



# BUILDING REPORTS PTY LTD

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27 February 2020

Paul Ravesteyn  
Cnr Wearden Road & Forest Way  
Belrose NSW 2085

Dear Paul,

**Re: 6 Wearden Road, Belrose – BCA Report (External Wall)**

This statement provides an assessment of the eastern external wall of the existing building for the purposes of the Building Code of Australia 2019 (BCA) for submission with a Development Application seeking a Change of Use to the building for use as a Dwelling.

**1) Building Description & Assessment**

The building is a single storey structure located adjacent to the eastern boundary of the property at 6 Wearden Road, Belrose. It is understood a separate Building Information Certificate has been lodged for the building with the assessment and comments on this not included in this Report.

This submission relates to the eastern external wall of the single storey dwelling of the site only.

An inspection of this existing building was carried out on 25 February 2020 and the following outlines a BCA assessment of the eastern external wall of the dwelling.

**2) Documentation**

The following documentation has been reviewed for the purposes of preparing this Report:

- Survey Plan showing side boundary setbacks prepared by CC Surveying dated 7 February 2020, Plan No. Page 1.
- Plans prepared by Mireality Design, Drawing Nos. Pages 1 to 7 dated 7 May 2019.

**3) BCA Description**

The building is assessed under the Building Code of Australia 2019 [Volume 2] (BCA). For the purposes of the BCA, the building may be described as follows:

**a) Classification**

The building is classified as follows:

- Class 1a (Residential Dwelling)

**b) Number of Storeys**

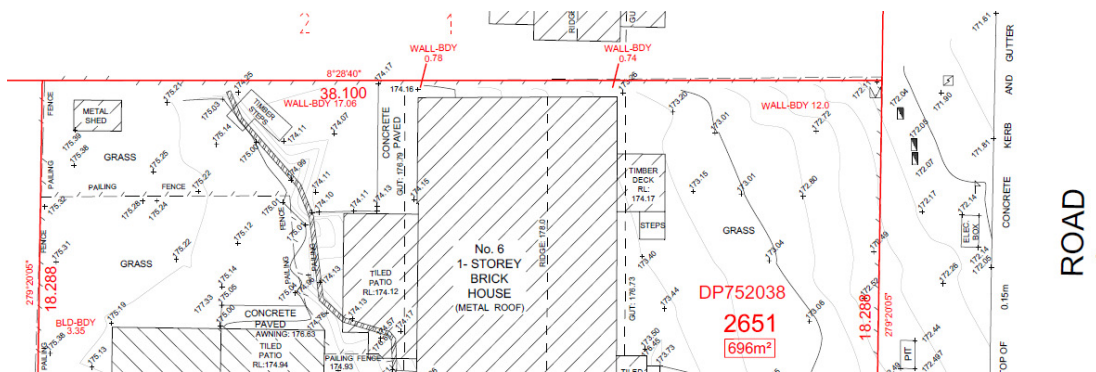
The building contains one (1) storey.

**c) Type of Construction**

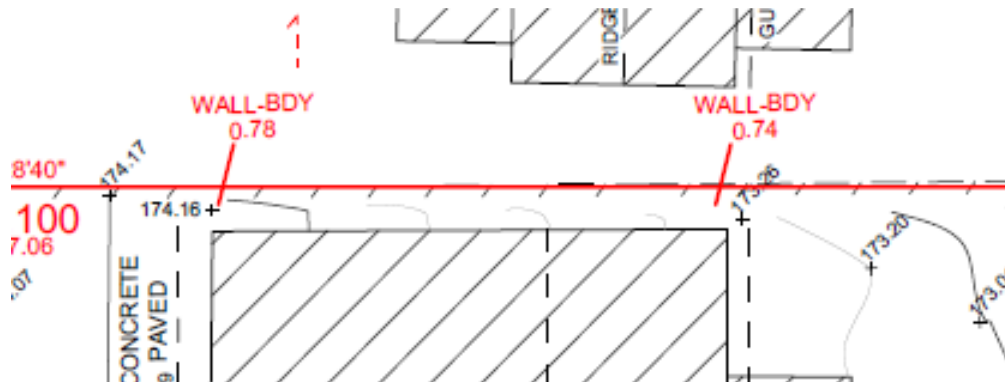
NA – Due to Class 1a

**d) Building Setback**

- Less than 900mm from adjacent eastern side boundaries as shown in Figures 1 and 2 below.



