Belzona 4131

FN10077 **(MAGMA-SCREED)**

BELZONA®
Repair • Protect • Improve

INSTRUCTIONS FOR USE

1. TO ENSURE AN EFFECTIVE MOLECULAR WELD

An effective damp proof membrane must be confirmed to avoid rising damp. Structural cracks in the floor must be chased out, terminated and proper provision made for subsequent movement by inclusion of expansion joints. Professional advice should be obtained if structural movement indicates that the floor is unsound.

Any surface to which **Belzona® 4131** is to be applied must be clean, firm and dry. Wash old concrete down with detergent to remove oil, grease and dust. Use clean water to wash away the detergent. Remove all paint, tar and any other coatings.

Allow new concrete to cure for a minimum of 28 days or until the moisture content is below 6% using a Protimeter.

Wire brush vertical upstands to remove loose surface material.

Horizontal concrete surfaces and new concrete will show the phenomenon of surface laitence and this must be removed by mechanical scarification. Wire brush vertical upstands to remove loose surface material.

Abrade metallic surfaces to remove loose rust and flaking paint and then roughen by blasting, grinding or other suitable means to achieve a rough bright metal surface.

In all instances vacuum up any loose dust produced by surface preparation techniques.

Treat any surfaces to which **Belzona® 4131** should not adhere with **Belzona® 9411** (Release Agent) and leave for 15 - 20 minutes to dry before proceeding; seal porous surfaces to be treated with **Belzona® 9411** first, with a suitable lacquer, e.g. shellac or cellulose enamel.

2. CONDITIONING

Add the entire contents of **Belzona® 4911** (Magma TX Conditioner) Solidifier to **Belzona® 4911** Base and stir thoroughly until completely mixed. Immediately brush all of this conditioner onto the surface to be treated with **Belzona® 4131,** with a stiff bristled brush, not exceeding an area of 12 sq.ft. (1.1 m²) per 450g unit.

NOTES:
1. For mixing small quantities of **Belzona® 4911** use:
   2 Parts Base : 1 Part Solidifier by Volume

2. Conditioning and overcoating must be completed within the times shown below:

Ambient Temperature	Usable life after mixing	Minimum overcoating time	Maximum overcoating time*
41°F/ 5°C	230 mins	Application can commence as soon as conditioning has been completed.	6 hours
50°F/10°C	105 mins		6 hours
59°F/15°C	55 mins		6 hours
68°F/20°C	45 mins		6 hours
77°F/25°C	32 mins		6 hours

* If the maximum overcoating time for the **Belzona® 4911** is exceeded, then the cured surface should be abraded and fresh **Belzona® 4911** applied.

3. COMBINING THE REACTIVE COMPONENTS

Mixing may be carried out in the large bucket supplied but due to the bulk and stiffness of the mixed materials, it is essential that a mechanical mixer is used to ensure complete mixing.

Add approximately half the Base component and all of the Solidifier component to the mixing container and start the mixer.

Once initial incorporation has been achieved, slowly add the remainder of the Base material and mix together thoroughly for approximately 5 minutes, or until an even color and consistency are achieved. During this time periodically stop the mixer and withdraw the mixing paddle and scrape clean before continuing mixing.

NOTES:
1. WORKING LIFE
From the commencement of mixing, **Belzona® 4131** must be applied within the times shown below:

Temperature	50°F (10°C)	59°F (15°C)	68°F (20°C)	77°F (25°C)
Use all material within	2 hours	1 hour	45 mins	30 mins

2. VOLUME CAPACITY OF MIXED BELZONA® 4131
524 cu.ins. (8590 cm³.) per 20 kg pack.

3. COVERAGE RATE
The coverage rate of **Belzona® 4131** is 15 sq.ft. (1.4 m²) at the recommended thickness of 0.25 inch (6 mm).

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4. APPLYING BELZONA® 4131

Apply the mixed **Belzona® 4131** directly on to the conditioned surface, initially spreading to a general level using normal screeding techniques and then using a metal straight edge to achieve a uniform thickness prior to smoothing off using a steel float. Avoid overtrowelling as this may detract from the surface finish achieved.

ALTERNATIVE FINISHES
When a very smooth finish to the **Belzona® 4131** is required, a steel float, cleaned and wetted with **Belzona® 9111** should be used. Rougher surfaces, with increased non-slip properties, can be achieved by finishing with a wooden float or brush, working the surface in a circular motion to achieve the desired effect. Note that ease of cleaning and chemical resistance may be reduced by rough finishing.

NOTES:
1. VERTICAL SURFACES
When applying **Belzona® 4131** to vertical surfaces, the normal maximum thickness obtained without sagging is 0.125 in. (0.3 cm.). If application at a greater thickness is necessary, then a piece of polyethylene can be pressed on to the surface of the **Belzona® 4131** to prevent sagging. The polyethylene can be removed when the **Belzona® 4131** has cured.

2. APPLICATION LIMITS
Belzona® 4131 can be applied when the temperature is anywhere between 10°C (50°F) and 25°C (77°F). Below 10°C the material may be too stiff for easy mixing and application, and above 25°C the material may be somewhat "fluid" and will have a short usable life.

3. DAMP SURFACES
Belzona® 4131 can be applied to damp surfaces but its adhesion will be approximately 75% of that obtained on a dry surface.

4. APPLYING ADDITIONAL LAYERS OF BELZONA® 4131
Where this is required it should be done as soon as the first layer is firm enough to accept the second layer and within the maximum overcoating time of 6 hours.

After this time the surface of the **Belzona® 4131** must be abraded before further application.

In all cases the surface must be conditioned with **Belzona® 4911** (see Section 2) before applying further **Belzona® 4131.**

5. CLEANING
All mixing tools should be cleaned immediately after use with **Belzona® 9111** (Cleaner/Degreaser) or any other effective solvent e.g. MEK. Brushes and other application tools should be cleaned using a suitable solvent such as **Belzona® 9121,** MEK, acetone or cellulose thinners.

5. COMPLETION OF THE MOLECULAR REACTION

Allow **Belzona® 4131** to solidify for the following times before subjecting it to the conditions indicated:

Temperature	41°F (5°C)	59°F (15°C)	77°F (25°C)
Pedestrian traffic	16 hours	9 hours	6 hours
Full load bearing capability	5 days	3 days	1 day
Full chemical resistance	18 days	12 days	7 days

These figures are for **Belzona® 4131** at the recommended film thickness of 0.25 in. (6 mm.). They will be reduced for thicker sections and extended for thinner applications.

BELZONA® 4131 MUST NOT BE EXPOSED TO MOISTURE UNTIL FULL CURE HAS BEEN ACHIEVED OTHERWISE SURFACE WHITENING WILL OCCUR.

HEALTH & SAFETY INFORMATION
Please read and make sure you understand the relevant Safety Data Sheets.

ISO 9001:2008
US3429

Manufactured under an ISO 9000 Registered Quality Management System

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