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Government of **Western Australia**
Department of **Mines, Industry Regulation and Safety**



Information Session

Bush fire changes and
NCC 2019 Volume Two
energy efficiency





Welcome to Country

The Department of Mines, Industry Regulation and Safety acknowledges Aboriginal and Torres Strait Islander people as the Traditional Custodians of this land on which we meet. We pay our respects to elders and leaders past, present and emerging



House Keeping & Overview

Topics

- Changes to bush fire requirements in the Building Regulations 2012.
- Changes to the approved forms BA3 – Certificate of design compliance and BA18 – Certificate of building compliance
- An overview of the changes in the 2018 edition of AS 3959 – Construction of buildings in bushfire prone areas.
- A summary of the NCC 2019, Volume 2 energy efficiency requirements.
- NatHERS Ratings

No Video or Audio Recording



Presenters

- Josclyn Sloan – *Policy Branch*
- Allan Meikle – *Standards Branch*
- Vicki Do – *Standards Branch*
- Mark Fortey – *Standards Branch*
- James Cross – *ABSA Board of directors deputy chair; BDAA Margaret River Chapter President*



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Department of **Mines, Industry Regulation and Safety**



Bush Fire Amendment Regulations

Presented by **Josclyn Sloan**



Building Amendment Regulations 2021

- Commenced operation on 1 May 2021
- www.legislation.wa.gov.au





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Department of **Mines, Industry Regulation and Safety**



Regulation 31BA

**Applicable building standard
for bush fire prone areas**

Modified definition - ‘Relevant building’

Means a **Class 1, Class 2 or Class 3** building that was **not required** to comply or substantially comply with a **bush fire standard** at the latest of the following times —

- (a) when the building was **constructed**;
- (b) if 1 or more applications or notices under **section 49(b) or 51(2) or (3) or regulation 47(1)** have been made or given in respect of the building — when the application or notice, or the last application or notice, was made or given;
- (c) if the building has been **relocated** — when the building was last relocated.

New definition - ‘bush fire standard’

Means -

- (a) a **bush fire performance requirement**; or
- (b) to the extent not covered by paragraph (a), a requirement impose under **any written law** that is a requirement relating to —
 - (i) a **technical aspect of the construction** of a building or incidental structure; and
 - (ii) **bush fires.**

Note: Paragraph (b) includes, for example, requirements imposed under the Building Regulations 1989.

Unchanged - ‘excluded building work’

Means building work that is the **renovation, alteration, extension, improvement or repair** of a relevant building if —

- (a) the estimated value of the building work is **less than \$20 000**; or
- (b) the renovation, alteration, extension, improvement or repair **does not increase the risk of ignition** from bushfire attack for the relevant building.

New Table (examples) & Class 10 concession

Item	Column 1 - Purposes	Column 2 - Applicable building standards
1.	<p>Section 19(3) in respect of all kinds of buildings and incidental structures located in a bush fire prone area</p>	<p>The requirements mentioned in regulation 31A(2) except that the bush fire performance requirements are not applicable building standards if —</p> <ul style="list-style-type: none"> (a) the building or incidental structure is or will be located in an area that, at any time during the 4-month period ending on the day on which the application is made, was not a bush fire prone area; or (b) the building work that is proposed to be done in respect of the building or incidental structure is excluded building work only; or (c) the building or incidental structure is or will be — <ul style="list-style-type: none"> (i) a Class 10a building or deck; and (ii) associated with a relevant building.

New concessions - unauthorised work

Item	Column 1 - Purposes	Column 2 - Applicable building standards
6.	<p>Section 57(3) for an application mentioned in section 51(3) in respect of all kinds of buildings and incidental structures located in a bush fire prone area</p>	<p>The requirements mentioned in regulation 31G(2) except that the bush fire performance requirements are not applicable building standards if —</p> <ul style="list-style-type: none">(a) the building or incidental structure is located in an area that, at any time during the 4-month period ending on the day on which the application is made, was not a bush fire prone area; or(b) the unauthorised work done in respect of the building or incidental structure is excluded building work only; or(c) the building or incidental structure is—<ul style="list-style-type: none">(i) a Class 10a building or deck; and(ii) associated with a relevant building.

r. 31BA(1)

Overview of concession for bush fire

Item	Section of Building Act	4 month transition	Alterations and extensions	Class 10a buildings and decks
1	s.19(3) : certificate of design compliance	✓	✓	✓
2	s.37(1) : applicable building standards where building permit is required	✓	✓	✓
3	s.37(2) : applicable building standards where building permit is not required	✓	✓	✓
4	s.57(3) for s.49(b) : certificate of building compliance for occupancy permit (change of classification)	✓		
5	s.57(3) for s.51(2) : certificate of building compliance for occupancy permit (unauthorised building work)	✓	✓	
6	s.57(3) for s.51(3) : certificate of building compliance for building approval certificate (unauthorised building work)	✓	✓	✓

New – Clarify relocated buildings

- (2) Item 1, 2 or 3 (as the case may be) of the Table to subregulation (1) **does not apply** if the building work is the assembly, reassembly or securing of a **relocated building or a relocated incidental structure**.

Note for this subregulation:

See also regulation 31D.

New – anti-avoidance clause

(3) Column 2 paragraph (b) of item 1, 2, 3, 5 or 6 (as the case may be) of the Table to subregulation (1) **does not apply** if the excluded building work is **part of a larger project** of building work that has been **divided up for the sole or dominant purpose of taking advantage** of that paragraph.



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Regulation 31D

**Applicable building standard for
relocated buildings and incidental structures**

r. 31D(1AA) & (1A)

New definition added

- (1AA) In this regulation —
relevant building has the meaning given in regulation 31BA(1A).
- (1A) This regulation does not apply to a swimming pool.

Purpose

- (1) For the purposes of the definition of *applicable building standard* in section 3, the building standards set out in subregulation (2) are prescribed as applicable building standards **for the purposes of sections 19(3) and 37(1) and (2)** in respect of the assembly, reassembly or securing of a relocated building or a relocated incidental structure.

Applicable building standard

- (2) For subregulation (1), the applicable building standards are the requirements in relation to the technical aspects of the construction of the relocated building or incidental structure that were **imposed under the written law applicable** at the time the relocated building or incidental structure was **first assembled, except** to the extent that **subregulations (3), (4) and (5)** of this regulation otherwise provide.

Requirement to upgrade

- (3) The applicable building standards include those that relate to a performance requirement that is—
- (a) **listed in the Table**; and
 - (b) **applicable to** buildings or incidental structures of **the classification** of the relocated building or incidental structure; and
 - (c) set out in the **edition of the Building Code** —
 - (i) for **sections 19(3) or 37(1)** — mentioned in regulation 31A(2)(a), (b) or (c), subject to regulation 31A(2A) and (3); or
 - (ii) for **section 37(2)** — in effect at the time the assembly, reassembly or securing of the relocated building or incidental structure commenced.

