

LSAA Symposium 2022

# Architectural Coated Fabrics

BCA amendments since 2016

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## LSAA Activities

- Engaged Basic Expert to create a “road map” to help members understand the path to a “Performance Solution” under the revised BCA.
- This “Guide to Preparing a Performance Solution for Fabric” has been issued to members.
- Liaise with BMAA and STA to support any initiatives related to the BCA amendments that have adversely affected our industry.

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## Case Study – Fabric façade at JCU Cairns

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## Example – JCU FER by WSP

The external wall of the building is generally of glazed or solid non-combustible construction. Surrounding the external walls of the building, excluding the external atrium wall, is the solar mesh screening material, **Chukoh: FGJ412-28**.

The mesh screening material is constructed of fiberglass which has been tested in accordance AS 1530.1 and therefore determined to be non-combustible. However, the finished product sees this fiberglass mesh coated in Polytetrafluoroethylene (PTFE). The product as a whole has not been tested in accordance with AS 1530.1 and therefore cannot be deemed as non-combustible. It is noted that AS 1530.1 states that the standard test is not appropriate for coated materials, and therefore cannot be directly applied for a pass/fail criteria.

The product as a whole has been tested in accordance with AS 1530.2 and AS 1530.3 has a spread of flame index of 0 and a smoke developed index of 3 or less. Therefore, as these are indicative of initial fire properties and the reaction that the material has, it can be considered that, to the degree necessary, the material as a whole will not be the origin of a fire.

The use of this material has been deemed not to strictly comply with the NCC DTS Provisions. The material has undergone testing to provide an understanding of the material behaviour under fire conditions and has been captured as part of a Performance Solution, refer section 3.5.

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## JCU – Performance Solution

### 3.3 Façade Assessment

#### 3.3.1 Introduction

The following assessment addresses departures Item 5

<b>DTS CLAUSE</b>	<b>C1.9, C1.14</b>	<b>Performance Requirements</b>	<b>CP2</b>	<b>Compliance and Assessment Methods</b>	<b>A0.9(a) &amp; A0.9(b)(ii)</b>
<b>DESCRIPTION</b>	Permit the use of combustible material to be installed as a fabric wrap to the building.				
<b>ANALYSIS METHODOLOGY</b>	Qualitative analysis methodology based on the performance of the façade material, the safety of building occupants, and the ability of fire brigade to undertake effective fire fighting operations.				
<b>ACCEPTANCE CRITERIA</b>	Acceptance will be demonstrated where the façade material will not unduly increase the risk of fire spread via the façade material, impact on the safe evacuation of building occupants, or impact on the ability of fire brigade to undertake effective fire fighting operations.				

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## 2016 (Rev1) - 2022 (Draft)

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**C1.1 Type of construction required**

(a) The minimum Type of fire-resisting construction of a building must be determined in accordance with Table C1.1, except as allowed for—

(i) certain Class 2, 3 or 9c buildings in C1.5; and

(ii) a Class 4 part of a building located on the top storey in C1.3(b); and

(iii) open spectator stands and indoor sports stadiums in C1.7.

SA C1.1(b)(v)

(b) Each building element must comply with Specification C1.1 as applicable.

**Table C1.1 TYPE OF CONSTRUCTION REQUIRED**

Rise in storeys	Class 2, 3 or 9 building	Class 5, 6, 7 or 8 building
4 or more	A	A
3	A	B
2	B	C
1	C	C

**Table C202 Type of construction required**

Rise in storeys	Class of building 2, 3 or 9c	Class of building 5, 6, 7 or 8
4 or more	A	A
3	A	B
2	B	C
1	C	C

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