



BELZONA® 5221 (D & A LAMINATE)

INSTRUCTIONS FOR USE

1. TO ENSURE AN EFFECTIVE MOLECULAR WELD TO WOOD

APPLY ONLY TO CLEAN, SOUND, DRY INTERIOR WOOD SURFACES

Make good any obvious joints, damaged areas or loose blocks before commencing application. Remove existing treatments by sanding. Whilst small areas can be sanded by hand, larger areas can only be effectively prepared using a mechanical sander. The degree of sanding will depend upon the condition of the surface to be protected, but continue sanding until the surface is an even colour. Scrape clear lodged dirt in joints and skirtings and vacuum the surface to remove all dirt and sanding dust, prior to wiping over with a damp cloth and application of the **Belzona® 5221**.

2. COMBINING THE REACTIVE COMPONENTS

Empty the entire contents of the Solidifier container into the Base unit and stir until a completely homogeneous mix is achieved (see section 5, usable life).

3. APPLYING THE BELZONA® 5221

For best results, only apply when the temperature is 41°F (5°C) or above and the relative humidity is below 90%.

- a) Apply the mixed **Belzona® 5221** to the prepared surface with short nap paint pads (suitable for gloss paint), or a good quality soft bristled brush, adhering to the coverage rates given in section 6.
- b) It is vitally important to work in such a way so as to maintain a "wet edge" to obtain the best possible finish and appearance to the application.
- c) After the first coat has dried, the wood grain will have lifted slightly. The area treated should be LIGHTLY SANDED to a smooth finish and all loose dust swept or vacuumed clear. Wipe the surface over with a damp cloth prior to application of the second coat of **Belzona® 5221**.
- d) Apply the second coat as soon as possible after the minimum overcoating time (see section 5 "Drying Times") to avoid risk of contamination. Again, refer to the coverage rates given.
- e) On particularly porous soft woods, or in high wear areas, the application of subsequent coats may be required. In such circumstances apply the material as detailed above.

4. APPLICATION TO OTHER SUBSTRATES

- a) **Belzona® 4111 (Magma-Quartz) and Belzona® 4131 (Magma-Screed)**
These products can be effectively sealed by the application of **Belzona® 5221**. First brush the surface, or vacuum, to remove any dust, and thoroughly wash contaminated surfaces with detergent solution followed by clean water.
- b) **Vinyl, thermoplastics and linoleum.**
Abrade previously waxed or polished surfaces to remove all surface treatment and finally wash down with water and allow to dry. It is essential that before proceeding with the application of **Belzona® 5221** onto any such substrate, a trial area is first treated to check for compatibility.
- c) **Terrazzo and Quarry Tiles**
In addition to being clean and dry it is essential that these surfaces are lightly abraded to remove surface sheen prior to vacuuming away any loose dust and washing with clean water.
- d) **Line Markings**
Belzona® 5221 can be applied over the top of most line marking paints, but carry out a compatibility test prior to application. For convenience this can be conducted using the **Belzona® 5221** Base only. Lightly abrade the line marking paint once dry prior to application of the **Belzona® 5221**.
- e) **Concrete and Granwood Surfaces**
It is essential to use Belzona® 5971 on these surfaces. Never apply Belzona® 5971 to surfaces which are below 50°F (10°C) or when the relative humidity is above 85%. Remove all surface laitence. Blast clean power floated concrete to provide a good surface profile. To condition the substrate empty the entire contents of the **Belzona® 5971** Solidifier container into the **Belzona® 5971** Base unit and mix thoroughly, until homogeneous. After mixing, allow the **Belzona® 5971** to stand for 30 minutes prior to application. Apply one coat of **Belzona® 5971**, followed by one or more coats of **Belzona® 5221**.

5. TECHNICAL DATA

1. USABLE LIFE

The usable lives of **Belzona® 5221** and **Belzona® 5971** are given in the table below:

Temperature	41°F (5°C)	50°F (10°C)	68°F (20°C)	86°F (30°C)
Belzona® 5221 Belzona® 5971	36 hours N/R*	30 hours 6 hours	24 hours 3 hours	12 hours 1½ hours

*Not Recommended

2. DRYING TIMES - BELZONA® 5221

For 100 microns (4 mil) wft at 50% RH and no air movement
(See Note 1 opposite)

Temperatures	41°F (5°C)	50°F (10°C)	68°F (20°C)	86°F (30°C)
Touch dry time	150 mins	90 mins	30 mins	20 mins
Minimum overcoating time	4 hours	3 hours	60 mins	45 mins
Maximum overcoating time	see Note 2 opposite			
Light pedestrian use	2 days	1 day	18 hours	12 hours
Heavy pedestrian use	5 days	2 days	1 day	18 hours
Chemical contact	14 days	10 days	7 days	5 days

OVERCOATING TIMES FOR BELZONA® 5971

	41°F (5°C)	50°F (10°C)	68°F (20°C)	86°F (30°C)
Minimum	-	36 hours	16 hours	12 hours
Maximum	-	4 days	3 days	2 days

Note 1: Drying times and overcoating times are critically dependent on air flow and relative humidity.

Note 2: There is no maximum overcoating time for **Belzona® 5221** but where any delay in overcoating results in contamination, this must first be removed before proceeding as described in section 3(b).

6. COVERAGE RATES

BELZONA® 5221 Wood Non-porous substrates

First coat	6 - 8 m ² /litre	9.8 m ² /litre
Second and subsequent coats	9.8 m ² /litre	9.8 m ² /litre

BELZONA® 5971

A coverage rate of 10m²/litre should be aimed for.

SMALL QUANTITY MIXING RATIO

Belzona® 5221	36 : 1 by weight or volume
Belzona® 5971	1 : 1 by weight or volume

7. THINNING

Under normal conditions it is not necessary to thin **Belzona® 5221**. Where rapid drying conditions lead to application difficulties, however, thin with up to 15% by volume of clean water.

8. TINTING

Belzona® 5221 and **Belzona® 5971** can be tinted by the addition of acrylic based pigment dispersions. The level of addition will be dependent on pigment concentration and the depth of color required, but must not exceed 5% by volume. In addition, phthalate based pigment dispersions can be used to tint **Belzona® 5971**, but these will necessitate a two-coat application to achieve good opacity. Compatibility of the tint to be adopted must always be verified before use. The addition of tints to **Belzona® 5221** and **Belzona® 5971** can lead to a significant extension of overcoating and drying times.

The figures quoted below relate to a maximum 5% by volume addition of an acrylic based tint.

DRYING TIMES - BELZONA® 5221

For 100 microns (4 mil) wft at 50% RH and no air movement

Temperature	50°F (10°C)	68°F (20°C)	86°F (30°C)
Touch dry time	180 mins	60 mins	40 mins
Minimum overcoating time	6 hours	2 hours	12 hours
Light pedestrian use	2 days	1 day	16 hours
Heavy pedestrian use	3 days	2 days	1 day
Chemical contact	14 days	10 days	7 days

OVERCOATING TIMES FOR BELZONA® 5971

Minimum	2 days	1 day	16 hours
Maximum	5 days	4 days	3 days

9. CLEANING

All mixing and application tools should be cleaned immediately after use in cold water.

HEALTH & SAFETY INFORMATION

Please read and make sure you understand the relevant Material Safety Data Sheets.

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