Requirement to upgrade – Continued

Section or part of Building Code	Performance requirements
Volume One, Section B — Structure	BP1.1, BP1.2, BP1.3, BP1.4
Volume One, Section C — Fire resistance	CP1, CP2, CP3, CP4, CP5, CP6, CP7, CP8, CP9
Volume One, Section D — Access and egress	DP2, DP3, DP4, DP5, DP6
Volume One, Section E — Services and equipment	EP1.1, EP1.2, EP1.3, EP1.4, EP1.5, EP1.6, EP2.1, EP2.2, EP4.1, EP4.2, EP4.3
Volume One, Section G — Ancillary provisions	GP2.1, GP2.2, GP5.1
Volume Two, Part 2.1 — Structure	P2.1.1, P2.1.2
Volume Two, Part 2.3 — Fire safety	P2.3.2
Volume Two, Part 2.5 — Safe movement and access	P2.5.1, P2.5.2
Volume Two, Part 2.7 — Ancillary provisions and additional construction requirements	P2.7.3, P2.7.5, P2.7.6

Concession for energy efficiency

- (4) The applicable building standards include those that relate to a performance requirement that is —
- (a) listed in the Table; and**

Section or part of Building Code	Performance requirements
Volume One, Section J — Energy Efficiency	JP1, JP2, JP3
Volume Two, Part 3.12 — Energy Efficiency	P2.6.1, P2.6.2



r. 31D(4)

Concession for energy efficiency

- (b) applicable to buildings or incidental structures —
 - (i) **of the classification** of the relocated building or incidental structure; and
 - (ii) **in the geographical area** where the relocated building or incidental structure was **first assembled**; and

- (c) set out in the **edition of the Building Code** in effect —
- (i) if subparagraph (ii) does not apply — **at the time of, or 12 months before**, the first application for a building permit to assemble the relocated building or incidental structure (whichever was applied by the building surveyor in respect of the building or incidental structure); or
 - (ii) if **no building permit** to assemble the relocated building or incidental structure has ever been required — **at the time of the first assembly** of the relocated building or incidental structure.

Concessions for bush fire (with example)

- (5) The **bush fire performance requirements are not applicable building standards** for the purposes of the section set out in Column 1 of **the Table** in the circumstances set out in Column 2 of the Table opposite the section.

Column 1 - Section	Column 2 - Circumstances
s. 19(3)	If — (a) the relocated building or incidental structure will be relocated to an area that, at any time during the 4-month period ending on the day on which the application is made, was not a bush fire prone area; or (b) the relocated building or incidental structure — (i) is a Class 10a building or deck ; and (ii) will be associated with a relevant building once relocated.



r. 31BA(4) & r.31HB

Transitions - existing building permits

New r.31BA(4) – transition of the term ‘relevant building’ for building permits obtained or construction commenced before 1 May 2021;

New r.31HB – includes existing r.31BA transitional provisions for buildings in areas that were designated bushfire prone prior to 8 April 2015.



Minor amendments

Section 39 transitional bush fire applications extended to 1 September 2023.

Regulation 18A (for CDC) and regulation 36 (for CBC) updated to reflect changes to regulation 31BA and 31D.

Align language used in regulation 47 (for the 4-month transition) with regulation 31BA and 31D.

Industry bulletins

Building Amendment Regulations 2021 for bush fire

The Building Amendment Regulations 2021 (the Amendment Regulations) were published in the Government Gazette on 13 April 2021 and commence operation on 1 May 2021.

The Amendment Regulations address administrative matters around the conclusion of transitional arrangements for bush fire in the Building Regulations 2012 (the Building Regulations), and other related

A new anti-avoidance clause will be inserted at regulation 31BA to prevent misuse of the alterations and extensions concession for bush fire.

Industry Bulletin 137

Updated BA3 and BA18 certificate of compliance forms for building surveyors

New versions of the BA3 – Certificate of design compliance (CDC), and BA18 – Certificate of building compliance (CBC) forms have been approved and published by the Building Commissioner.

The changes to these forms are the result of the Building Amendment Regulations 2021 (the Amendment Regulations) that were published in the Government Gazette on 13 April 2021 and commence operation on 1 May 2021.

Where 'No' is selected, the building surveyor must nominate the relevant concession(s) provided under regulation 31BA or 31D. Examples of how to nominate concessions are provided at the end of this industry bulletin.



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Thank you



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Updated Forms

BA3 (CDC) and BA18 (CBC)

Presented by **Allan Meikle**





Examples of nominating a concession on CDC

19. Certificate of design compliance

(3) A certificate must contain a statement of the building surveyor signing the certificate to the effect that if the building or incidental structure that is the subject of the application is completed in accordance with the plans and specifications that are specified in the certificate, the building (including each incidental structure associated with the building) or incidental structure will comply with each applicable standard.



Scenario 1

The proposal is for a new Class 1a building which is to be built in an area which has been a designated bush fire prone area for the last 2 years and is BAL-12.5.

With this example how would you complete the BA3 Form?

Table to regulation 31BA(1)

Item	Column 1 - Purposes	Column 2 - Applicable building standards
1.	<p>Section 19(3) in respect of all kinds of buildings and incidental structures located in a bush fire prone area</p>	<p>The requirements mentioned in regulation 31A(2) except that the bush fire performance requirements are not applicable building standards if —</p> <p>(a) the building or incidental structure is or will be located in an area that, at any time during the 4-month period ending on the day on which the application is made, was not a bush fire prone area; or</p> <p>(b) the building work that is proposed to be done in respect of the building or incidental structure is excluded building work only; or</p> <p>(c) the building or incidental structure is or will be —</p> <p>(i) a Class 10a building or deck; and</p> <p>(ii) associated with a relevant building.</p>



New Class 1A Building located in a designated bushfire area – BAL 12.5

Bush fire prone areas (only required for the types of buildings or incidental structures stated below)

In respect of a Class 1, Class 2 or Class 3 building or an associated Class 10a building or deck that is located less than six (6) metres from the Class 1, Class 2 or Class 3 building:

Is the building or deck located in a bush fire prone area?

Yes

No (if No, continue to part 3)

Under regulation 31BA or 31D of the Building Regulations 2012, does a bush fire performance requirement apply to the building or deck?

Yes. The Bushfire Attack Level or other measure is: BAL - 12.5

No. Does not apply because of:

(if No, nominate the relevant concession(s) provided under regulation(s) 31BA or 31D)



Scenario 2

This proposal is for a new extension to an existing house (relevant building) located in an area that has been designed as bush fire prone for 4 years and the value of the building work is under \$20,000.

With this example how would you complete the BA3 Form?

Table to regulation 31BA(1)

Item	Column 1 - Purposes	Column 2 - Applicable building standards
1.	Section 19(3) in respect of all kinds of buildings and incidental structures located in a bush fire prone area	<p>The requirements mentioned in regulation 31A(2) except that the bush fire performance requirements are not applicable building standards if —</p> <p>(a) the building or incidental structure is or will be located in an area that, at any time during the 4-month period ending on the day on which the application is made, was not a bush fire prone area; or</p> <p>(b) the building work that is proposed to be done in respect of the building or incidental structure is excluded building work only; or</p> <p>(c) the building or incidental structure is or will be —</p> <ul style="list-style-type: none">(i) a Class 10a building or deck; and(ii) associated with a relevant building.

Concession for excluded building works which has an estimated value of less than \$20,000.00.

Bush fire prone areas (only required for the types of buildings or incidental structures stated below)

In respect of a Class 1, Class 2 or Class 3 building or an associated Class 10a building or deck that is located less than six (6) metres from the Class 1, Class 2 or Class 3 building:

Is the building or deck located in a bush fire prone area? Yes No (if No, continue to part 3)

Under regulation 31BA or 31D of the Building Regulations 2012, does a bush fire performance requirement apply to the building or deck?

