 9 building*; or

- (4) 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.

Standard means the edition of Australian Standard AS 62053.21, AS 1284.1 and AS 2890.3 referenced by this QDC part.

Structure as defined in the *Building Act 1975*, Schedule 2:

structure includes a wall or fence and anything fixed to or projecting from a *building*, wall, fence or other structure.

Storey as defined in Schedule 1 to the *BCA (NCC, Volume One and Volume Two)*:

a space within a *building* which is situated between one floor level and the floor level next above, or if there is no floor above, the ceiling or roof above, but not:

- (a) a space that contains only:
 - (i) a lift shaft, stairway or meter room; or
 - (ii) a bathroom, shower room, laundry, water closet, or other *sanitary compartment*; or
 - (iii) accommodation intended for not more than 3 vehicles; or
 - (iv) a combination of the above; or
- (b) a mezzanine.

Tertiary education facility means a *class 9b building* that is in a university, college or similar establishment and does not include a primary or secondary school.

Total R-Value as defined in Schedule 1 to the *BCA (NCC, Volume One and Volume Two)*:

The sum of the R-Values of the individual component layers in a composite element including any *building* material, insulating material, airspace, thermal bridging and associated surface resistances, expressed in m².Kelvin/Watt or m².K/W.

Unenclosed space means—

- (1) generally, a space that is not bounded by a wall or other substantially solid perimeter construction, whether or not the construction incorporates vents, air bricks or other ventilation openings required by the *NCC*, but may be bounded by battens, lattice, screening or similar construction that allows airflow through the space; or
- (2) for a space used for car-parking, a space that has at least one side that is permanently open.

Unisex design means suitable for any gender.

Water service as defined in the *Water Supply (Safety and Reliability) Act 2008*, Schedule 3:

- (1) Water service means:
 - (a) water harvesting or collection, including, for example, water storages, groundwater extraction or replenishment and river water extraction; or
 - (b) the transmission of water; or
 - (c) the reticulation of water; or
 - (d) drainage, other than stormwater drainage; or
 - (e) water treatment or recycling.
- (2) For Chapter 2, Part 3 [of the *Water Supply (Safety and Reliability) Act 2008*], the term does not include a service supplied by infrastructure, if:

- (a) the infrastructure is used solely for mining purposes; or
- (b) the service is used only by:
 - (i) the owner of the infrastructure or the owner's guests or *employees* including, for example, guests at a resort; or
 - (ii) if the owner of the infrastructure is a body corporate for a *community titles scheme*, however described, established under an Act—the *occupants* of lots in the scheme.

Examples of body corporates for community title schemes:

- a body corporate under the *Body Corporate and Community Management Act 1997*.
- a community body corporate or a precinct body corporate under the *Mixed Use Development Act 1993*.
- the primary thoroughfare body corporate or the principal body corporate under the *Sanctuary Cove Resort Act 1985*.

Water service provider as defined in the *Water Supply (Safety and Reliability) Act 2008*, Schedule 3:

an entity registered under the *Water Supply (Safety and Reliability) Act 2008*, Chapter 2, Part 3, as the water service provider for retail water services for the premises.

Workforce numbers means the number of day-time *employees* that are *full-time equivalents*.

Chapter 2 Performance Criteria and Acceptable Solutions

1 Energy efficiency – class 1 *buildings*

P1 Performance criteria

- (1) A *class 1 building* and an enclosed *class 10a building* attached to a *class 1 building* must comply with *performance requirements* H6P1 (thermal performance) and H6P2 (energy usage) in the *BCA (NCC, Volume Two)*.