**Figure 1 – Part Survey Plan**



**Figure 2 – Part Survey Plan showing setback dimensions to Eastern Boundary**

**4) BCA Assessment and Comments**

Following an inspection of the building on 25 February 2020, it is evident that the fire rating and elements of the eastern external wall do not satisfy the BCA or verification is necessary to confirm how compliance may be achieved. The primary purpose of this statement is to advise on BCA issues with the eastern external wall for submission with the Development Application to be lodged with the Northern Beaches Council for use of the building as a Dwelling.

The eastern external wall has 2 types of external lining, being compressed cement sheeting to the rear portion and an extruded foam type material to the front portion. There is also a small extension of the northern wall with the foam extending past the line of the cement sheeting at the rear corner of the building. The setback to the eastern wall as shown in Figure 2 varies from 740 to 780mm. This eastern wall contains 2 existing windows, i.e. 1 to the bathroom and to Bedroom No. 1.

The following BCA Comments are made following an inspection of the building. Recommendations are proposed to upgrade the eastern external wall of the building to address BCA fire rating requirements for the use as a dwelling;

**A. External Walls - Fire Resistance Level.**

As a result of the building being Class 1a the following FRL's apply;

- a) Walls less than 900mm from boundary must be provided with a FRL of 60/60/60.
- b) The 60/60/60 FRL need only be measured from outside the building, commence at the footings or ground slab and extend to the underside of a non-combustible eaves lining, and
- c) Encroachments such as eaves, fascias, gutters and the like if within 450mm of the boundary must be of non-combustible construction, and
- d) No FRL applies to external walls within 900mm of the side boundary if the wall is 90° or more to the boundary, and
- e) Openings in the external walls required to be fire-resisting (ie < 900mm from boundary) must be protected by:-
  - Non-openable fire windows or other construction having an FRL of not less than -/60/-, or
  - Self-closing solid core doors not less than 35mm thick.
- f) The requirements e) do not apply to a window in a non-habitable room that is located adjacent to and not less than 600 mm from the boundary of an adjoining allotment or 1200 mm from another building on the same allotment provided that—
  - (i) in a bathroom, laundry or toilet, the opening has an area of not more than 1.2 m<sup>2</sup>; or
  - (ii) in a room other than one referred to in (i), the opening has an area of not more than 0.54 m<sup>2</sup> and—
    - A. the window is steel-framed, there are no opening sashes and it is glazed in wired glass; or
    - B. the opening is enclosed with translucent hollow glass blocks.

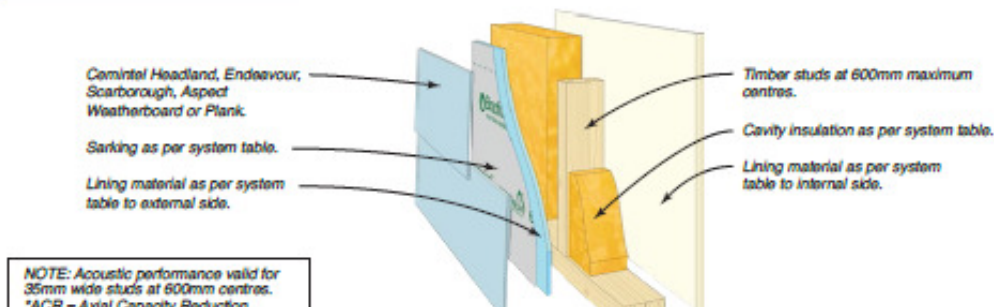
**Comment:**

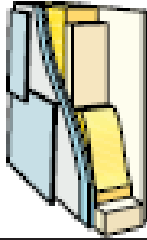
The eastern external wall and elements of the building that are less than 900mm from the side boundary contain the following non-compliances;