Yes. The Bushfire Attack Level or other measure is:

No. Does not apply because of: r.31BA(1) Item 1(b) excluded building work less than \$20,000

(if No, nominate the relevant concession(s) provided under regulation(s) 31BA or 31D)



Scenario 3

Proposal is for a new extension to an existing house (relevant building) in a bush fire prone area:

- that does not increase the risk of ignition to the existing house; and
- Includes the construction of a Class 10a shed within 6m of the existing house.

With this example how would you complete the BA3 Form?

Table to regulation 31BA(1)

Item	Column 1 - Purposes	Column 2 - Applicable building standards
1.	<p>Section 19(3) in respect of all kinds of buildings and incidental structures located in a bush fire prone area</p>	<p>The requirements mentioned in regulation 31A(2) except that the bush fire performance requirements are not applicable building standards if —</p> <p>(a) the building or incidental structure is or will be located in an area that, at any time during the 4-month period ending on the day on which the application is made, was not a bush fire prone area; or</p> <p>(b) the building work that is proposed to be done in respect of the building or incidental structure is excluded building work only; or</p> <p>(c) the building or incidental structure is or will be —</p> <ul style="list-style-type: none"> (i) a Class 10a building or deck; and (ii) associated with a relevant building.



Extension to relevant building and a Class 10a building associated with the relevant building.

Bush fire prone areas (only required for the types of buildings or incidental structures stated below)

In respect of a Class 1, Class 2 or Class 3 building or an associated Class 10a building or deck that is located less than six (6) metres from the Class 1, Class 2 or Class 3 building:

Is the building or deck located in a bush fire prone area? Yes No (if No, continue to part 3)

Under regulation 31BA or 31D of the Building Regulations 2012, does a bush fire performance requirement apply to the building or deck?

Yes. The Bushfire Attack Level or other measure is:

No. Does not apply because of: r.31BA(1) Item1(b) excluded building work not increasing risk and r.31BA(1) Item1(c)
(if No, nominate the relevant concession(s) provided under regulation(s) 31BA or 31D)



Scenario 4

Proposal is to relocate a Class 10a building to a designated bush fire prone area. The relocated Class 10a building will be associated with a relevant building.

With this example how would you complete the BA3 Form?

Table to regulation 31D(5)

Column 1 - Section	Column 2 - Circumstances
s. 19(3)	<p>If —</p> <p>(a) the relocated building or incidental structure will be relocated to an area that, at any time during the 4-month period ending on the day on which the application is made, was not a bush fire prone area; or</p> <p>(b) the relocated building or incidental structure —</p> <ul style="list-style-type: none">(i) is a Class 10a building or deck; and(ii) will be associated with a relevant building once relocated.



Class 10a building relocated to designated bush fire prone area and associated with relevant building

Bush fire prone areas (only required for the types of buildings or incidental structures stated below)

In respect of a Class 1, Class 2 or Class 3 building or an associated Class 10a building or deck that is located less than six (6) metres from the Class 1, Class 2 or Class 3 building:

Is the building or deck located in a bush fire prone area? Yes No (if No, continue to part 3)

Under regulation 31BA or 31D of the Building Regulations 2012, does a bush fire performance requirement apply to the building or deck?

Yes. The Bushfire Attack Level or other measure is:

No. Does not apply because of: **r.31D(5),circumstance(b) – Class 10a associated with relevant building**

(if No, nominate the relevant concession(s) provided under regulation(s) 31BA or 31D)

Example of nominating a concession on a CBC

57. Certificate of building compliance

- (3) A certificate of building compliance that accompanies an application other than an application mentioned in section 48 or 52(1) or (2) must state that the building or incidental structure substantially complies with each applicable building standard.



Scenario 5

Unauthorised extension to a relevant building is constructed in a bush fire prone area and valued at under \$20,000.

With this example how would you complete the BA18 Form?

Table to regulation 31BA(1)

Item	Column 1 - Purposes	Column 2 - Applicable building standards
6.	Section 57(3) for an application mentioned in section 51(3) in respect of all kinds of buildings and incidental structures located in a bush fire prone area	<p>The requirements mentioned in regulation 31G(2) except that the bush fire performance requirements are not applicable building standards if —</p> <ul style="list-style-type: none">(a) the building or incidental structure is located in an area that, at any time during the 4-month period ending on the day on which the application is made, was not a bush fire prone area; or<li data-bbox="595 754 1866 869" style="border: 2px solid red;">(b) the unauthorised work done in respect of the building or incidental structure is excluded building work only; or(c) the building or incidental structure is—<ul style="list-style-type: none">(i) a Class 10a building or deck; and(ii) associated with a relevant building.



Building approval certificate for unauthorised building work to a Class 1a building.

Bush fire prone areas (only required for the types of buildings or incidental structures stated below)

In respect of a Class 1, Class 2 or Class 3 building or an associated Class 10a building or deck that is located less than six (6) metres from the Class 1, Class 2 or Class 3 building:

Is the building or deck located in a bush fire prone area? Yes No (if No, continue to part 3)

Under regulation 31BA or 31D of the Building Regulations 2012, does a bush fire performance requirement apply to the building or deck?

Yes. The Bushfire Attack Level or other measure is:

No. Does not apply because of: r.31BA(1) Item 6 (b) excluded building work less than \$20,000

(if No, nominate the relevant concession(s) provided under regulation(s) 31BA or 31D)



Thank you



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AS 3959

Construction of buildings in bushfire prone areas

Presented by Vicki Do





Overview

- Changes from AS 3959:2009 to AS 3959:2018
- Section 2 – Determining the BAL
- Section 3 – General construction requirements
- Section 4 – 9 – Construction requirements for specific BAL Level



Determining BAL

Section 2 – Determining the Bushfire Attack Level

Clause 2.1 – General

- Building and attached or adjacent structure – within 6 metres

Method 1 – Simplified Procedure

- Clause 2.2

Method 2 – Detailed Procedure

- Appendix B



Simplified Method

Section 2 – Determining the Bushfire Attack Level (BAL)

Step 1 – Relevant FDI

Step 2 – Vegetation classification types

Step 3 – Distance from site to classifiable vegetation

Step 4 – Effective slope of land under the classified vegetation

Step 5 – Determination of Bushfire Attack Level (BAL)

Step 6 – Construction requirements



Simplified Method

Section 2 – Determining the Bushfire Attack Level (BAL)

Step 1 – Relevant FDI

Step 2 – Vegetation classification types

Step 3 – Distance from site to classifiable vegetation

Step 4 – Effective slope of land under the classified vegetation

Step 5 – Determination of Bushfire Attack Level (BAL)

Step 6 – Construction requirements

Step 2 – Vegetation classification types

Table 2.3 – Classification of Vegetation

- Woodland
- Grassland (G)
 - Open woodland, Low open woodland, Open shrubland

Clause 2.2.3.2 – Exclusions

- Mangroves and other saline wetlands
- Market gardens and other non-curing crops



Effective slope

Step 4 – Effective slope of land under the classified vegetation

Clause 2.2.5

- Each slope shall be individually assessed
- Tables 2.4 – 2.7 – Determination of bushfire attack level



Determining BAL

Step 4 – Effective slope of land under the classified vegetation

Clause 2.2.6 (d) & (e)

- Assessed highest BAL applies
- Adjacent structures within 6 metres assessed separately



Construction Requirements

Section 3 – General construction requirements

- Specific construction requirements for openings
- Clarification of shielding provisions
- Clarification of protection of gaps and openings
- Allocation of Crib Class for testing to AS 1530.8.1



