



BRANZ Appraised

Appraisal No. 818 [2024]

GLASSCORP GREENSEAL BACKING SEALANT

Appraisal No. 818 [2024]

This Appraisal replaces BRANZ
Appraisal No. 818 [2018]



BRANZ Appraisals

Technical Assessments of
products for building and
construction.



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Product

- 1.1 Glasscorp Greenseal Backing Sealant is a weatherproofing backing sealant for use in the manufacture of powder-coated and anodised aluminium window joinery.

Scope

- 2.1 Glasscorp Greenseal Backing Sealant has been appraised for use as a backing sealant in the manufacture of powder-coated and anodised aluminium joinery for buildings within the scope limitations of NZBC Acceptable Solution E2/AS1, Paragraph 1.1 and meeting the following scope limitations:

- in joints with a minimum depth of 2 mm.

[Note: Substrates or materials other than those specified above have not been assessed and are outside the scope of this Appraisal. Glasscorp Ltd must be consulted when proposing the sealing of material not specifically covered by this Appraisal.]

Building Regulations

New Zealand Building Code (NZBC)

- 3.1 In the opinion of BRANZ, Glasscorp Greenseal Backing Sealant, if used, designed, installed and maintained in accordance with the statements and conditions of this Appraisal, will meet the following provisions of the NZBC:

Clause B2 DURABILITY: Performance B2.3.1 [b] 15 years. Glasscorp Greenseal Backing Sealant meets this requirement. See Paragraph 8.1.

Clause E2 EXTERNAL MOISTURE: Performance E2.3.2. Glasscorp Greenseal Backing Sealant contributes to meeting this requirement. See Paragraphs 11.1-11.3.

Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1 Glasscorp Greenseal Backing Sealant meets this requirement.



Technical Specification

- 4.1 Product supplied by Glasscorp Ltd is as follows:
- **Glasscorp Greenseal Backing Sealant** - a one-part, low-modulus (LM), solvent-free sealant based on silyl-modified polymer (SMP). It is available in grey and is supplied in 600 ml sausages and 300 ml cartridges.

Handling and Storage

- 5.1 The handling and storage of Glasscorp Greenseal Backing Sealant on-site is the responsibility of the installer. Glasscorp Greenseal Backing Sealant has a shelf life of 12 months from the date of production, if stored in unopened packaging under dry, cool conditions at temperatures of between 5°C and 25°C. The product must be stored out of direct sunlight.

Technical Literature

- 6.1 The Technical Information contained on the cartridges must be read in conjunction with this Appraisal. All aspects of design, use, installation and maintenance contained in the Technical Information and within the scope of this Appraisal must be followed. In particular, the detail of limitations in the Technical Information for use should be referred to.

Design Information

General

- 7.1 Glasscorp Greenseal Backing Sealant is designed to be used for back sealing joints or penetrations in joinery frames, such as mitre corner joints, butt joints and screw penetrations. The purpose of this sealant is to provide long-term protection against water ingress.
- 7.2 The design of weathertight joints and detailing for all applications must be in accordance with good design principles. In most situations, joint design should see the sealant used as a first line of defence, in conjunction with flashings (second line of defence), which drain to the building exterior. Other good design principles include the optimum width to depth ratio, correct sealant profile, and use of a bond breaker system.
- 7.3 For optimum adhesion, it is important that preliminary adhesion tests be conducted to ensure adequate performance. Glasscorp Ltd must be consulted where doubt arises. Any other treatments must be undertaken in accordance with the instructions of Glasscorp Ltd.

Durability

Serviceable Life

- 8.1 When used and applied in accordance with the Technical Literature and this Appraisal, it is expected that Glasscorp Greenseal Backing Sealant, when used in the manufacture of window joinery will remain serviceable for 15 years or more as a backing sealant.

Maintenance

- 9.1 Glasscorp Greenseal Backing Sealant is used during the manufacture of aluminium window joinery and is inaccessible thereafter. If leakage of the joinery is observed, the window joinery manufacturer should be contacted.

Prevention of Fire Occurring

- 10.1 Separation or protection must be provided to Glasscorp Greenseal Backing Sealant from heat sources such as fireplaces, heating appliances and chimneys. Part 7 of NZBC Acceptable Solution C/AS1 and NZBC Acceptable Solution C/AS2 provide methods for separation and protection of combustible materials from heat sources.

External Moisture

- 11.1 Glasscorp Greenseal Backing Sealant complies with Type F Class 25LM of ISO 11600.
- 11.2 Glasscorp Greenseal Backing Sealant is suitable to be used as a backing sealant in the manufacture of aluminium window joinery.
- 11.3 It is the responsibility of the window joinery manufacturer to ensure sound joint design principles are followed.

