



BELZONA® 4151 (MAGMA-QUARTZ RESINS)

INSTRUCTIONS FOR USE

1. TO ENSURE AN EFFECTIVE MOLECULAR WELD

Any surfaces to which **Belzona® 4151** is to be applied must be clean, firm and dry. Old concrete should be washed down with detergent to remove oil, grease and dirt. Clean water should then be used to wash away the detergent. All paint, tar and any other coatings must be removed.

New concrete should be allowed to cure for a minimum of 28 days or until the moisture content is below 6% using a Protimeter.

Horizontal concrete surfaces and new concrete will show the phenomenon of surface laitence and this must be removed by mechanical scarification. Vertical surfaces should be wire brushed to remove loose surface material.

Belzona® 4111 (Magma-Quartz) and **Belzona® 4131** (Magma-Screed) must be overcoated within 48 hours. If allowed to cure for longer than this time, the surface must be thoroughly abraded and any contamination removed with a suitable cleaner.

In all instances any loose dust produced by surface preparation techniques should be vacuumed clear.

2. COMBINING THE REACTIVE COMPONENTS

Empty the entire contents of the Base and Solidifier units into a suitable mixing vessel. Mix thoroughly for 3 minutes until a homogeneous mix is achieved then immediately proceed to Stage 3, "Application".

NOTES:

1. WARNING

UNDER NO CIRCUMSTANCES SHOULD COMPLETE UNITS BE MIXED AND LEFT TO STAND, AS THE LARGE EXOTHERM PRODUCED WILL GREATLY REDUCE THE USABLE LIFE OF THE MIXED MATERIAL.

IF DIFFICULTY IS ANTICIPATED IN APPLYING ALL OF THE MATERIAL WITHIN ITS WORKING LIFE, IT SHOULD BE SPLIT BETWEEN TWO OR MORE OPERATIVES TO APPLY.

ALTERNATIVELY, SMALLER QUANTITIES SHOULD BE MIXED (see 2 below).

2. MIXING SMALL QUANTITIES

For mixing small quantities of **Belzona® 4151** use:
2 parts Base to 1 part Solidifier by volume

Mix thoroughly for 2 minutes to achieve a homogeneous mix, then proceed to Stage 3 "Application".

3. WORKING LIFE

From the commencement of mixing, **Belzona® 4151** must be applied within the times shown below:

Temperature	Use all material within
41°F/ 5°C	50 min
50°F/10°C	36 min
59°F/15°C	27 min
68°F/20°C	18 min
77°F/25°C	13 min

3. APPLYING BELZONA® 4151

FOR BEST RESULTS

Do not apply when:-

- The temperature is below 41°F (5°C) or the relative humidity is above 90%.
- Rain, snow, fog or mist is present.
- There is moisture on the surface or is likely to be deposited by subsequent condensation.
- The working environment is likely to be contaminated by oil/grease from adjacent equipment or smoke from kerosene heaters or tobacco smoking.

- a) Apply **Belzona® 4151** with a good quality brush, to give a practical coverage rate of 205 sq.ft. (19 m²) per 6 kg unit. See Note 2 below regarding application to vertical surfaces.
- b) Where a second coat is required, this should be applied as soon as it is possible to do so without disturbing the first coat, and never after longer than 2 hours.

Should this overcoating interval be exceeded, the first coat should be allowed to harden, and abraded prior to applying the second coat. (Alternatively, see Note 3 below for large applications).

- c) The second coat of **Belzona® 4151** should be applied directly after mixing.

NOTES:

1. Film thickness and coverage rate will vary with porosity and profile of the substrate.
2. To avoid sagging on vertical surfaces, film thickness should not exceed 5 mil (125 microns).
3. On larger applications where it is not possible to overcoat **Belzona® 4151** within the maximum overcoating time, **Belzona® 4911** (Magma TX Conditioner) should be adopted instead of the first coat of **Belzona® 4151**. This material should be applied at a practical coverage rate of 79.0 sq.ft. (7.33 sq.m.) per 3 kg unit irrespective of whether on a horizontal or vertical surface. The **Belzona® 4151** should be applied as soon as possible to do so without disturbing the **Belzona® 4911**, and never in excess of the 6 hour maximum overcoating time.

4. CLEANING

Mixing tools should be cleaned immediately after use with **Belzona® 9111** or any other effective solvent e.g. MEK. Brushes, injection guns, spray equipment and other application tools should be cleaned using a suitable solvent such as **Belzona® 9121**, MEK, acetone or cellulose thinners.

4. COMPLETION OF THE MOLECULAR REACTION

Allow **Belzona® 4151** to solidify as below before subjecting it to the conditions indicated:

	To resist pedestrian traffic	Full mechanical hardness	Full chemical resistance
41°F/ 5°C 59°F/15°C 77°F/25°C	16 hours 6 hours 4 hours	2 days 24 hours 16 hours	14 days 10 days 5 days

BELZONA® 4151 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 Material Safety Data Sheets.

All descriptions are based on the results of long term tests carried out in our laboratories and are believed to be true and accurate. No condition or warranty is given covering the results from the use of our products in any particular case, whether the purpose is disclosed or not, and we cannot accept liability if the desired results are not obtained.

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