Protection of openings

Section 3 – General construction requirements

Clause 3.2 – Construction requirements for specific structures

- Doorways – **AS 1905.1** – Part 1: Fire-resistant doorsets & **AS 1530.4** – Part 4: Fire-resistance test of elements of construction
- Windows – **AS 1530.4**
- Other openings – **AS 1530.4**



Protection of openings

Section 3 – General construction requirements

Clause 3.6.1 – Vents, weepholes, joints and the like

- All gaps shall be screened

Clause 3.6.2 – Gaps to door and window openings

- Maximum aperture of 2.0 mm and tight fitting to frames
- Windows – **AS 2047** – Windows and external glazed doors

Clause 3.7 – Bushfire Shutters

- 2 mm gaps and aperture



Shielding

Section 3 – General construction requirements

Clause 3.5 – Shielding

- Shall not apply to subfloor or roofs



AS 1530.8.1 – Crib Class

Section 3 – General construction requirements

Clause 3.8 – Testing of materials, elements of construction and systems to the AS 1530.8 series

- BAL 12.5 to BAL 40 – AS 1530.8.1 – **Crib Class AA**
- BAL FZ – AS 1530.8.2 – **Crib Class (Not applicable)**

Acceptable

- AS 1530.8.1 – 2007 – **Crib Class A**



Subfloors

BAL 12.5 & BAL 19

Enclosed subfloor space

- No construction requirements – enclosed with a wall, mesh or perforated sheet

Unenclosed subfloor space

- Non-combustible or bushfire resisting timber
- Timber lined with sarking-type material or mineral wool insulation
- A system conforming with 1530.8.1.



Translucent Sheeting

BAL 12.5 & BAL 19

5.6.4 & 6.6.4 – Veranda, carport and awning roof

- Translucent or transparent roof coverings
- Separated from the main roof space by an external wall

Veranda Posts

Veranda Post

5.7.5 & 6.7.5 – BAL 12.5 & BAL 19

- Timber mounted on galvanized mounted shoes or stirrups with a clearance of not less than 75 mm;

or

- Non-combustible material
- Bushfire resisting timber
- Timber species specified – Appendix E



Veranda Posts

Veranda Post

7.7.5 – BAL 29

- Non-combustible material
- Bushfire resisting timber

8.7.5 & 9.7.5 – BAL 40 & BAL FZ

- Non-combustible material



Vehicle Access Doors

Doors – Vehicle access doors (garage doors)

ALL BALS

- Door assemblies fitted with guide tracks do not need edge gap protection

BAL 12.5, BAL 19 & BAL 29

- Vehicle access doors with ventilation slots – Clause 3.6

BAL 19, BAL 29 & BAL FZ

- Weather strips – Flammability index not exceeding 5



Evaporative Coolers

BAL 12.5, BAL 19 & BAL 29

Evaporative coolers

- AS/NZS 60335.2.98 – Part 2.98: Particular requirements for humidifiers



BAL – FZ Roofs

BAL FZ

Clause 9.6.2 & 9.6.3 - Tiled Roofs and Sheet Roofs

- Appendix H – Generic Roof Systems

Or

- AS 1530.8.2



Thank you



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2019 NCC

Energy Efficiency Requirements for Residential Buildings

Presented by **Mark Fortey**



Changes in the 2019 BCA

- Verification Method V2.6.2.2
- Verification Method V2.6.2.3
- Building Sealing Provisions Part 3.12.3
- NatHERS Energy Ratings Part 3.12.0.1



Changes to Part 3.12.0.1

2.4 **3.12.0.1** NatHERS heating and cooling load limits tables
Table 1 Class 1 CSOG - Heating and cooling load limits applying to NatHERS 6 stars

NatHERS climate zone	Applicable State and/or Territory	Heating load limit (MJ/m ² .annum)	Cooling load limit (MJ/m ² .annum)
1	N/A	N/A	N/A
2	N/A	N/A	N/A
3	N/A	N/A	50
4	WA	8	N/A
5	N/A	57	85
6	Qld	13	57
7	Qld, SA	71	52
8	Qld	33	31
9	Qld	24	N/A
10	N/A	35	44
11	WA	57	39
12	WA	121	26
13	Qld	N/A	52
14	N/A	57	N/A
15	SA	N/A	N/A
16	N/A	N/A	66
17	N/A	52	47
18	Qld	114	45
19	Vic	96	27
20	Vic	123	N/A
21	Vic	N/A	38
22	N/A	154	N/A
23	ACT, Vic	N/A	N/A
24	N/A	N/A	57
25	N/A	82	N/A
26	Vic, SA	N/A	N/A
27	N/A	N/A	N/A
28	N/A	N/A	N/A
29	N/A	N/A	N/A

1 cooling loads

...an energy rating, including the separate heating and cooling load limits, using a rating greater than or equal to—

...*climate zones* 1 or 2, 5.5 stars if the building has an outdoor living area as specified in clause 3.12.0.1.1—

...with an impervious roof having a *Total R-Value* greater than or equal to—

...permanently installed ceiling fan; or

...*climate zones* 1 or 2, 5 stars if the building has an outdoor living area as specified in clause 3.12.0.1.1—

...with an impervious roof having a *Total R-Value* greater than or equal to—

(B) has at least one permanently installed ceiling fan.

(b) The heating and cooling load limits in (a) are specified in the ABCB Standard for NatHERS Heating and Cooling Load Limits.





Regulation 15C

The Building Code Volume Two Part 3.12.0.1 is modified as follows —

- (a) in paragraph (a) **delete** “*A building must achieve an energy rating, including the separate heating and cooling load limits, using house energy rating software, of greater than or equal to*” and **insert**:

To reduce heating or cooling loads, a building must achieve an energy rating, using house energy rating software, of not less than

- (b) **delete** *paragraph (b).*

Modified Text Outcome

3.12.0.1 Heating and cooling loads

- (a) To reduce heating or cooling loads, a building must achieve an energy rating using *house energy rating software*, of not less than—
 - (i) 6 stars; or
 - (ii) for a building in *climate zones* 1 or 2, 5.5 stars if the building has an outdoor living area as described in **(b)** if the outdoor living area—
 - (A) is fully covered with an impervious roof having a *Total R-Value* of at least 1.5 (for downward heat flow); or
 - (B) has at least one permanently installed ceiling fan; or
 - (iii) for a building in *climate zones* 1 or 2, 5 stars if the building has an outdoor living area as described in **(b)** if the outdoor living area—
 - (A) is fully covered with an impervious roof having a *Total R-Value* of at least 1.5 (for downward heat flow); and
 - (B) has at least one permanently installed ceiling fan.

Changes to Part 3.12.3

Part 3.12.3

Building sealing

3.12.3.3 External windows and doors

- (a) An external door, **internal door between a Class 1 building and an unconditioned Class 10a building,** openable *window* and other such opening must be sealed when serving—

3.12.3.5 Construction of ceilings, walls and floors

- (a) Ceilings, walls, floors and any opening such as a *window* frame, door frame, *roof light* frame or the like must be constructed to minimise air leakage in accordance with (b) when forming part of the external fabric of—

3.12.3.5 Construction of **roofs**, walls and floors

- (a) Roofs, *external walls*, external floors and any opening such as a *window* frame, door frame, *roof light* frame or the like must be constructed to minimise air leakage in accordance with **(b)** when forming part of the external *fabric* of—

V2.6.2.3 Verification of building envelope sealing

Compliance with P2.6.1(f) is verified when a building *envelope* is sealed at an air permeability of not more than $10 \text{ m}^3/\text{hr.m}^2$ at 50 Pa reference pressure when tested in accordance with AS/NZS ISO 9972 Method 1.

