# Multi-Purpose Composite for Bonding, Sealing and Rebuilding Applications





Belzona 1111 (Super Metal) is a cold-curing 100% solids epoxy composite reinforced with silicon steel alloy.

This material can be used for various applications including bonding, shimming, forming, rebuilding, wrapping, patching, sealing and filling.

It will not shrink while curing in service, allowing for exact dimensions and geometry to be achieved. Belzona 1111 ensures lasting in-service performance, accounting for temperature and pressure fluctuations, loading and stresses, impact and abrasion.

Five-year shelf life makes Belzona 1111 an invaluable stock item for many maintenance professionals.



	Mixing ratio (Base : Solidifier)	3:1 by volume	5:1 by weight		
TECHNICAL DATA	Working life	15 minutes at 25°C (77°F)			
	Shelf life	5 years			
	Dry heat resistance	200°C (392°F)			
	Adhesion (tensile shear)	Mild steel - 2,790 psi (19.2 Mpa)	Stainless steel - 2,960 psi (20.4 Mpa)		
	Compressive strength	9620 psi (66.3 Mpa) at 20°C (68°F)			
	Volume capacity	24.3in <sup>3</sup> (398cm <sup>3</sup> ) /kg			
	Heat distortion temperature	53°C (127°F) at 20°C (68°F)	91°C (195°F) at 100°C (212°F)		
	Abrasion resistance	H10 Wheels (Wet) 852mm <sup>3</sup>	CS17 - 24 mm <sup>3</sup> dry		

	Temperature	10°C (50°F)	15°C (59°F)	20°C (68°F)	25°C (77°F)
	No loading or immersion	3 hours	2¼ hours	1¾ hours	1 hour
	Machining and/or light loading	4 hours	3 hours	2 hours	1½ hours
	Full mechanical or thermal loading	2 days	1½ days	1 day	20 hours
	Immersion in chemicals	4 days	3 days	2 days	1½ days

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



MULTI-PURPOSE



SIMPLE APPLICATION



100% SOLIDS

www.belzona.com/1111

# <mark>1000 Series</mark> BELZONA 1111



## **Application Areas:**



Bonding and shimming

Forming and rebuilding

#### Wrapping and patching

#### Sealing and filling

# Key Benefits:

#### • Multi-purpose

Can be used for bonding, irregular shimming, forming, rebuilding, wrapping and patching.

## • Durable

High compressive strength, impact and abrasion resistance.

#### • High precision

Moulds to precise contours and can be machined with conventional tools.

## • Simple application

Easy to mix and apply with no specialist tools.

## • Versatile

Adheres well to almost any substrate and can be applied in thin or thick sections in one operation.

## • 100% Solids

No shrinkage, expansion or contraction during cure.

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.