A1 Acceptable solution

- (1) In addition to the *acceptable solutions* provided under H6D2(1) (thermal performance) in the *BCA (NCC, Volume Two)*, A1(2), (3), (4) and (5) are *acceptable solutions* for H6P1.
- (2) Subject to A1(3) and (4), a *class 1 building* and an enclosed *class 10a building* attached to it comply with H6P1 if they:
- (a) comply with the requirements identified in 3.12.0(a)(ii) in the *BCA 2019 (NCC 2019, Volume Two)*; and
 - (b) obtain a nominal credit of 1 star under A1(9)(b).
- (3) A *small home* and an enclosed *class 10a building* attached to it comply with H6P1 if they achieve:
- (a) a 5-star *NatHERS* rating; or
 - (b) a 4.5-star *NatHERS* rating and obtain a 0.5-star nominal credit under A1(9)(a); or
 - (c) a 4-star *NatHERS* rating and obtain a 1-star nominal credit under A1(9)(b).
- (4) A *class 1 building* with *raised floor construction* and an enclosed *class 10a building* attached to it comply with H6P1 if they achieve:
- (a) a 6-star *NatHERS* rating; or
 - (b) a 5.5-star *NatHERS* rating and obtain a 0.5-star nominal credit under A1(9)(a); or
 - (c) a 5-star *NatHERS* rating and obtain a 1-star nominal credit under A1(9)(b).
- (5) A *class 1 building*, and an enclosed *class 10a building* attached to it, in *BCA climate zone 5* comply with H6P1 if they comply with Parts 13.2, 13.3, 13.4 and 13.5 of the *ABCB Housing Provisions Standard*, with Table 13.2.6a applying as if the “X” for climate zone 5 were replaced by “reflective insulation facing down with a minimum R-Value of 2.5”.
- (6) For A1(3) and (4)—
- (a) compliance with the separate heating load limit and separate cooling load limit under the *BCA (NCC, Volume Two)* is not required; and
 - (b) compliance with the total thermal energy load limit under the *BCA (NCC, Volume Two)* is required.
- (7) A *building* that complies with:
- (a) A1(2) is deemed to be equivalent to a 7-star *NatHERS* rating;

- (b) A1(3) is deemed to be equivalent to a 5-star NatHERS rating; and
- (c) A1(4) or A1(5) is deemed to be equivalent to a 6-star NatHERS rating.
- (8) A1(9) applies to the calculation of a nominal credit for an *outdoor living area*.
- (9) The following nominal credits apply if a *building* includes an *outdoor living area*:
 - (a) 0.5 star if the *outdoor living area* is fully covered with an impervious roof having a Total R-Value greater than or equal to 1.5 for downward heat flow; or
 - (b) 1 star if the *outdoor living area* is fully covered with an impervious roof having a Total R-Value greater than or equal to 1.5 for downward heat flow and has at least one permanently installed ceiling fan with a speed controller that serves the area.
- (10) For A1(9)(b), the floor area that a single ceiling fan serves must not exceed:
 - (a) 15 m² if the fan has a blade rotation diameter of less than 1200 millimetres; or
 - (b) 25 m² if the fan has a blade rotation diameter of greater than or equal to 1200 millimetres.
- (11) Nothing in A1(2) to (10) affects the requirement to comply with H6P2 (energy usage) of the *BCA (NCC, Volume Two)*.

Note: Nominal credits available under A1 apply only to demonstrating compliance with H6P1 (thermal performance). Compliance with H6P2 (energy usage) must be demonstrated separately.

2 Energy efficiency – class 2 *buildings*

P2 Performance criteria

- (1) *Sole-occupancy units* in *class 2 buildings* must comply with *performance requirements* J1P2 (thermal performance) and J1P3 (energy usage) in the *BCA (NCC, Volume One)*.

A2 Acceptable solution

- (1) In addition to the *acceptable solutions* provided under J2D2(2) (thermal performance) in the *BCA (NCC, Volume Two)*, A2(2) is an *acceptable solution* for J1P2.
- (2) For the purposes of calculating the average *software rating* for the elemental provisions in J3D3(1)(a)(i) in the *BCA (NCC, Volume One)*, for all *sole-occupancy units* of a *class 2 building* in *BCA climate zones* 1, 2, 3 and 5, the following nominal credits apply towards the *building's* average *software rating*:
 - (a) 0.5 stars where a *sole-occupancy unit* includes an *outdoor living area* fully covered with an impervious roof that:
 - (i) has a total R-Value greater than or equal to 1.5 (for downward heat flow); or
 - (ii) forms the floor of an *outdoor living area* immediately above; or
 - (b) 1 star where a *sole-occupancy unit* includes an *outdoor living area* that has at least one ceiling fan that complies with A2(3) and is fully covered by an impervious roof that:
 - (i) has a total R-Value greater than or equal to 1.5 (for downward heat flow); or
 - (ii) forms the floor of an *outdoor living area* immediately above.
- (3) For A2(2)(b), the floor area that a single ceiling fan serves must not exceed:

