

GRC FIRE RATING

Satu Bumi is a large GRC manufacturer and places a high emphasis on compliance with all relevant international quality standards in all aspects of its business. In fact, in most circumstances, it sees compliance with quality standards as a distinct competitive advantage. Therefore, Satu Bumi typically manufactures its GRC with polymer in compliance with the “Specification for the Manufacture, Curing & Testing of Glassfibre Reinforced Concrete (GRC) Products” as published by the “The International Glassfibre Reinforced Concrete Association (GRCA)”.

■ Compliance with AS/NZ 1530.3 – Fire Testing

Satu Bumi’s Polymer GRC was tested in accordance with the AS/NZS 1530.3 standard (Methods for Fire Tests on Building Materials, Components and Structures Part 3: Simultaneous Determination of Ignitability, Flame Propagation, Heat Release and Smoke Release) on the 25th of August 2020 by AWTA, a company accredited by NATA for compliance with “ISO/IEC 17025 – Testing” with the following excellent results: -

Test	Test Range	Test Result
Ignitability	0 - 20	0
Spread of Flame Index	0 - 10	0
Heat Evolved Index	0 - 10	0
Smoke Developed Index	0 - 10	1

Therefore, Satu Bumi’s polymer based GRC planters and GRC street furniture are compliant with the appropriate Australian fire rating standard, which is referred to as the AS/NZ 1530.3. However, if the higher fire rating of AS/NZ 1530.1 is required due to the location of these GRC products on a specific project it can also be achieved by the removal of the polymer from Satu Bumi’s standard GRC mix design in conjunction with a wet curing process. □

A copy of Satu Bumi’s fire testing results can be found by reference to the following page on Satu Bumi’s web site:

<https://www.satubumi.com.au/grc-planter-boxes/compliance>

■ Compliance with AS/NZ 1530.1 – Fire Testing

When Satu Bumi needs to remove the polymer from the raw materials used in its manufacturing process to achieve compliance with the AS/NZ 1530.1 standard, it replaces the quick curing advantage that polymer provides with a wet curing process that takes longer and generally costs more than the polymer curing process. However, the wet curing process still results in a high quality GRC product.

Satu Bumi generally only provides Non-Polymer GRC planters for positioning on the external face of buildings and this would typically be done with the customer's acceptance of the resulting price and production lead time.

■ Be Cautious of GRC Manufacturers' Adherence to the AS/NZ 1530 Standard

Both polymer based GRC and wet cured GRC looks the same at the completion of manufacture and hence it is not difficult for GRC manufacturers/suppliers to misrepresent the fire rating compliance of their products. Therefore, if either AS/NZ 1530.1 or AS/NZ 1530.3 compliance is a requirement for a specific project, Satu Bumi would strongly recommend that you should ensure that: -

- You have sighted the documented evidence that the manufacture's GRC has passed the relevant AS/NZ 1530.1 or AS/NZ 1530.3 compliance testing by an accredited NATA testing company, and
- The GRC manufacturer/supplier is prepared to provide a written guarantee from the senior management of the manufacturer/supplier to state that the planters to be supplied have been manufactured in compliance with the required standard.

sales@satubumi.com.au
+61 (03) 5292 1001
satubumi.com.au

Last edited: 2nd of May, 2023