BELZONA 4131 Product Specification Sheet

1. PRODUCT NAME

Belzona® 4131 (Magma-Screed)
High performance, non-porous resurfacing material for concrete. Provides excellent protection against abrasion or chemical attack.

2. MANUFACTURER

Belzona Inc.,
2000 NW 88th Court,
Miami, Florida 33172.

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

3. PRODUCT DESCRIPTION

A two component system consisting of a base and solidifier. The product contains high molecular weight polymers and oligomers incorporated with an aggregate mix. Once fully cured, the system provides excellent protection to concrete from the effects of abrasion and chemical attack. Easy to mix and apply, this material is ideally suited for application to:

Floors.
Walls.
Aisles.
Ramps.
Stairways.
Warehouse loading bays.
Lifts.
Chemical storage areas.
Machinery/production areas.

4. TECHNICAL DATA

Base Component

Appearance	Damp sand
Color	Gray or Red
Density	2.26 g/cm³

Solidifier Component

Appearance	Liquid
Color	Clear
Density	0.99 g/cm³

Mixed Components

Mixing Ratio by Weight (Base : Solidifier)	30 : 1
Mixing ratio by Volume (Base : Solidifier)	13 : 1

• Shelf Life:
All components will have a shelf life of at least 5 years when stored between 32°F (0°C) and 86°F (30°C).

• Working Life:
Will vary according to temperature. At 77°F (25°C), use all mixed material within 30 minutes.

• Coverage Rates:
Each 20 kg unit applied at the minimum recommended film thickness of ¼ inch (6 mm) will cover 15 sq.ft. (1.4 sq.m.).

• Volume Capacity:
The volume capacity of mixed product is 524 cu.in. (8590 ccs) per 20 kgs.

• Cure Time:
Allow to solidify for the times shown in the chart below before subjecting it to the conditions indicated.

5. PHYSICAL / MECHANICAL PROPERTIES

Determined after 7 days cure at 77°F (25°C).

• Abrasion Resistance:
Taber
The sliding abrasion resistance of the material when using H10 grinding wheels under a 1 kg load is typically 685 mm³ loss/1,000 cycles tested wet.

• Adhesion:
Tensile Shear
The tensile shear adhesion to steel of the polymeric binder, when tested in accordance with ASTM D1002 is typically 2,400 psi (169 kgs/cm²).

Elcometer

Dry concrete	600 psi (42 kgs/cm²)*
Wet concrete	425 psi (30 kgs/cm²)*

** Cohesive failure of substrate*

• Chemical Resistance:
Demonstrates excellent chemical resistance to most inorganic acids up to 10% concentration and alkalis up to 20% concentration. Is resistant to salt solutions, hydrocarbons and mineral oils.

* *For a more detailed description of chemical resistance properties, refer to Product Data Q504.*

• Compressive Strength:
The compressive strength of the material when tested to ASTM C39 is typically 7,500 psi (527 kgs/cm²), and when tested to ASTM D695 is typically 10,500 psi (738 kgs/cm²).

• Flexural Strength:
When tested to ASTM D790 is typically 4,600 psi (323 kgs/cm²).

• Heat Distortion Temperature:
The heat distortion temperature when tested to ASTM D648 is typically 100°F (38°C).

• Heat Resistance:
For many typical applications, the product is thermally stable to 300°F (149°C) dry and 140°F (60°C) wet, and down to -40°F (-40°C).

• Impact Strength:
The Izod impact strength when tested to ASTM D256 is typically 0.35 ft.lbs./in. (19 J/m).

CURE TIMES

Temperature	41°F (5°C)	59°F (15°C)	77°F (25°C)	86°F (30°C)
Pedestrian traffic	12 hrs	9 hrs	6 hrs	4 hrs
Full load bearing capability	5 days	3 days	1 day	18 hrs
Full chemical resistance	18 days	12 days	7 days	4 days

6. SURFACE PREPARATION AND APPLICATION PROCEDURES

For proper techniques, refer to Belzona® Instructions For Use which is enclosed with each packaged product.

7. AVAILABILITY AND COST

Belzona® 4131 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 Belzona® 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 recognised 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.

11. APPROVALS/ ACCEPTANCES

U.S.D.A.

ISO 9001:2008
Q 09335
ISO 14001:2004
EMS 509612

Manufactured under an ISO 9000 Registered Quality Management System

BELZONA®
Repair • Protect • Improve

Printed in England Publication No. 153-3-11