- (a) 15 m² if the fan has a blade rotation diameter of less than 1200 millimetres; or
- (b) 25 m² if the fan has a blade rotation diameter of greater than or equal to 1200 millimetres.
- (4) To achieve a nominal credit under A2(2)(b), an air-conditioner that services any room directly adjacent to an *outdoor living area* must automatically shut down when an external door that provides access to the *outdoor living area* is open for more than 1 minute.
- (5) Nothing in A2(2) to (4) affects the requirement to comply with J1P3 (energy usage) of the *BCA (NCC, Volume One)*.

Note: Nominal credits available under A2 apply only to demonstrating compliance with J1P2 (thermal performance). Compliance with J1P3 (energy usage) must be demonstrated separately.

3 Water conservation

P3 Performance criteria

- (1) In a *class 1* or *class 2 building*, in an area serviced by a water service provider, toilet cisterns and bowls must facilitate the efficient use of water.

A3 Acceptable solution

- (1) In a *class 1* or *class 2 building*, in an area serviced by a water service provider, all toilet cisterns:
 - (a) have a dual flush function and have a minimum 4-star WELS rating; and
 - (b) are compatible with the size of the toilet bowl to allow for proper functioning of the toilet.

Note: All other water efficiency requirements are set out in B1D2 of the Plumbing Code of Australia.

4 Electricity sub-metering

P4 Performance criteria

- (1) The *electricity* supplied to each *meterable premises* is able to be measured.

A4 Acceptable solution

- (1) Each *meterable premises* has an *electricity sub-meter* installed which measures only the *electricity* supplied to that *meterable premises*.

P5 Performance criteria

- (1) An *electricity meter* must be located so it is easy and safe to read and maintain at any reasonable time.

A5 Acceptable solution

- (1) The *electricity sub-meter* is:
 - (a) installed in a *common area*; and
 - (b) free of hindrance or obstruction to a person authorised to read and/or maintain the *electricity sub-meter*.

P6 Performance criteria

- (1) The *electricity meter* for each *meterable premises* must be labelled to indicate which *meterable premises* it is associated with.

A6 Acceptable solution

- (1) A *meter label* identifying which *meterable premises* it is associated with is affixed or located adjacent to the *electricity sub-meter* for each *meterable premises*.

5 End-of-trip facilities

P7 Performance criteria

- (1) End-of-trip facilities are provided for *employees* or *occupants*, in a *building* or on-site within a reasonable walking distance, and include:
- (a) adequate *bicycle* parking and storage facilities; and
 - (b) adequate provision for securing belongings; and
 - (c) *change rooms* that include adequate showers, *sanitary compartments*, wash basins and mirrors.
- (2) Despite P7(1), there is no requirement to provide end-of-trip facilities if it would be unreasonable to provide these facilities having regard to:
- (a) the projected population growth and forward planning for road upgrading and development of cycle paths; or
 - (b) whether it would be practical to commute to and from the *building* on a *bicycle*, having regard to the likely commute distances and nature of the terrain; or
 - (c) the condition of the road and the nature and amount of traffic potentially affecting the safety of commuters.

