

Jotaguard RB 4001

PRODUCT DESCRIPTION

This product is a fusion-bonded epoxy coating with increased flexibility that is designed for corrosion protection of steel reinforcing bars. The product is tested to ASTM standard and approved by Valley Forge Laboratories. The bond strength between steel and concrete is maintained when this coating is used as proven by independent third-party testing houses.

POWDER PROPERTIES

Property	Standard	Result
Cure time	ISO 8130-6 annex A.2 240 °C (464 °F)	< 30 seconds
Gel time	ISO 8130-6 annex A.3 240 °C (464 °F)	3-5 seconds
Moisture content	Moisture balance method	Below 0.50 % (at time of manufacture)
Particle size	Vacuum sieve method	99.8 % below 250 µm 97 % below 150 µm
Density	Liquid displacement method	1.30 ± 0.05 g/cm ³

Storage

When stored at a maximum 25 °C (77 °F), a shelf life of 12 months is obtained from the date of manufacture.

APPLICATION

Powder application

Application conditions	Typical application temperature	Typical film thickness
Typical application	230-250 °C (446-482 °F)	175-300 µm (7-12 mils)

PERFORMANCE

Property	Standard	Result
Flexibility	ASTM A775 bar No. 6, 180 ° 4" diameter Mandrell, 15 seconds	No cracking
Hardness	ASTM D1474-68 Pencil hardness	> 16 7 H
Impact resistance	ASTM G14-72	No cracking, shattering and bond loss
Cathodic disbondment*	ASTM G8-96 168 hours at 24 °C (75 °F)	< 4 mm radius average

Salt spray resistance	ASTM B117 800 hours at 35 °C (95 °F)	2 - 3 mm
Chemical resistance	ASTM A775 45 days immersion at 24 ± 2 ° C (75 ° F) In distilled water 3 molar calcium chloride 3 molar sodium chloride Saturated calcium hydroxide	No holidays No undercutting No blistering No loss of bond No softening
Bond strength	ASTM A944 Beam-end test	> 90 % of uncoated bar
Abrasion resistance	ASTM D4060 CS-10, 1000 g load 1000 cycles	26.4 mg loss
Chloride permeability	ASTM A775 45 days at 24 °C (75 ° F)	1.4 x 10 ⁻⁵ M

* The performance of the coating is based on substrates which have not been chemically pretreated.

Disclaimer

The information in this document is given to the best of Jotun's knowledge, based on laboratory testing and practical experience. Jotun's products are considered as semi-finished goods and as such, products are often used under conditions beyond Jotun's control. Jotun cannot guarantee anything but the quality of the product itself. Minor product variations may be implemented in order to comply with local requirements. Jotun reserves the right to change the given data without further notice.

Users should always consult Jotun for specific guidance on the general suitability of this product for their needs and specific application practices.

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