

Product Data

Abrasion Resistant System for Protection Against Extreme Abrasive Attack

Belzona® 9811 are alumina tiles supplied on a flexible mat, that is easily bonded to create a hard wearing abrasion resistant lining capable of forming many different contours. These tiles are bonded into place and grouted with Belzona® materials to form a high performance abrasion resistant system. Belzona® offer a wide range of materials that can be used for bonding and grouting the tiles, depending on the operating conditions and substrate profile.

Belzona® 9811 alumina tiles are produced from superfine, an extremely pure micro-crystal aluminium oxide sintered at high temperature. The alumina oxide used to manufacture the tiles has a hardness of 9 on the Moh scale, with only diamond being harder at 10 on Moh scale.

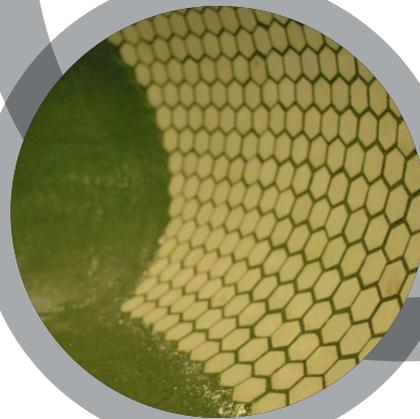
The following table, generated from tests at a power station, shows wear resistance of Belzona® 9811 in comparison with other wear resistant materials.

Material	Wear Amount	Relative Wear Resistance
Belzona® 9811	0.0002g	266
High-chrome cast iron	0.0343g	1.551
Manganese steel	0.0532g	1

System selection:

For bonding	General applications where time, temperature and contaminants are not an issue	Belzona® 1321 (Ceramic S-Metal)
	Extended cure time, large repair areas	Belzona® 1121 (Super XL-Metal)
	Uneven, pitted substrate	Belzona® 1111 (Super Metal) Belzona® 1151 (Smoothing Metal)
	High operating temperatures	Belzona® 1391 (Ceramic HT)
For grouting	General application up to 90°C (194°F)	Belzona® 1812 (Ceramic Carbide FP)
	Abrasion at high temperatures up to 200°C (392°F)	Belzona® 1813

Belzona® 9811



Bonding Belzona® 9811 tiles

Belzona® 9811 system is:

Simple

- No specialist tools required
- Can be applied to most substrates
- Convenient design for fast and easy application

Safe

- Low temperature cure ensures no fire risk
- No VOC content
- Fastback to service time
- No dust or loose aggregate to be mixed

Versatile

- No shrinkage, expansion or distortion
- Fast cure rates
- Suitable for application on many geometric shapes
- Bonds to most rigid substrates including steel and cast iron

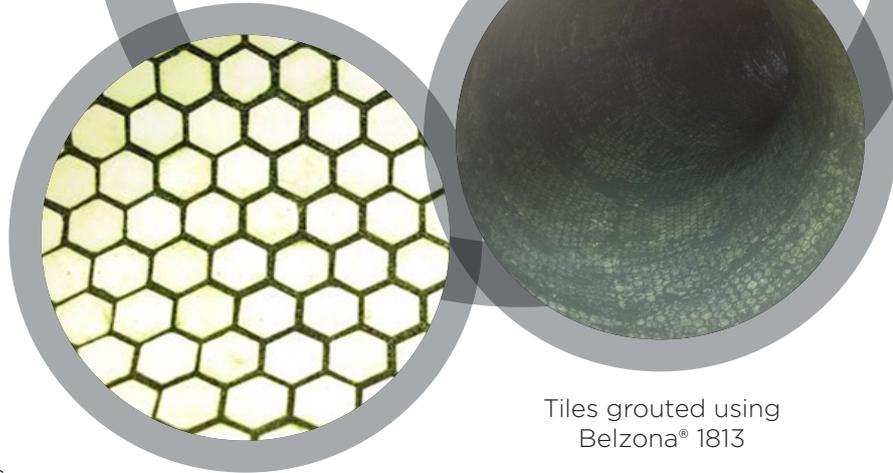
Effective

- High wear resistance
- Broad service temperature range
- Resistant to a wide range of chemicals
- Does not corrode

Applications for Belzona® 9811 system include:

- Cyclones
- Hoppers
- Nozzles
- Deflector plates
- Centrifuges
- Impellers
- Chutes
- Pipe bends
- Wear plates
- Mixing bowls

Belzona® 9811

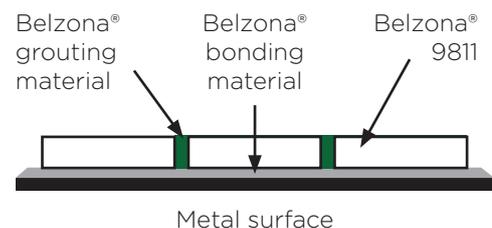


Tiles grouted using Belzona® 1813

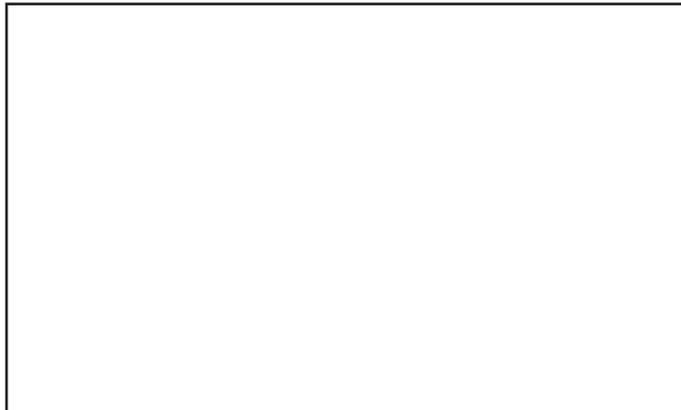
Belzona® 9811 pack specifications:

- Each individual hexagonal tile measures 10x10x5mm and are supplied on bonded mat for ease of installation
- A pack contains 25 Belzona® 9811 wear resistant hexagonal alumina tile mats measuring 250x170mm
- Each pack covers approximately 1.065m² area and weighs 18kg approximately

How it works:



For more information, please contact your local Belzona® representative:



QUALITY PRODUCTS - TECHNICAL SUPPORT

The Belzona® product range is manufactured through stringent quality and environmental control guidelines complying with the internationally recognised requirements of **ISO 9001:2008** and **ISO 14001:2004**.

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.



ISO 9001:2008
Q 09335
ISO 14001:2004
EMS 509612

Belzona products are manufactured under an ISO 9000 Registered Quality Management System