A7 Acceptable solution

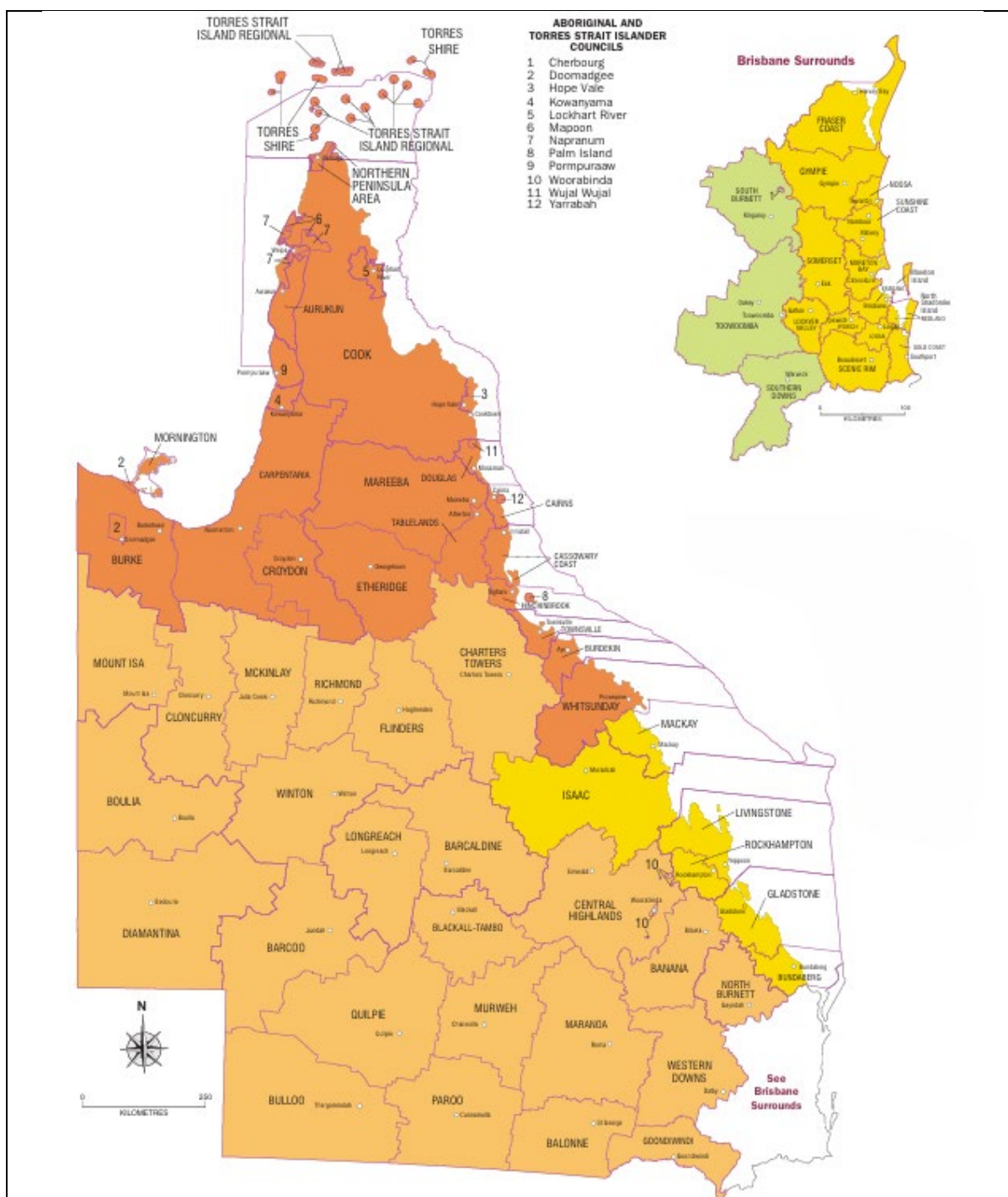
- (1) *Bicycle* parking and storage facilities are:
- (a) easily accessible and provided in a *building*, or on-site within 100 metres of an *entrance* to a *building*, in accordance with:
 - (i) five percent (5%) of the number of *employees*, based on workforce numbers;
 - (ii) the occupant ratios in Schedule 4 (rounded up to the nearest whole number); and
 - (b) designed and constructed in compliance with AS 2890.3 (including modifications as specified in Schedule 3).
- (2) *Lockers* are:
- (a) provided in a *building*, or on-site within 100 metres of an *entrance* to a *building*, on a 1.6:1 ratio for every *bicycle* parking space; and
 - (b) co-located or located within 50 metres of *change rooms* required by A7(3); and
 - (c) provided with minimum dimensions of 900 millimetres (height) x 300 millimetres (width) x 450 millimetres (depth).
- (3) *Change rooms*:
- (a) are provided in a *building*, or on-site within 100 metres of an *entrance* to a *building* and comply with Schedule 5, Table A, Column B; and
 - (i) are fitted with a lockable door or otherwise screened from public view; and
 - (ii) are located within 100 metres of *bicycle* parking and storage facilities required by A7(1) if the *bicycle* parking and storage facilities and *change rooms* are not located in a *building*.
- (4) *Change rooms* provide:
- (a) showers that:

- (i) are located within *change rooms* and meet Schedule 5, Table A, Column C; and
 - (ii) have a minimum 3-star WELS rating shower head; and
 - (iii) dispense both hot and cold water; and
 - (b) *sanitary compartments* that:
 - (i) are located within *change rooms*, and meet Schedule 5, Table A, Column D; and
 - (ii) are constructed in compliance with F4D4 and F4D8 of the *BCA (NCC, Volume One)*; and
 - (c) wash basins that are located within *change rooms* and meet Schedule 5, Table A, Column E; and
 - (d) a mirror located above wash basins; and
 - (e) a hook and bench seating located within each shower compartment; and
 - (f) a socket-outlet located adjacent to each wash basin.
- (5) Where *change room* requirements are predominantly located in a carpark or on a basement floor that is not regularly used by *occupants* or *employees*, they may not be counted towards the requirements of Part F4 in the *BCA (NCC, Volume One)*.
- (6) Despite A7(1) to A7(4), a local government planning scheme may require additional *bicycle* parking and storage facilities, *locker* facilities, *change rooms*, showers, *sanitary compartments*, wash basins and mirrors.

Notes:

- For A7(1)(a) – the occupant ratios may be used where *employees* based on workforce numbers cannot be determined accurately.
- For A7(6) – it is recommended that in all cases confirmation be obtained from the relevant local government as to whether it has any *end-of-trip facility* requirements for a *building* in its planning scheme.

Schedule 1 – BCA climate zones



Source: Australian Building Codes Board (ABCB) Climate Zone Map. Licensed under CC BY 4.0.

BCA climate zone*	Prevailing climatic conditions
Zone 1 – Tropical	Hot humid summer, warm winter.
Zone 2 – Subtropical	Warm humid summer, mild winter.
Zone 3 – Hot arid	Hot dry summer, warm winter days and cold nights.
Zone 5 – Warm temperate	Warm summers, cold winters.

* BCA climate zone boundaries are based on local government areas.

Note: Queensland does not have an area covered by BCA climate zone 4.

Schedule 2 – Designated Local Governments

Below are the designated local governments for *end-of-trip facilities*:

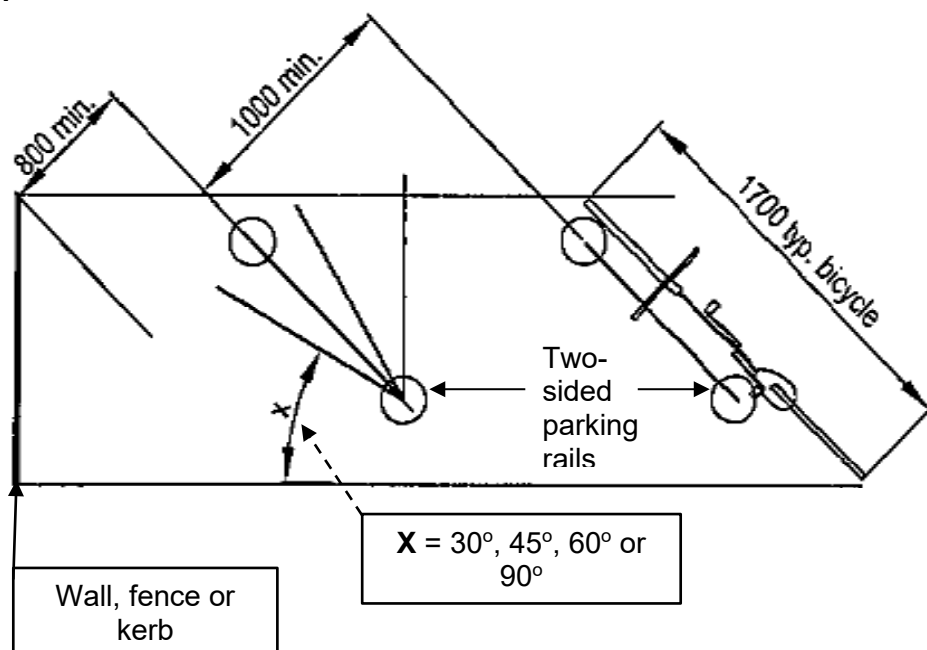
- Brisbane City Council
- Bundaberg Regional Council
- Cairns Regional Council
- Central Highlands Regional Council
- Fraser Coast Regional Council
- Gladstone Regional Council
- Gold Coast City Council
- Gympie Regional Council
- Ipswich City Council
- Livingstone Shire Council
- Logan City Council
- Mackay Regional Council
- Moreton Bay Regional Council
- Mount Isa City Council
- Noosa Shire Council
- Redland City Council
- Rockhampton Regional Council
- Southern Downs Regional Council
- Sunshine Coast Regional Council
- Toowoomba Regional Council
- Townsville City Council
- Western Downs Regional Council

