

# Energy Requirements for Class 1 Building Update



## Compliance for Energy Requirements for Class 1 Buildings with QDC MP 4.1

National Construction Code (NCC) 2019 Section 3 Acceptable construction, Part 3.12 Energy efficiency, sets out the Deemed to Satisfy (DTS) requirements for Energy efficiency for Class 1 buildings. Part 3.12 also sets out the DTS State and Territory Variations that are alternative pathways to compliance.<sup>1</sup>

4) In Queensland, building work for the energy efficiency of Class 1 buildings is also regulated by the Building Act 1975 and the Queensland Development Code, QDC MP 4.1 – Sustainable buildings.

QDC MP 4.1 – Sustainable buildings was updated in Sept 2020 and became effective from 1st Mar 2021.<sup>2</sup>

**To comply to QDC MP 4.1, possible pathways to compliance include:**

- Meet BCA 2010 DTS, or
- Meet BCA 2009 DTS and use 1 star nominal credit

### BCA 2010 DTS: Table 3.12.1.3a – OPTIONS FOR EACH PART OF AN EXTERNAL WALL

In QLD climate zones: 1, 2, 3 and 5:

- Achieve a minimum Total R-Value of 2.8, or
- (i) Achieve a minimum Total R-Value of 2.4; and  
(ii) shade the external wall of the storey with a verandah, balcony, eaves, carport or the like, which projects at a minimum angle of 15 degrees in accordance with Figure 3.12.1.2.

*Note: not including external walls with surface density of not less than 220kg/m<sup>2</sup>.*

### BCA 2009 DTS and 1 star nominal credit: Table 3.12.1.3 – OPTIONS FOR EACH PART OF AN EXTERNAL WALL

In QLD climate zones: 1, 2 (300m below altitude), and 3:

- Achieve a minimum Total R-Value of 1.9, or
- (i) Achieve a minimum Total R-Value of 1.4; and  
(ii) be constructed on a flooring system that is in direct contact with the ground, such as a concrete slab-on-ground or the like.

#### Plus 1 star nominal credit.

In QLD climate zones: 2 (300m above altitude), and 5:

- Achieve a minimum Total R-Value of 1.9.

#### Plus applied 1 star credit.

*Note: not including external walls with surface density of not less than 220kg/m<sup>2</sup>.*

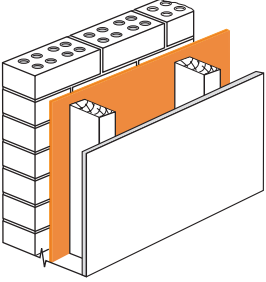
1 star nominal credit achieved via:

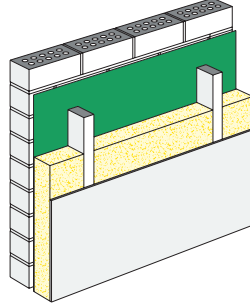
- including an outdoor living area with R<sub>1.5</sub> roof (includes a permanently installed ceiling fan with a speed controller and a blade rotation diameter of at least 900mm) or
- building has a solar photovoltaic system of at least 1kW installed.

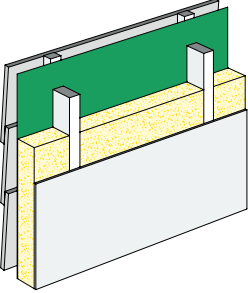
<sup>1</sup> Refer to National Construction Code (NCC) 2019 Building Code of Australia (BCA) Volume Two, Section 3 Acceptable construction, Part 3.12 Energy efficiency, page 367–371

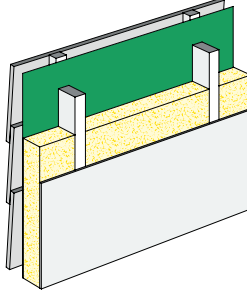
<sup>2</sup> Refer to the Queensland Development Code MP 4.1 Sustainable buildings

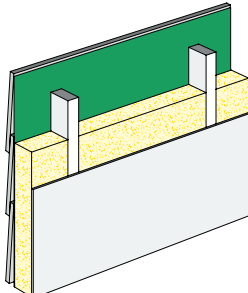
# CSR Bradford compliance to QDC MP 4.1 via BCA 2009 DTS and 1 star nominal credit

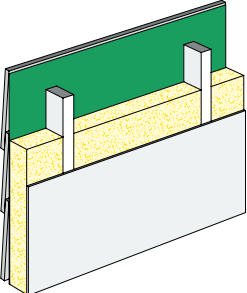
	<b>Brick Veneer Wall</b>
	No Insulation
	Summer
	<b><math>R_t</math> 1.6</b>
Slab on Ground 70mm stud	
To comply install - Bradford Thermoseal Wall Wrap XP Plus with no insulation batts	

	<b>Brick Veneer Wall</b>
	Insulation
	Summer
	<b><math>R_t</math> 2.3</b>
Slab on Ground 70mm stud	
To comply install - Bradford Enviroseal and R <sub>m</sub> 2.0 Gold Wall Batt (75mm)*	

	<b>Lightweight Clad (Battened)</b>
	Insulation
	Summer
	<b><math>R_t</math> 1.8</b>
Slab on Ground 70mm Stud	
To comply install - Bradford Enviroseal and R1.5 Gold Wall Batt	

	<b>Lightweight Clad (Battened)</b>
	Insulation
	Summer
	<b><math>R_t</math> 2.1</b>
Not Slab on Ground 70mm Stud	
To comply install - Bradford Enviroseal and R <sub>m</sub> 2.0 Gold Wall Batt (75mm)*	

	<b>Lightweight Clad (Direct Fix)</b>
	Insulation
	Summer
	<b><math>R_t</math> 1.6</b>
Slab on Ground 70mm stud	
To comply install - Bradford Enviroseal and R1.5 Gold Wall Batt	

	<b>Lightweight Clad (Direct Fix)</b>
	Insulation
	Summer
	<b><math>R_t</math> 2.0</b>
Not Slab on Ground 70mm Stud	
To comply install - Bradford Enviroseal and R <sub>m</sub> 2.0 Gold Wall Batt (75mm)*	

Slab on Ground requires min  $R_{t,1.4}$   
Not Slab on Ground requires min  $R_{t,1.9}$

\*75mm insulation in 70mm stud: compression accounted for

For more information, please contact the CSR Bradford Technical Specialist team.  
For Sales Support, please contact your CSR Bradford Account Manager.

**CSR Bradford**  
39 Delhi Road, North Ryde NSW 2113, Australia  
**Tel: 1800 354 044 Email: bradfordenquiries@csr.com.au**  
**Web: bradfordinsulation.com.au**

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Doc ref: Energy requirement for Class 1 building update bulletin