AS/NZS ISO 9972:2015
ISO 9972:2015

Australian/New Zealand Standard™

**Thermal performance of buildings—
Determination of air permeability of
buildings—Fan pressurization method**



- Must use a calculation method other than House Energy Rating Software

House energy rating software, for the purposes of Volume Two—

- (a) applied to [V2.6.2.2](#)—means software accredited or previously accredited under the Nationwide House Energy Rating Scheme and the additional functionality provided in non-regulatory mode; and
- (b) applied to [3.12.0.1](#)—means software accredited under the Nationwide House Energy Rating Scheme.

The calculation method must comply with ANSI/ASHRAE Standard 140

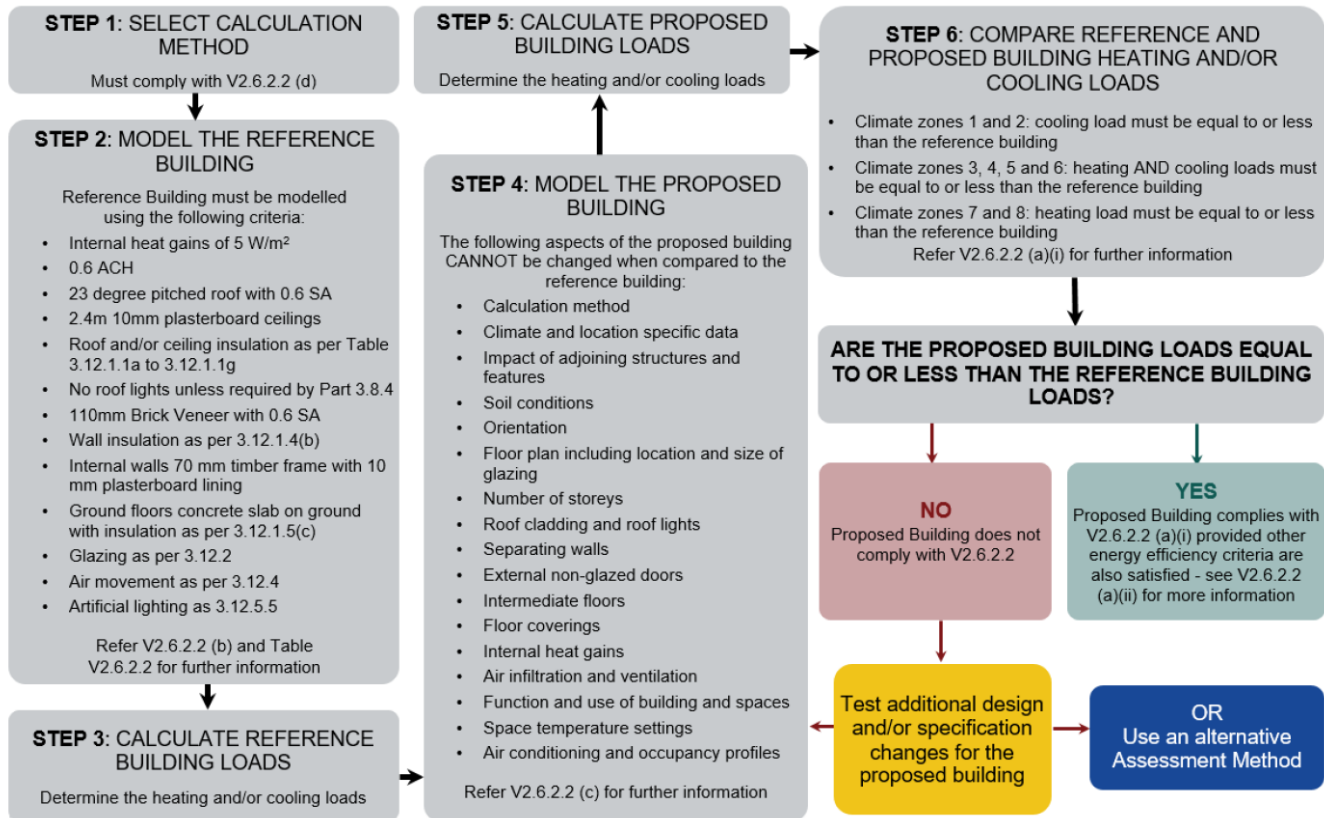
- Internal heat gains from appliances and an air infiltration value have been specified
- The location and size of the windows is now required be the same in both buildings
- The reference building must be modelled using the modelling criteria in Table V2.6.2.2

Table V2.6.2.2

Item	Description	Minimum criteria to be modelled
1	Roof	Pitched roof (23 degrees) with Solar absorptance of 0.6
2	Ceiling	2.4 m high horizontal, 10mm plasterboard ceiling
3	Roof and ceiling insulation	In accordance with Tables 3.12.1.1a to 3.12.1.1g
4	Roof lights	No roof light, unless required by Part 3.8.4.2
5	External walls	Masonry veneer with 110mm thick masonry with a solar absorptance of 0.6
6	Wall insulation	The minimum Total R-Value specified in 3.12.1.4(b)
7	Internal walls	70 mm wide timber frame with 10mm internal plaster lining
8	Ground floor	Concrete slab-on-ground, insulated in accordance with 3.12.1.5(c)
9	Glazing	In accordance with 3.12.2
10	Air movement	In accordance with 3.12.4
11	Artificial lighting	In accordance with the maximum illumination power density allowed by 3.12.5.5 without any increase for a control device illumination power density adjustment factor

Item	Description	Minimum criteria to be modelled
1	Roof	Pitched roof (18 degrees)
2	Ceiling	2.4 m high horizontal ceiling
3	Roof insulation	In accordance with Table 3.12.1
4	Roof lights	Any roof light in the proposed building provided the roof light is the only means of complying with 3.8.4.2
5	External walls	Brick veneer with 110mm thick clay masonry
6	Wall insulation	The minimum Total R-Value specified in option (a) of Table 3.12.1.3
7	Internal walls	70 mm wide timber frame complying with 3.4.3
8	Internal linings	10 mm internal plaster linings
9	Ground floor	Concrete slab-on-ground
10	Glazing	In accordance with 3.12.2
11	Glazing coverings	Holland blinds operated in a comparable manner as, and using the same criteria applied to, the glazing coverings in the proposed building
12	Building Sealing	In accordance with 3.12.3
13	Air movement	In accordance with 3.12.4

ABCB Flow Chart



Documentation

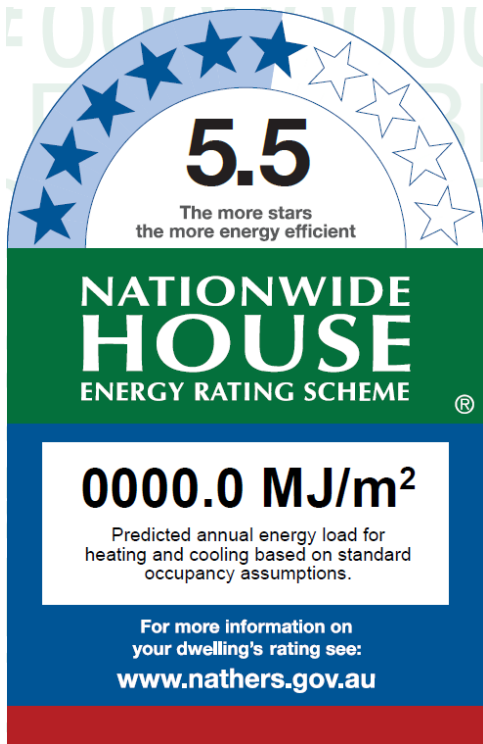
Reference Building -

- Architectural plans
- Modelling report

Proposed Building –

- Modelling report
- Where relevant, evidence of compliance with:
 - 3.12.1.1
 - 3.12.1.2(c) & 3.12.4(d)
 - 3.12.1.2(e)
 - 3.12.1.5 & 3.12.1.5(d)
 - 3.12.3 or V2.6.2.3
- Evidence of compliance with P2.6.2 Services requirements & compliance with the WA Additions

Star Ratings



6 Star requirements were introduced into the BCA 2010.

They were applied in WA from 1 May 2012.

