

BP-ReCon GP

Modified Cementitious Structural Grade Repair Mortar

Description

BP-ReCon GP is a ready to use single component polymer modified repair mortar containing fibres and silica fume which requires only the addition of clean water to produce a highly consistent, hand and spray grade, repair mortar suitable for most structural and load bearing repairs. It contains specially selected materials to provide a fine, smooth repaired surface.

Application Area

BP-ReCon GP is suitable for wet spraying and hand application in a wide variety of repair applications, and is particularly well suited to vertical and overhead repairs for repairing load bearing structures, precast concrete elements, etc. It can also be used to repair honeycombs, surface defects, blowholes, tie rod holes and minor damages.

Advantages

- ✓ Non-shrink mortar
- ✓ Fibres help in reducing micro cracking of repaired surfaces
- ✓ User friendly, excellent workability
- ✓ Non-toxic and non-corrosive
- ✓ Extremely low permeability
- ✓ Excellent resistance to aggressive environmental elements
- ✓ Dense surface helps in resisting carbon dioxide penetration
- ✓ Excellent adhesion and mechanical strength
- ✓ Chloride free, safe to use in repairs of reinforced concrete surfaces

Typical Properties

Property	Test Method	Value
Component		Single
Form		Powder
Colour		Grey
Fresh Wet Density	BSEN 12350-6	2.05 kg/ltr +/- 0.05
Working Time		25 Minutes
Compressive Strength	ASTM C109	55 N/mm ² at 28 days
Bond Strength	ASTM D4541	>1.5 N/mm ² at 28 days
Flexural Strength	BS 6319-3	7 N/mm ² at 28 days
Water Absorption (ISAT)	BS 1881-208	< 0.01 ml/m ² /sec at 2 hrs
Drying Shrinkage	ASTM C157	< 500 microstrain at 28 days

Surface Preparation

The area to be repaired should be clearly marked and saw cut for at least 5 mm depth to avoid feather edges. The surface should be clean and sound. Remove dirt, dust, oil, grease, laitance,

sealers, release agents, curing compounds and paints using suitable mechanical means. Exposed rebar should be cleaned and protected with **BP-ReCon Zinc**. The concrete should be saturated with water prior to application.

Priming

Priming is generally not required. Surfaces to receive **BP-ReCon GP** should be well saturated with water prior to application and excess water is to be removed before application of **BP-ReCon GP**. In some critical cases appropriate bonding agent from **BP-FitBond SBR** or **BP-FitBond EA** range can be used.

Mixing

BP-ReCon GP should be mixed with water using a heavy duty slow speed drill machine fitted with a paddle. Amount of water to be added is 4 ltrs per 25 kg bag. Mix for at least 3 minutes to ensure a homogeneous lump free consistency is achieved. Do not try to remix the product after it loses its workability by adding more water.

Application Guidelines

BP-ReCon GP can be applied by hand or wet spray. It should be firmly placed to ensure proper bonding to the prepared surface. Wooden float or plastic float may be used for levelling and initial finishing. Final finish can be carried out just before the initial set of material using a steel trowel. Single layer application can be carried out to a maximum thickness of 40 mm. Thicker repairs may be achieved by working in layers.

Application Thickness

BP-Recon GP can be applied at a thickness of 5 mm up to 40 mm in a single layer.

- ✓ 5 mm to 40 mm in a single layer for horizontal surface
- ✓ 5 mm to 20 mm in a single layer for vertical surface
- ✓ 5 mm to 15 mm in a single layer for overhead surface

Curing

BP-Recon GP treated concrete must be protected to prevent premature moisture loss and crazing immediately after final finishing. Water cure by mist spray or by spreading wet burlap/moist hessian over the surface. Alternatively suitable curing compound from **BP-JetCure** range may be used.

Packaging

BP-Recon GP is packed in 25kg moisture resistant bags.

Storage & Shelf-life

12 months from date of manufacture when stored under warehouse conditions in original unopened packing. Extreme temperature / humidity may reduce shelf life.

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Limitations

At temperatures over 30°C, at low humidity or when placing concrete without protection from wind or sun, erect sunshades or windbreaks the use of **BP-JetCure GP** curing products is essential. Do not use salt water or salt contaminated aggregate in concrete over which shakes containing metallic aggregate or colour will be applied.

Cleaning

Clean all equipments and tools with water immediately after use. Hardened material can be removed mechanically.

Health and Safety

This product contains cement powders which, when mixed with water or upon becoming damp, release alkalis that can be harmful to skin. During

use, avoid inhalation of the dust and contact with the skin or eyes. Gloves, goggles and suitable mask must be worn. Contact with skin, eyes, etc. must be avoided. If swallowed seek medical attention immediately. Regarded as non-hazardous for transportation. Do not reuse containers. To be disposed off as per local rules and regulations.

Quality & Care

Conpacmix (BD) Ltd. acquired German technology for an updated production facility and set up a state of the art laboratory facility for conducting regular quality assessments on raw materials procured and finished products. Process from procurement of raw materials to finished products, are managed by qualified and experienced engineers, chemists and technicians.

Note: Field service where provided does not constitute supervisory responsibility. Suggestions made by **Conpacmix (BD) Ltd.** either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not **Conpacmix (BD) Ltd.**, are responsible for carrying out procedures appropriate to a specific application.

Manufacture:

