

# High Performance Concrete Repair and Rebuild Composite



Belzona 4111 (Magma-Quartz) is a multi-purpose repair composite for the resurfacing, rebuilding and protection of concrete and stonework.

This versatile material can also be used for grouting and bonding and offers outstanding chemical, abrasion and impact resistance.

Belzona 4111 is ideally suited for repairs to horizontal surfaces subject to abrasion impact and vibration but may also be applied to vertical substrates up to 6mm (0.2in) in thickness. It adheres well to most surfaces including concrete, brick, marble, stone, steel and other metal substrates.

TECHNICAL DATA	Mixing ratio (base:solidifier:aggregate)	2 : 1 : 30 by weight	2 : 1 by volume - aggregate may be added to desired consistency
	Working life	30 minutes at 25°C (77°F)	
	Shelf life	5 years	
	Dry heat resistance	200°C (392°F)	
	Adhesion (tensile shear)	18.0 MPa (2,620 psi)	
	Compressive strength	92.7 MPa (13,450 psi)	
	Volume capacity	6,465 cm <sup>3</sup> (394 in <sup>3</sup> ) / 15 kg	
	Heat distortion temperature	43°C (109°F)	
	Abrasion resistance	H10 - 650 mm <sup>3</sup> wet	CS17 - 7.5 mm <sup>3</sup> dry
	Coverage rate	1.1 m <sup>2</sup> (12 ft <sup>2</sup> ) / 15 kg at 6 mm (0.25 in)	

CURE TIMES	Temperature	5°C (41°F)	15°C (59°F)	25°C (77°F)
	To resist pedestrian traffic	16 hours	6 hours	4 hours
	Machine hard	24 hours	8 hours	6 hours
	Full mechanical hardness	2 days	24 hours	16 hours
	Full chemical resistance	14 days	10 days	5 days

\*Please consult the Product Specification Sheet (PSS) and Instructions for Use (IFU) for the latest technical data.



**LONG TERM PROTECTION**



**EXCELLENT ADHESION**



**HIGH MECHANICAL STRENGTH**



**RAPID CURE**



**EASY TO APPLY (NO SPECIALIST TOOLS)**

## Key Benefits:

- **Easy to apply**

An easy-to-apply solution, Belzona 4111 can bond to metallic or non-metallic surfaces and does not experience shrinkage whilst curing.

- **Fast curing**

The material can experience foot traffic in as little as 4 hours and cures to full mechanical hardness in only 16 hours at 25°C (77°F).

- **Excellent adhesion**

Belzona 4111 has been designed to adhere to a wide range of substrates including: concrete, brick, marble, stone, steel and metallic surfaces

- **Reduce safety hazards**

Belzona 4111 is solvent-free, meaning there are no dangerous solvent vapours or risks of fire.

- **Provide long-term protection**

When cured, Belzona 4111 exhibits high mechanical strength, is resistant to environmental and chemical attack and is non-porous, therefore providing long-term protection.

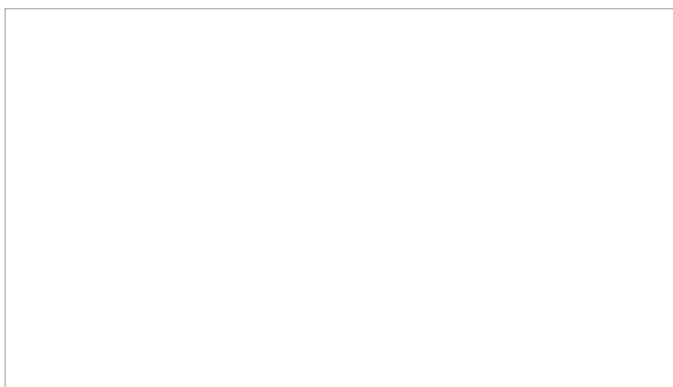
## Before & After:



## Application areas:

- Aisles
- Channels and gratings
- Chemical storage areas
- Expansion joints
- Floors
- Loading docks
- Loose railings
- Machinery/production areas
- Ramps
- Stairways
- Steps
- Walkways

For more information, please contact your local Belzona representative:



### QUALITY PRODUCTS - TECHNICAL SUPPORT

Belzona products are manufactured under an ISO 9001 Registered Quality Management System.

Belzona has a global distribution network of over 140 Distributors operating in 120 countries. Local support is provided by a trained Technical Consultant who will diagnose the problem, recommend the solution and provide 24-hour, on-site application supervision and advice.