Only a NatHERS Assessment can be assigned a Star Rating.

BCA Compliance achieved but no star rating assigned:



- Elemental approach
- Verification Method V2.6.2.2
- Other Performance Solutions



Compliance Options

P2.6.1: Energy efficiency – building compliance requirements

The overarching requirement of P2.6.1 is that the house must have certain features providing the required level of thermal performance in order to facilitate the efficient use of energy. There are various pathways for complying with Performance Requirement P2.6.1 of the NCC which include:

1. following prescriptive elemental provisions;
2. using NatHERS accredited house energy rating software to achieve a star rating with certain elemental provisions;
3. using Verification Method V2.6.2.2, Verification using a reference building (VURB); or
4. any other Performance Solution.

Note – every option must be supported by suitable evidence and/or adequate documentation to demonstrate that appropriate levels of compliance have been achieved. ABCB resources include:



Other Performance Solutions

For some time, the ABCB and the Department of Mines, Industry Regulation and Safety's Building and Energy Division (Building and Energy), have been encouraging practitioners to follow [a four step process when developing Performance Solutions](#).

The development of Performance Solutions to address the energy efficiency provisions of the NCC should be consistent with this process which includes:

- Preparing a performance-based design brief (PBDB).
- Analysis as per the Assessment Methods agreed to in the PBDB.
- Evaluation of the analysis against the criteria agreed to in the PBDB.
- Generation of a report including the specifics as noted in the NCC and in accordance with the expectations of the PBDB.

Key to the process is the development of the PBDB which is to be carried out in consultation with all the relevant stakeholders.

The onus is on the professional(s) carrying out the Performance Solution to provide sufficient documentation, evidence and validation to the certifying building surveyor that the solution complies with the relevant performance requirements.



Other Performance Solutions

Use of renewable energy as part of Performance Solution

Building and Energy has become aware that some practitioners may be attempting to trade the thermal performance of a new house with the adoption of renewable energy sources such as PV panels.

They may also be attempting to trade Performance Solution P2.6.2 for services with the requirements in P2.6.1 for buildings.

The performance requirement P2.6.1 sets out the minimum requirements and relates only to facilitating the efficient use of energy for artificial heating and cooling appropriate to various listed matters.

Importantly the energy source is not an appropriate matter for the performance requirement P2.6.1.

It is therefore inappropriate to take into account a renewable source of energy when determining compliance with P2.6.1.

While the source of energy is a consideration for determining compliance with the performance requirement P2.6.2 for domestic services, the performance requirements P2.6.1 and P2.6.2 are independent from each other and must be evaluated accordingly.

It is not appropriate to trade-off between the two requirements.

Performance Solutions

P2.6.1 Building

A building must have, to the degree necessary, a level of thermal performance to facilitate the efficient use of energy for artificial heating and cooling appropriate to—

- (a) the function and use of the building; and
- (b) the internal environment; and
- (c) the geographic location of the building; and
- (d) the effects of nearby permanent features such as topography, structures and buildings; and
- (e) solar radiation being—
 - (i) utilised for heating; and
 - (ii) controlled to minimise energy for cooling; and
- (f) the sealing of the building envelope against air leakage; and
- (g) the utilisation of air movement to assist cooling.

P2.6.2 Services

Domestic services, including any associated distribution system and components must, to the degree necessary—

- (a) have features that facilitate the efficient use of energy appropriate to—
 - (i) the *domestic service* and its usage; and
 - (ii) the geographic location of the building; and
 - (iii) the location of the *domestic service*; and
 - (iv) the energy source; and
- (b) obtain heating energy from—
 - (i) a source that has a greenhouse gas intensity that does not exceed 100 g CO₂-e/MJ of thermal energy load; or
 - (ii) an on-site *renewable energy* source; or
 - (iii) another process such as reclaimed energy.

ABCB Handbook

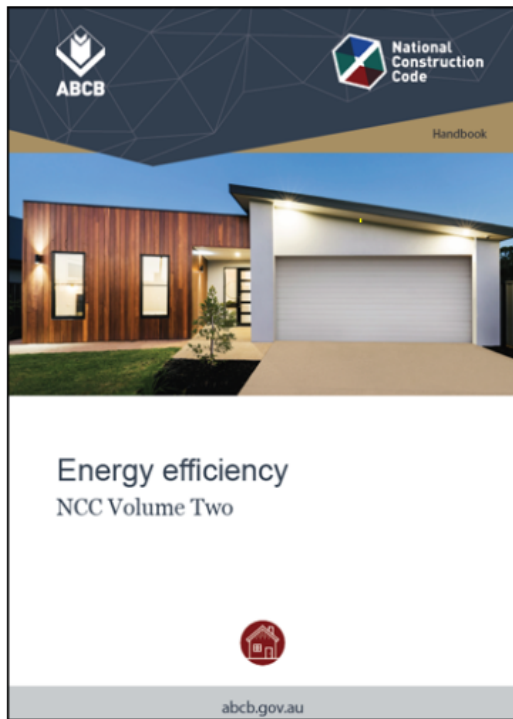
Handbook

This non-mandatory Handbook provides details of the energy efficiency requirements of NCC Volume Two. It aims to provide practitioners with sufficient knowledge to successfully apply energy efficiency requirements for residential dwellings.

The Handbook has a practical focus, and is intended to provide an understanding of the policy objectives and the technical basis of the NCC requirements. This will enable practitioners to manage a range of situations where different design and assessment tools are needed.

This document provides guidance on the NCC 2019 Volume Two energy efficiency requirements.

[Download PDF](#)





Industry Bulletin 140

Industry Bulletin 140

National Construction Code 2019 Volume Two: Complying with energy efficiency requirements

This bulletin is intended for practitioners, energy efficiency assessors and permit authorities to provide a summary of the residential energy efficiency requirements that are applicable in Western Australia from 1 May 2021.

Please note, industry bulletins are intended for guidance only. As such this information does not replace or override the National Construction Code (NCC) and its application in accordance with the *Building Act 2011* and Building Regulations 2012.