Installation Information

Installation Skill Level Requirement

- 12.1 Glasscorp Greenseal Backing Sealant is for use by window joinery manufacturers only. The installations must be in accordance with the instructions given within the Technical Literature and this Appraisal.

General

- 13.1 Before the application of sealant, substrate surfaces must be clean, dry and free from any surface contaminants such as dirt, dust, oil or existing coatings and paints.
- 13.2 Cure rates will slow down as temperatures decrease.
- 13.3 Sealant application must be carried out when the sealant and substrate temperature is within the range of 5°C to 30°C.
- 13.4 Installation of the sealant can be undertaken using a hand or pneumatically operated caulking gun at an angle to eliminate the inclusion of air pockets. The sealant should be tooled off to achieve a smooth finish and to compress it, promoting adhesion to the joint walls. Clean-up can be carried out using Glasscorp FB 7803 Solvent Cleaner immediately after application. *[Note: Methylene chloride paint strippers can aid the removal of cured sealant.]*

Health and Safety

- 14.1 Safe use and handling procedures for Glasscorp Greenseal Backing Sealant is provided on the product packaging and the safety data sheets available from Glasscorp Ltd.

Basis of Appraisal

The following is a summary of the technical investigations carried out:

Tests

- 15.1 Glasscorp Greenseal Backing Sealant has been tested and meets the requirements of ISO 11600 – F – Class 25LM, Building Construction – Sealants – Classification and Requirements.
- 15.2 BRANZ have tested to ASTM G154 for accelerated weathering, with analysis of tensile adhesion performance and colour being carried out before, after and during the exposure.
- 15.3 The test results were used in part to determine the BRANZ durability opinion.

Other Investigations

- 16.1 Site inspections have been carried out by BRANZ to confirm practicability of installation and completed installations.
- 16.2 Technical data sheets and safety data sheets for Glasscorp Greenseal Backing Sealant have been obtained by BRANZ and found to be satisfactory.
- 16.3 A durability opinion has been given by BRANZ technical experts.

Quality



- 17.1 The manufacture of the product has not been examined by BRANZ, but details of the quality and composition of the materials used were obtained and found to be satisfactory.
- 17.2 Quality of supply of the product to the market is the responsibility of Glasscorp Ltd.
- 17.3 Quality of installation of the product on-site is the responsibility of the sealant installer.
- 17.4 The quality of installation of the substrates in accordance with the manufacturer's instructions is the responsibility of the substrate installer.
- 17.5 Building designers are responsible for the design of the joints, and for the incorporation of the sealant into their design in accordance with the instructions of Glasscorp Ltd.

Sources of Information

- ISO 11600:2002 Building Construction - Jointing Products - Classification and Requirements for Sealants.
- Ministry of Business, Innovation and Employment Record of amendments - Acceptable Solutions, Verification Methods and handbooks.
- The Building Regulations 1992.



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17 September 2024

GLASSCORP GREENSEAL
BACKING SEALANT



In the opinion of BRANZ, **Glasscorp Greenseal Backing Sealant** is fit for purpose and will comply with the Building Code to the extent specified in this Appraisal provided it is used, designed, installed and maintained as set out in this Appraisal.

The Appraisal is issued only to **Glasscorp Ltd**, and is valid until further notice, subject to the Conditions of Appraisal.

Conditions of Appraisal

1. This Appraisal:
 - a) relates only to the product as described herein;
 - b) must be read, considered and used in full together with the Technical Literature;
 - c) does not address any Legislation, Regulations, Codes or Standards, not specifically named herein;
 - d) is copyright of BRANZ.
2. **Glasscorp Ltd**:
 - a) continues to have the product reviewed by BRANZ;
 - b) shall notify BRANZ of any changes in product specification or quality assurance measures prior to the product being marketed;
 - c) abides by the BRANZ Appraisals Services Terms and Conditions;
 - d) warrants that the product and the manufacturing process for the product are maintained at or above the standards, levels and quality assessed and found satisfactory by BRANZ pursuant to BRANZ's Appraisal of the product.
3. BRANZ makes no representation or warranty as to:
 - a) the nature of individual examples of, batches of, or individual installations of the product, including methods and quality of work;
 - b) the presence or absence of any patent or similar rights subsisting in the product or any other product;
 - c) any guarantee or warranty offered by **Glasscorp Ltd**.
4. Any reference in this Appraisal to any other publication shall be read as a reference to the version of the publication specified in this Appraisal.
5. BRANZ provides no certification, guarantee, indemnity or warranty, to **Glasscorp Ltd** or any third party.

For BRANZ

Claire Falck

Chief Executive

Date of Issue:

17 September 2024