

## TECHNICAL DATA SHEET FOR

**FLOORSHIELD 821 EPOXY RE-MORTAR**

**DESCRIPTION** : Floorshield 821 Epoxy Re-Mortar is a two-component product, premixed with selected graded aggregates / epoxy resins & additives which when mixed, produces a high strength impermeable and chemically resistant mortar. The base / hardener are in different colours to provide visual confirmation of adequate and proper mixing on site.

**TYPE** : Two component high strength epoxy resin mortar

**USES** :

- Repair of damaged precast concrete building units
- Repair of spalled or honeycombed vertical surfaces and protecting exposed reinforcement
- Repair of cracked concrete piles
- Grouting of tile joints in commercial & hotel, food & hygienic areas, swimming pools, industrial work areas
- Bedding applications – bridge bearing pads and mounting of heavy plant and machinery
- General repair works – bonds different materials
- Underwater applications – replacing slip tiles repairing submerged steel work and concrete where reinforcement has been exposed
- Repair and reinstating structures exposed to heavy battering of the sea, such as seawalls and concrete jetties

**FEATURES** :

- Possess outstanding strength and adhesive strength
- Fast cure - by chemical reaction
- High compressive and tensile strength
- Impermeable to water, oil, petrol, chemical spillage
- Excellent chemical resistance

**APPLICATION DATA**

**METHOD** : Trowel

**THEORETICAL COVERAGE** : 1.85 – 1.95 kg/m<sup>2</sup> per 1mm dry film thickness

**THICKNESS PER APPLICATION** : 1 – 20mm

**DILUTION** : No dilution is necessary for best performance

**FLOORSHIELD 821 EPOXY RE-MORTAR****SURFACE  
PREPARATION****: For Concrete and Ceramic**

As with all concrete repairs, it is essential to remove all grease, oil, dust and other loose materials. Concrete substrates must be adequately prepared either by use of a suitable mechanical method such as scabbling, grit blasting or needle gunning.

**For Site Instruction**

Mechanically clean concrete to remove loose, weak and contaminated surfaces and remove dust and debris. Ensure surfaces are dry and prime with Floorshield SF Epoxy Primer. Allow to dry for 12 hours before firmly applying Floorshield 821 Epoxy Re-mortar. A smooth surface may be obtained with a damp or heated trowel.

Floorshield 821 Epoxy Re-mortar may be used on wet surfaces but must thoroughly worked into the wet surface to obtain complete surface protection and adhesion.

Floorshield 821 Epoxy Re-Mortar should not be applied more than 20 mm thick in one application on vehicle surfaces, to prevent slumping. In most cases, where concrete surface is rough, no primer is required.

**DIRECTION OF  
USE****: Mixing**

Mix materials in the ratio of 3:1 by weight (Part A:Part B) until a homogenous colour is obtained (1 to 3 mins). For large quantities, mechanical mixer should be used, for small quantity, it can be hand mixed.

**For Underwater Application**

Surfaces must be mechanically cleaned, free of weak or loose material, marine growth, rust, scale, etc.

Mixed Floorshield 821 Epoxy Re-Mortar should be carried in plastic bags to work area in small quantities, approximately 5 mm thick, pressed into position ensuring that all water is expelled from between the repair surface and the Nippon Floorshield 821 Epoxy Re-Mortar.

Mixed mortar should be applied within 30 minutes of mixing. Contact between the mixed mortar and water should be avoided until the point of application. Uncured material should be protected from scouring and displacement by moving water until cured.

**FLOORSHIELD 821 EPOXY RE-MORTAR****TECHNICAL DATA**

<b>Appearance</b>	Part A: White Paste Part B: Soft Black Paste
<b>Density</b>	Part A: 2.20 ± 0.06 Part B: 1.85 ± 0.06
<b>Mix Ratio (Part A : PartB)</b>	3:1
<b>Mixed Colour</b>	Grey
<b>Pot Life</b>	45 ± 5 mins (100g at 25 ± 3°C in paper cup)
<b>Compressive Strength at 7 Days ASTM C579: 2001 (2012)</b>	≥ 60 N/mm <sup>2</sup>
<b>Tensile Strength (ASTM C307: 2003 (2012))</b>	> 13.8 N/mm <sup>2</sup>
<b>Water Immersion</b>	May be applied and cured underwater
<b>Coverage</b>	1.85 – 1.95 kg/m <sup>2</sup> per mm thickness
<b>Full Cure</b>	7 ± 2 days at 25 ± 3°C

**GENERAL INFORMATION**

**PACKING** : 3 kg and 12 kg set

**SHELF LIFE** : 12 months when stored unopened in a cool and dry place. Store the materials away from sunlight or heat before using, as heat will shorten pot-life of materials.

**PRECAUTION** : Gloves and goggles should be worn. Any splashes to the skin or eyes should be washed off with clean water. In the event of prolonged irritation, seek medical advice. Powder products should be handled to minimize dust formation. Use a light mask if excessive dusting is unavoidable.

The information given is intended to give a description of the product performance under specific test conditions. Nevertheless, we cannot assume any responsibility for the use of it since circumstances under which the products are applied in practice are subjected to many variations. We reserve the right to alter the given data without notice.

**Enquiries / Contact Details** : **Customer Service**  
**6265 5355 (Main Line)**  
**6264 1603 (Fax)**  
**www.nipponpaint.com.sg**