2021

NatHERS Ratings

Presented by James Cross



1 Member of a NatHERS Assessor Accrediting Organisation (AAO)

- ABSA (Australian Building Sustainability Association)
- Design Matters (formerly BDAV)
- HERA (Home Energy Raters Association)

2 Qualified - completed a Certificate IV in NatHERS Thermal Assessment

- Continuing Professional Development requirements

3 Subject to:

- An AAO Code of Conduct
- Assessment rules – the NatHERS Technical Note
- Oversight – Quality Assurance and forensic auditing of submitted work
- Compulsory insurance
- Mentoring and support

4 Non-accredited assessors need none of this = greater risk



5 Software Accredited for use under the NatHERS Scheme

- Hero,
- Bers Pro
- First Rate 5
- Accurate

6 Software User Agreement

- The software user agreements dictate that the NatHERS certificate be produced for each file produced. This can be either the official NatHERS Accredited or Non Accredited Report. Failure to produce this report is a breach of the user license. The \$30 fee goes back to CSIRO and software companies to further develop the system.

7 Possible PI risk of accepting star rating reports outside of the NatHERS scheme:

- For accredited assessors this is a breach of the AAO Code of Conduct and can result in instant dismissal
- If assessors work in breach of the signed software license, would their PI insurer cover the work?
- Oversight – Quality Assurance can only be completed on files in the NatHERS system.

8 Non NatHERS sanctioned reports = greater risk of not being covered by PI

NatHERS Certificates

Nationwide House Energy Rating Scheme[®] Certificate

Certificate number: _____ Certificate Date: 17 Oct 2018 ★ Star rating: 5.5

Assessor details

Accreditation number: _____
 Name: _____
 Organisation: _____
 Email: _____
 Phone: _____
 Declaration of interest: No potential conflicts of interest to declare
 Software: AccuRate Sustainability V2.3.3.13 SP4
 AAO: BDAV

57.6 MJ/m²

For more information on your dwelling's rating see: www.nathers.gov.au

Overview

Dwelling details

Street: _____
 Suburb: Regents Park State: NSW Postcode: 2143
 Type: New NCC Class: 2
 Lot/DP number: _____ Exposure: Suburban
 NaHERS climate zone: 56

Key construction and insulation materials

(see following pages for details)

Construction: Fibre-cement wall
 Concrete roof/Plasterboard
 Plywood/Slab/Plasterboard
 R2.0 wall insulation

Insulation: _____
 Floor (uninsulated)
 Aluminium B 9G High Solar Gain
 Low-E

Ceiling penetrations

NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If the number is exceeded in construction then this certificate is NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Principle daylight type: Light-emitting diode (LED)

Sealed:	34
Unsealed:	0
TOTAL**	34

*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If the number is exceeded in construction then this certificate is NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Net floor area (m²)

Conditioned:	76.7
Unconditioned:	3.0
Change:	79.7
TOTAL:	79.7

Annual thermal performance loads (MJ/m²)

Heating:	37.4
Cooling:	20.2
TOTAL:	57.6

Plan documents

Plan refdate: 24.17
 Prepared by: _____

* Nationwide house Energy Rating Scheme (NatHERS) is an initiative of the Australian, state and territory governments. For more details see www.nathers.gov.au

Page 1 of 5

Nationwide House Energy Rating Scheme[®] NatHERS Certificate No. #00000000-00

Generated on (date) using (software and version)

Property

Address: [00] Long Road,
 [0] town, Victoria, 3000
 Lot/DP (number): _____
 NCC Class* (number): _____
 Type: [xxxxxxxxxxxxxxxxxxxxxx]

Plans

Main plan: [plan number, version & date]
 Prepared by: [name of preparer of plans, single]

For more information on your dwelling's rating see: www.nathers.gov.au

Construction and environment

Assessed floor area (m ²)	Exposure type
Conditioned* [000.0]	[exposure]
Unconditioned** [000.0]	NatHERS climate zone
Total [000.0]	(number, town/suburb)
Usage: [000.0]	

Thermal performance

Heating	Cooling
0000.0	0000.0
MJ/m ²	MJ/m ²

About the rating
 NatHERS software models the expected thermal energy loads using information about the design and construction, climate and common patterns of household use. The software does not take into account appliances, apart from the airflow impacts from ceiling fans.

Accredited assessor

Name: [xxxxxxxxxxxxxx]
 Business name: [xxxxxxxxxxxxxx]
 Email: [email@.email.com]
 Phone: [0000 000 0000]
 Accreditation No.: [0000 000 0000]
 Assessor Accrediting Organisation: [Australian Building Accreditation Building]
 Declaration of interest: (declaration of interest option)

Verification

To verify this certificate, scan the QR code or visit www.address.com/verificationurl

National Construction Code (NCC) requirements
 The NCC's requirements for NatHERS-rated buildings are detailed in 3.12.5(a)(i) and 3.12.5 of the NCC Volume Two. For apartments the requirements are outlined in 3.2.2 and 3.2.3 of the NCC Volume One.

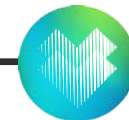
In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to, insulation installation methods, thermal breaks, building sealing, water heating and pumping, and artificial lighting requirements. The NCC and NatHERS Heating and Cooling Load Limits (Australian Building Codes Board standards) are available at www.abcb.gov.au.

State and territory variations and additions to the NCC may also apply.

* Refer to glossary
 Generated on [date] using [software] for [address]

Page 1 of 8





Features of the New NatHERS Energy Rating Certificate

Accredited Assessor Certificate or Non-Accredited Form

The type of certificate clearly indicates if the form has been completed by an Assessor accredited under the NatHERS Scheme. Only Accredited Assessors can use the official NatHERS logo. Assessors are not required to be accredited in some states and territories. Check with your state or territory building authority for clarification regarding accreditation.

Accreditation Number
Accredited Assessors have a unique member number.

Assessor Accrediting Organisation (AAO)
Accredited Assessors are members of a professional body that provides quality assurance, on-going training and checks appropriate insurance cover.

QR Code
This code allows the owner to confirm that the certificate is valid.

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 87654321 Date of certificate: 12 April 2014 Star rating: 7.0

Assessor details

Assessment number: 12345678
Name: Fred Williams
Organisation: Capital Building Assessors
Email: fredrick.williams@capitalassessors.com.au
Phone: 9812 123 456
Declaration of interest: Employed by designer of the building
Software: FreeBabel v5.5.11
AAO: AAOA

Overview

Dwelling details

Address: Unit V5, 237 Edwina Mountbatten Drive
Suburb: West Wychburn
State: NSW Postcode: 2345
Type: New dwelling RCC Class: 01
LotOP number: 983 Urban zone: 14
Epoque: Suburban

Key construction and insulation materials (see following pages for details)

Construction: Brick veneer
Ceiling: Concrete slab roof
Slab on ground
Insulation: R1.5 wall insulation
R3.5 ceiling insulation
Glazing: Timber frame single glass clear

Calling penetrations
Ceiling: 5
Walls: 20
TOTAL: 25
Principle daylight type: Compact fluorescent

Net floor area (m²)

Unconditioned: 55
Conditioned: 23
Garage: 12
TOTAL: 90

Annual thermal performance loads (MJ/m²)

Heating: 576
Cooling: 698
TOTAL: 1274

Window selection - default windows only
Heating: 576
Cooling: 698
TOTAL: 1274

Plan documents

Plan ref: Ref2488
Prepared by: Wyndham Sustainable Homes

7.0
The star rating is based on the maximum number of calling penetrations identified in the certificate. If the number of calling penetrations identified in the certificate is less than the maximum number of calling penetrations allowed for a rating, the star rating is based on the maximum number of calling penetrations allowed for a rating.

68 MJ/m²
The star rating is based on the maximum number of calling penetrations identified in the certificate. If the number of calling penetrations identified in the certificate is less than the maximum number of calling penetrations allowed for a rating, the star rating is based on the maximum number of calling penetrations allowed for a rating.