Schedule 3 – AS 2890.3:1993 modifications

Below are the modifications to AS 2890.3:1993 for the purposes of QDC MP 4.1:

Australian Standard clauses affected	QDC MP 4.1 modifications
2.2.4	In addition to clause 2.2.4: Vertical storage can also comprise alternative <i>bicycle</i> storage area requirements that are available within the marketplace (e.g. wall mounted rails and racks, pods).
2.2.6	In addition to clause 2.2.6: Open plan storage layouts can also comprise alternative <i>bicycle</i> storage area requirements that are available within the marketplace (e.g. double parker/double <i>storey</i> parking systems, pods).
Figure 2.1	In addition to Figure 2.1, Figure 1 below also applies.

Figure 1



Schedule 4 – Occupant ratios

Below are the minimum number of *bicycle* spaces *required* based on the occupant ratios for various *major developments*:

(A) <i>Building type</i>	(B) <i>Bicycle spaces</i>	(C) <i>Security classification</i> (Refer to AS 2890.3:1993, Table 3.1)
<i>Commercial office building</i>	1 per 30 <i>occupants</i>	2
<i>Shopping centre</i>	1 per 500 <i>occupants</i>	2
<i>Tertiary education facility</i>	1 per 375 <i>occupants</i>	2
<i>Hospital</i>	1 per 100 <i>occupants</i>	2

Schedule 5 – Change room requirements

Table A

Below are the *change room* requirements and *required* fixtures based on *bicycle* parking spaces:

(A) Change room requirements based on <i>bicycle</i> parking spaces	User group	(B) Change room provisions	(C) Number of showers required	(D) Number of <i>sanitary compartments</i> required	(E) Number of wash basins required
1 – 5	Female and male	1 <i>change room</i> of unisex design	1	1 closet pan	1
6 – 19	Female	1	1	1 closet pan	1
	Male	1	1	1 closet pan	1
20 or more	Female	1	2, plus 1 additional shower for every 20 <i>bicycle</i> parking spaces provided thereafter*.	2 closet pans, plus 1 additional <i>sanitary compartment</i> for every 60 <i>bicycle</i> parking spaces provided thereafter*.	1, plus 1 additional wash basin for every 60 <i>bicycle</i> parking spaces provided thereafter*.
	Male	1	2, plus 1 additional shower for every 20 <i>bicycle</i> parking spaces provided thereafter*.	1 urinal and 1 closet pan, plus 1 additional <i>sanitary compartment</i> at the rate of 1 closet pan or 1 urinal for every 60 <i>bicycle</i> parking spaces provided thereafter*.	1, plus 1 additional wash basin for every 60 <i>bicycle</i> parking spaces provided thereafter*.

* Refer to **Table B** for example of workings.

Table B

Below are the numbers used to calculate the associated change room aspects based on bicycle parking spaces provided in the building (from Table A):

Change room requirements based on <i>bicycle</i> parking spaces	User group	20–39 <i>bicycle</i> parking spaces	40–59 <i>bicycle</i> parking spaces	60–79 <i>bicycle</i> parking spaces	80–99 <i>bicycle</i> parking spaces
Number of showers required	Female and male	2	3	4	5
Number of <i>sanitary</i> compartments required	Female and male	2	2	2	3
Number of wash basins required	Female and male	1	1	1	2