BELZONA 5151 Product Specification Sheet

1. PRODUCT NAME

Belzona® 5151 (Hi-Build Cladding)
Coating for long term waterproofing and weatherproofing of exterior walls and structures.

2. MANUFACTURER

Belzona Inc.
2000 N.W. 88th Court
Miami, Florida 33172

Belzona Polymerics Ltd.
Claro Road, Harrogate,
HG1 4DS, England

3. PRODUCT DESCRIPTION

A single component formulated latex emulsion. The product is based on high molecular weight polymers and oligomers offering elasticity, flexibility and outstanding weather resistance. The system prevents damage to surfaces from aggressive industrial, marine or natural pollutants and ultraviolet radiation. The self-cleaning properties ensure that the appearance of treated surfaces are maintained.

It is ideally suited for application to:

- Walls
- Lintels
- Columns
- Wall panels
- Brickwork
- Stonework
- Cast concrete
- Coated steel
- Aluminum
- Existing painted surfaces

4. TECHNICAL DATA

A one component product.

Appearance	Thixotropic liquid
Color	Sandstone or Limestone White
Viscosity at 77°F (25°C)	1 - 2.5 Poise
Density	1.16 - 1.23 g/cm³
Gel strength	
after 1 hour	180 - 260 g/cm
after 24 hours	225 - 335 g/cm
Solids content by weight	59 - 61%

• Shelf Life:
When stored in unopened containers between 41°F (5°C) and 86°F (30°C), this material is expected to have a shelf life of at least 5 years.

• Usable Life:
At temperatures between 41°F (5°C) and 86°F (30°C) this material will have an indefinite usable life.

• Coverage Rates:
To ensure excellent adhesion, the substrate must be treated with **Belzona® 3911** (PSC Conditioner). The coverage rate is dependent on the nature of the substrate. In order to obtain the recommended dry film thickness of 6 - 8 thou (150 - 200 microns), the practical coverage rate in the chart below should be used as a guide.

• Drying Times:
This will depend largely on prevailing temperatures and relative humidity at the time of application. Typically, at 75°F (22°C) and 50% RH, a single layer of **Belzona® 5151,** applied at 10 mils (250 microns) wet, will become touch dry within 60 minutes and water resistant within 90 minutes.

5. PHYSICAL / MECHANICAL PROPERTIES

• Adhesion:
Tested in accordance with ASTM D429, the results are:

Glass	> 10 pli (1.75 N/mm)
Concrete	> 10 pli (1.75 N/mm)
Coated steel	> 10 pli (1.75 N/mm)

• Elongation at Break:
The elongation of the system after 7 days cure at 68°F (20°C) when tested against BS 2782 or similar test method is typically, 250%

• Flexibility:
Tested at -11°F to +79°F (-24°C to +22°C) to ASTM D552 Conical Mandrell, the results are Pass at 1.5 inch (38mm). Tested to BS 3900 E1 180° Mandrell the results are Pass at 0.5 inch (12mm).

• Tear Strength:
The tear strength of the system after 7 days cure at 68°F (20°C) is typically, 150 pli (26 N/mm).

• Tensile Strength:
The tensile strength of the system after 7 days at 68°F (20°C) when tested against BS 2782 or similar test method is typically, 410 psi (29 kgs/cm²).

• 50% Tensile Modulus:
Tested to ASTM D412 is 110 psi (7.7 kgs/cm²).

• Water Vapor Permeability:
When tested in accordance with ASTM D1653, is 3.5 mg/cm²/mm/day.

Product / Substrate	Belzona® 3911 per litre	1st coat Belzona® 5151 per litre	2nd coat Belzona® 5151 per litre
Concrete	54.0 sq.ft. (5.0 sq.m.)	43.0 sq.ft. (4.0 sq.m.)	43.0 sq.ft. (4.0 sq.m.)
Rough brick	37.5 sq.ft. (3.5 sq.m.)	32.0 sq.ft. (3.0 sq.m.)	43.0 sq.ft. (4.0 sq.m.)
Smooth brick	64.5 sq.ft. (6.0 sq.m.)	43.0 sq.ft. (4.0 sq.m.)	54.0 sq.ft. (5.0 sq.m.)
Cement rendering	54.0 sq.ft. (5.0 sq.m.)	43.0 sq.ft. (4.0 sq.m.)	54.0 sq.ft. (5.0 sq.m.)
Stone	48.5 sq.ft. (4.5 sq.m.)	43.0 sq.ft. (4.0 sq.m.)	43.0 sq.ft. (4.0 sq.m.)

6. SURFACE PREPARATION AND APPLICATION PROCEDURES

To ensure good adhesion, the substrate must be treated with **Belzona® 3911** as appropriate prior to the application of the **Belzona® 5151.** For proper technique, refer to the Belzona® Instructions For Use Leaflet which is enclosed with each packaged product.

7. AVAILABILITY AND COST

Belzona® 5151 is available from a network of Belzona® Distributors throughout the world for prompt delivery to the application site. For information, consult the Belzona Distributor in your area.

8. WARRANTY

Belzona® guarantees this product will meet the performance claims stated herein when material is stored and used as instructed in the Instructions For Use Leaflet. Belzona® further guarantees that all its products are carefully manufactured to ensure the highest quality possible and tested strictly in accordance with universally recognized standards (ASTM, ANSI, BS, DIN, etc.). Since Belzona® has no control over the use of the product described herein, no warranty for any application can be given.

9. TECHNICAL SERVICES

Complete technical assistance is available and includes fully trained Technical Consultants, technical service personnel and fully staffed research, development and quality control laboratories.

10. HEALTH AND SAFETY

Prior to using this material, please consult the relevant Material Safety Data Sheets.

The technical data contained herein is based on the results of long term tests carried out in our laboratories and to the best of our knowledge is true and accurate on the date of publication. It is however subject to change without prior notice and the user should contact Belzona to verify the technical data is correct before specifying or ordering. No guarantee of accuracy is given or implied. We assume no responsibility for rates of coverage, performance or injury resulting from use. Liability, if any, is limited to the replacement of products. No other warranty or guarantee of any kind is made by Belzona, express or implied, whether statutory, by operation of law or otherwise, including merchantability or fitness for a particular purpose.

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Repair • Protect • Improve

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