BELZONA 5131 Product Specification Sheet

1. PRODUCT NAME

Belzona® 5131 (EG-Cladding)
For the treatment of exterior and interior wall 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 modified acrylic emulsion that incorporates hollow borosilicate microspheres to produce a lightweight weather resistant thermal protection system.

Belzona® 5131 was specifically developed to combat exterior water penetration and with its low carbon dioxide permeability reduce the risk of carbonation.

The low thermal conductivity of **Belzona® 5131** together with its low heat capacity means cold surfaces treated with the material feel warmer and hot surfaces feel cooler. This coating is ideal for upgrading the appearance of walls and structures.
Other applications include:

- Metal roofs and cladding
- Ducting and pipework
- Cold pipework
- External tanks
- Ceilings and underside of roofs
- Cellars and basements

4. TECHNICAL DATA

A one component product.

Appearance	Thixotropic liquid
Color	Available in Sandstone or Limestone White
Density	0.90 - 0.98 g/cm³
Gel strength at 68°F (20°C)	100 - 160 g/cm
Freezing point	32°F (0°C)
Solids content by weight	56 - 58%

• 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.

• Drying Time:
Applied under good drying conditions, will be water resistant within 30 minutes of application. Under cool or humid conditions, this time will be extended. The product should not be applied when the relative humidity is above 80% or the surface temperature is below 41°F (5°C).

• Coverage Rates:
An average dry film thickness for **Belzona® 5131 System** of 6-8 mil (150-200 microns) should be aimed for.

Nature and profile of substrate have a marked effect and coverage rate listed in chart below should be obtained.

5. PHYSICAL / MECHANICAL PROPERTIES

• 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, 960%

• Tear Strength:
The tear strength of the system after 7 days cure at 68°F (20°C) is typically, 80 pli.

• 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,
190 psi (13 kgs/cm²).

• Thermal Conductivity:
The table below provides comparative figures between **Belzona® 5131** and traditional materials.

Material	Thermal Conductivity (W/m/°K)
Belzona® 5131	0.105
White Chlor-Rubber Paint	0.474
Concrete	0.864-1.296
Building Brick	0.432-0.864
Glass	0.720-0.864
Plaster	0.288-0.726

• Thermal Imagery Testing:
Independent thermographic tests measured heat transfer using an infra-red camera. It was demonstrated that there is a substantially less degree of heat transfer as compared to conventional coatings.

Product / Substrate	Belzona® 3911 per litre	Belzona® 3921 per kg	1st coat Belzona® 5131 per litre	2nd coat Belzona® 5131 per litre
New Asbestos Sheeting	9.3 m² 100.0 sq.ft.		4.0 m² 43.0 sq.ft.	6.0 m² 64.0 sq.ft.
Old Asbestos Sheeting	4.6 m² 50.0 sq.ft.		3.0 m² 32.0 sq.ft.	4.0 m² 43.0 sq.ft.
Breeze Block/Tyrolean	2.3 m² 25.0 sq.ft.		3.0 m² 32.0 sq.ft.	4.0 m² 43.0 sq.ft.
Concrete	4.2 m² 45.0 sq.ft.		4.0 m² 43.0 sq.ft.	4.0 m² 43.0 sq.ft.
Rough Brick	3.5 m² 37.5 sq.ft.		3.0 m² 32.0 sq.ft.	4.0 m² 43.0 sq.ft.
Smooth Brick	6.0 m² 64.5 sq.ft.		4.0 m² 43.0 sq.ft.	5.0 m² 54.0 sq.ft.
Cement Rendering	5.0 m² 54.0 sq.ft.		4.0 m² 43.0 sq.ft.	5.0 m² 54.0 sq.ft.
Unpainted Plaster	8.0 m² 86.0 sq.ft.		4.0 m² 43.0 sq.ft.	6.0 m² 64.0 sq.ft.
Stone	4.5 m² 48.5 sq.ft.		4.0 m² 43.0 sq.ft.	4.0 m² 43.0 sq.ft.
Galvanized Steel		6.5 m² 70.0 sq.ft.	5.0 m² 54.0 sq.ft.	6.0 m² 64.0 sq.ft.
Non-Ferrous Metals		7.4 m² 80.0 sq.ft.	5.0 m² 54.0 sq.ft.	6.0 m² 64.0 sq.ft.
Iron or Steel		5.6 m² 60.0 sq.ft.	5.0 m² 54.0 sq.ft.	6.0 m² 64.0 sq.ft.
Belzona® 5131	8.5 m² 92.5 sq.ft.		5.0 m² 54.0 sq.ft.	6.0 m² 64.0 sq.ft.

6. SURFACE PREPARATION AND APPLICATION PROCEDURES

To ensure good adhesion, the substrate must be treated with **Belzona® 3911**, or **Belzona® 3921** as appropriate prior to the application of the **Belzona® 5131.** For proper technique, refer to the Belzona® Instructions For Use Leaflet which is enclosed with each packaged product.

7. AVAILABILITY AND COST

Belzona® 5131 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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ISO 9001:2008
Q 09335
ISO 14001:2004
EMS 509612

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Printed in England Publication No. 03-06-11