

# Building

## Regulations Advisory Committee

# Certificate of Accreditation

## Amendment 1

<b>Name of product:</b>	ShapeShell™-RT Panels
<b>Product description:</b>	ShapeShell™-RT Panels is a composite moulded glass fibre reinforced thermoset cladding product manufactured from a combination of glass fibre fabric, thermosetting polyester resin and proprietary fire-retardant chemical resins.
<b>Description of the purpose and use of the building product:</b>	ShapeShell™-RT Panels are used as a cavity cladding system (rainscreen) supported on a steel frame connected to a non-combustible building fabric having an FRL of not less than -/60/60.
<b>Regulation/s in relation to which the building product is accredited:</b>	<p>The Building Regulations Advisory Committee appointed under Division 4 of Part 12 of the Building Act 1993 has examined the application and accredited the product as complying with;</p> <p>Performance Requirement C1P2 of the National Construction Code (NCC) 2022, Volume One, Building Code of Australia (BCA) for use where a non-combustible external wall is required in Class 2 to 9 buildings of Type A or Type B construction.</p>
<b>Conditions to which the accreditation is subject:</b>	<ol style="list-style-type: none"><li>1. This accreditation does not apply to any other provisions of the National Construction Code series and <b>only accredits</b> the limited and conditional uses of the product to the performance requirement C1P2.</li><li>2. In the event that any other Performance Solution involving a fire performance requirement within the meaning of the Building Regulations 2018 is applied to a specific building project, the project fire safety engineer must consider whether the presence of the ShapeShell™-RT Panels will affect their assessment of the building design. In consideration of a combustible external wall, the project fire safety engineer must rely on the "ShapeShell™-RT Panels Appraisal Report, Revision 7, dated 23 May 2023" prepared by SKIP Consulting Pty Ltd. A copy of the product Appraisal Report is included as an appendix within the ShapeShell™-RT Panels product manual titled "Application and Use of ShapeShell™-RT Panels for Rain Screen Applications, Revision 11".</li><li>3. Each project design is subject to the following conditions:<ol style="list-style-type: none"><li>(a) The thickness of the panels must be not less than 6 mm.</li><li>(b) The panels are to be mounted on an underlying non-combustible (or material allowed by BCA clause C2D10) fire-resistant <u>external wall</u> behind having an FRL of not less than -/60/60.</li></ol></li></ol>

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- (c) The connections between all ShapeShell™-RT Panel components and the supporting structure must be designed by an appropriately qualified professional engineer in the area of structural engineering with an endorsement to work in building industry in Victoria.
  - (d) The panels are to be supported using steel supporting members in a manner consistent with that used for the tested prototype (refer to the “ShapeShell™-RT Panels Appraisal Report, Revision 7, dated 23 May 2023”) and in this configuration the horizontal members can be considered to act as cavity barriers.

If cavity barriers (refer to the “ShapeShell™-RT Panels Appraisal Report, Revision 7, dated 23 May 2023”) cannot be provided, then non-combustible horizontal cavity barriers must be provided at each floor level consisting of a solid element having an FRL of -/60/- (e.g. steel, or supported mineral wool) across the width of the void.

If there also needs to be a construction gap (for differential movement, thermal/acoustic break purposes etc.), then an intumescent material achieving an FRL of -/60/- can be used.

In all cases, the cavity barrier must be continuous for the perimeter of the façade where ShapeShell™-RT Panels are to be installed.
  - (e) The materials within the cavity between the fire-resistant wall behind and the rainscreen are to be non-combustible (as defined or allowed in the BCA clause C2D10).
  - (f) The interfaces between the rainscreen panels and the edges of the fire-resistant wall (e.g. at window openings) are to be detailed as for the relevant fire test (refer to the “ShapeShell™-RT Panels Appraisal Report, Revision 7, dated 23 May 2023”) or in a manner to give an equivalent outcome.
  - (g) ShapeShell™-RT Panels may be rendered with a non-combustible cement render provided that exits and hydrant, booster assemblies and the like located below such rendered panels are provided with protection against such falling debris (i.e. a canopy, veranda, portico, or the like extending not less than 1m out from the edge of the building).
  - (h) The requirements of BCA C1V3 (c) [enhanced sprinkler protection for Type A construction] or C1V3 (d) [Type B construction limitations and enhancements] must also be satisfied.
  - (i) The panel performance is limited to BB20 (i.e. located at least 3 m from adjoining property boundaries, or at least 6m from another building on the same allotment) unless confirmed by a large scale BB test or assessed by first principles fire safety engineering as part of a site-specific performance solution.
4. Each project installation must be designed and installed by ShapeShift Technologies Pty Ltd in accordance with the ShapeShell™-RT Panels product manual titled “Application and Use of ShapeShell™-RT Panels for Rain Screen Applications” Revision 11.

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**The name, address and Australian business number of the holder of the accreditation:** ShapeShift Technologies Pty Ltd  
Suite107, 33 Longland Street  
NEWSTEAD QLD 4006  
ABN 27 650 442 863

**Certificate number:** V20/02-A1

**Date of issue:** 05 June 2023

**Signature:**



**Commissioner Yvonne von Hartel AM  
Chair, Building Regulations Advisory Committee**

### Practitioner guidance on how to use a Certificate of accreditation

Practitioners are reminded to consider any limitations noted in this Certificate and whether the performance of the product has been tested for all aspects of the performance that it is expected to achieve in the application it is being applied to.

## Historical Details

Certificate number:	Description:	From:	To:
V20/02	Accreditation granted	15 June 2020	-
V20/02-A1	Amendment to Certificate details: <ul style="list-style-type: none"><li>• Reaccreditation granted for a period of 3 years</li><li>• Accreditation assessed against NCC2022</li><li>• New certificate number issued</li><li>• Product name (updated format)</li><li>• Company name and ABN updated</li><li>• Conditions updated to reference updated product manual and appraisal report</li></ul>	05 June 2023	15 June 2026