- a) The entire eastern external wall within 900mm of the eastern side boundary are not provided with an FRL of 60/60/60 measured from outside the building. This is required to be upgraded with a tested system such as detailed in Figure 3 of this Report, and
- b) The two (2) windows may remain subject to the wall opening for the bathroom window being not greater than 1.2m<sup>2</sup> and the bedroom window being replaced with a non-openable steel frame wired glass or glass block window not greater than 0.54m<sup>2</sup>, and
- c) The fascia is within 450mm of the side boundary and is of combustible materials and requires upgrading. It is noted the existing eave and top roof flashing are considered to be non-combustible and may remain.

**SYSTEM SPECIFICATIONS**

**Cemintel Weatherboard – Direct Fixed – Timber Frame**



SYSTEM SPECIFICATION		
FRL Report/Opinion	SYSTEM N°	WALL LININGS
<b>60/60/60*</b> (from outside only) *ACR Group 2  FAR2303	<b>CSR 5510</b> 	<b>EXTERNAL WALL SIDE</b> <ul style="list-style-type: none"> <li>1 x 16mm Gyprock Pyrochek MR Plasterboard.</li> </ul> <b>INTERNAL WALL SIDE</b> <ul style="list-style-type: none"> <li>1 x 10mm Gyprock Plus Plasterboard.</li> </ul>

**Figure 3 – Typical Example of FRL for External Wall**

**Recommendation:**

- a) *That the eastern external wall to the dwelling and associated elements be upgraded in accordance with BCA [Volume 2] Clause 3.7.2.4 as follows;*
- (i) *Eastern wall is to be provided with an FRL of 60/60/60 measured from outside the building, and*
  - (ii) *The one (1) bathroom window in the eastern wall is to be verified as having a wall opening of not greater than 1.2m<sup>2</sup>, otherwise the window is to be infilled with fire rated materials as detailed in (i) above and alternative light and ventilation is to be provided to the bedroom, and*
  - (iii) *The one (1) bedroom window in the eastern wall is to be infilled with fire rated materials as detailed in (i) above unless the window is proposed with a wall opening of not more than 0.54m<sup>2</sup> with steel framed non-openable wired glass or with translucent hollow glass blocks, and*
  - (iv) *The existing non-combustible eaves may remain, subject to the fascia within 450mm of the boundary being lined with non-combustible materials.*

Reason – This is to minimise the risk of fire spread.

**5) Limitations:**

This report and assessment does not address issues in relation to the following:

- a) The provisions of the BCA other than the provisions of the BCA as outlined above. The recommendations are not intended to provide a building that satisfies the current provisions of BCA. Acceptance and review of the level of any upgrade is at the discretion of Council.
- b) The BCA Structural Provisions of the building elements (unless specifically referred to).
- c) The adequacy of damp-proofing, termite protection, bush fire construction, energy efficiency or roof drainage.
- d) The design, maintenance or operation of any existing or proposed electrical, mechanical, hydraulic or fire protection services.
- e) Development Consent conditions of approval issued by the Consent Authority.
- f) Environmental Planning and Assessment Act, associated Regulations, Local Government Act and Regulations unless where nominated.
- g) Work Health & Safety Act / Regulations and WorkCover Authority requirements.
- h) Water, drainage, gas, telecommunications and electricity supply authority requirements.
- i) Disability Discrimination Act (DDA) and Premises Standard.

Should you require any further details, please do not hesitate to call me on 0417 247 447.

Yours faithfully,

**GRS Building Reports Pty Ltd.**



Graham Scheffers

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