Scan to access this certificate online and confirm this is valid

* Nationwide House Energy Rating Scheme (NatHERS) is an initiative of the Australian, state and territory governments. For more details see www.nathers.gov.au

Page 1 of 5

House Energy Rating — NON-ACCREDITED*

Rating document number: 87654321 Date of rating: 12 April 2014 Star rating: 7.0

Completed by

Name: Fred Williams
Organisation: Capital Building Assessors
Email: fredrick.williams@capitalassessors.com.au
Phone: 9812 123 456
Declaration of interest: Employed by designer of the building
Software used: FreeBabel v5.5

Overview

Dwelling details

Address: Unit V5, 237 Edwina Mountbatten Drive
Suburb: West Wychburn
State: NSW Postcode: 2345
Type: New dwelling RCC Class: 01
LotOP number: 983 NatHERS climate zone: 14
Exposure: Suburban

Key construction and insulation materials (see following pages for details)

Construction: Brick veneer
Ceiling: Concrete slab roof
Slab on ground
Insulation: R1.5 wall insulation
R3.5 ceiling insulation
Glazing: Timber frame single glass clear

Calling penetrations (see following pages for details)

Ceiling: 5
Walls: 20
TOTAL: 25
Principle daylight type: Compact fluorescent

Net floor area (m²)

Unconditioned: 55
Conditioned: 23
Garage: 12
TOTAL: 90

Annual thermal performance loads (MJ/m²)

Heating: 576
Cooling: 698
TOTAL: 1274

Window selection - default windows only (see following pages for details)

Heating: 576
Cooling: 698
TOTAL: 1274

Plan documents

Plan ref: Ref2488
Prepared by: Wyndham Sustainable Homes

NatHERS Logo
Energy assessors who are not accredited cannot use the NatHERS logo.

Non-Accredited Assessors
Non-accredited assessors may not have completed a recognised software training course, do not undertake quality assurance processes, do not have any on-going training requirements and are not supported or recognised under the NatHERS scheme.

Scan to access this rating document online and confirm this is valid

* This rating has been completed by a non-accredited user. For more details see the Australian Government Nationwide House Energy Rating Scheme (NatHERS) website www.nathers.gov.au

Page 1 of 5

The Nationwide House Energy Rating Scheme (NatHERS) is a national framework for the purpose of regulating how Australian homes are rated for their thermal performance.

For more details see NatHERS.gov.au



Features of the New NatHERS Energy Rating Certificate

Accredited Assessor Certificate or Non-Accredited Form

The type of certificate clearly indicates if the form has been completed by an Assessor accredited under the NatHERS Scheme. Only Accredited Assessors can use the official NatHERS logo. Assessors are not required to be accredited in some states and territories. Check with your state or territory building authority for clarification regarding accreditation.

Look for the Star Rating
The dwelling's rating is clearly shown out of a score of 10. The more stars your home has, the less heating or cooling will be required to keep your home comfortable.

Does your dwelling need more cooling or heating?
These key figures indicate how much heating or cooling is expected to be required each year to keep your home within a comfortable range.

Who completed the assessment
Details of who completed the assessment are shown.

TBC

Residential Energy Rating - Non-Accredited #00000000-00

This rating report has been completed by a rater (non-accredited assessor)*. For more details see the NatHERS House Energy Rating Scheme (NatHERS) website www.nathers.gov.au

About the rating: NatHERS software models expected thermal energy loads using information on design and construction, climate and common patterns of household use. The software does not take into account appliances, apart from the airflow impacts from ceiling fans.

Star rating [0.0]

Annual thermal performance
Total [0000.0] MJ/m² Heating [0000.0] MJ/m² Cooling [0000.0] MJ/m²

Property

Address [00 Long Road, Big town, Victoria, 3000]
Lot/DP [number]
NCC Class* [number]
Type [residential/other]

Verification

To verify this rating report, scan the QR code or visit www.nathers.gov.au/certificate/number. When using either link, ensure you are visiting www.nathers.gov.au.

Plans

Main plan [number]
Prepared by [name of preparer, optional]

Construction and environment

Assessed floor area (m²)
Conditioned* [000.0] Unconditioned* [000.0] Total [000.0] Garage [000.0]

Rater*

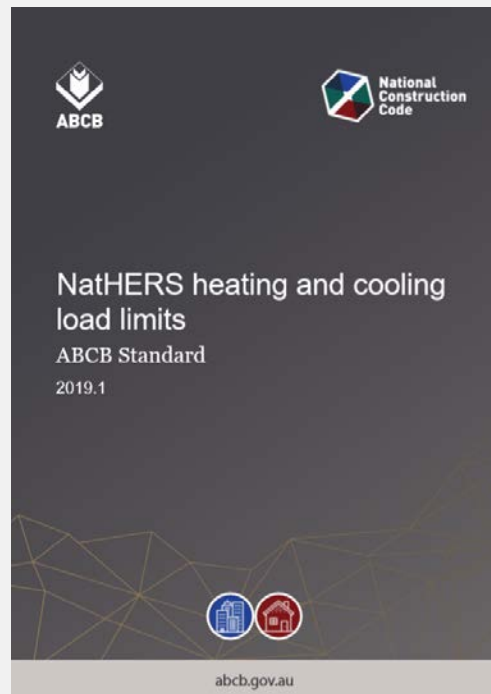
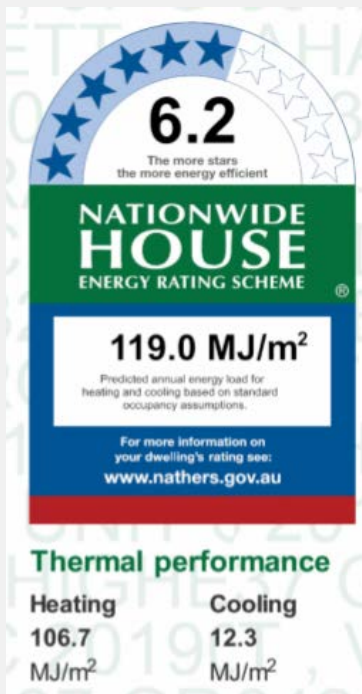
Name [assessor's name]
Business name [business name]
Email [email address]
Phone [0000 000 000]
Phone [0000 000 000]

*Minimum Competence Code (MCC) requirements:
This MCCs requirements for NatHERS-rated buildings are detailed in 3.1.2.3(a) and 3.1.2.3 of the NCC Volume Two. For apartments the requirements are detailed in 3.1.2.3(b) of the NCC Volume Two.
In MCC 2015, these requirements include separate site design and separate heating and cooling load limits that need to be met by buildings and compliance through the NCC's assessment process. However, NatHERS requires that you can confirm that you are permitted to include insulation materials, thermal mass, building quality water heating and hot water, and other energy improvements. The MCC and NatHERS Heating and Cooling Load Calculation Code Booklet is available at www.nathers.gov.au.
State and territory variations and additions to the MCC may also apply.

Non-accredited assessors
Non-accredited assessors may not have completed a recognised software training course, do not undertake quality assurance processes, do not have any on-going training requirements and are not supported or recognised under the NatHERS scheme.

QR Code
This code allows the owner to confirm that the certificate is valid.

Key construction features
Key materials relating to the thermal performance of your home are displayed on the front page. All other materials are displayed on subsequent pages. You should check that your home has been built with these features.



NatHERS and the NCC