

## MONNELI EPOMORT GP

*General Purpose Epoxy Mortar*

### Product Description

A three-component epoxy mortar, developed as a concrete repair and patching material, for general purposes. It is based on a combination of epoxy resin and selected high strength aggregates.

### Uses

EPOMORT GP is designed to provide repairs in horizontal locations up to 50 mm thickness and in vertical locations up to 15 mm in single applications.

It can also be used for all structural and general concrete repairs (interior, exterior, above and below grade) including: Casting resumption between fresh and old concrete.

- Concrete residential driveways
- Patios
- Balconies
- Walkways
- Garages and other concrete surfaces exposed to normal foot and rubber-wheeled traffic
- Sewerage works and manhole linings

### Advantages

- Pre-measured proportions which makes it easier to prepare
- High mechanical strength. Equal to the strength of high quality concrete within 3 days
- Economical, non slip and easy to apply
- High impact and erosion resistance with good chemical resistance

### Instructions for Use

#### Surface Preparation

#### **Concrete Preparation**

Surface must be clean and sound. Remove all dirt, laitance, grease curing compounds and other foreign matter by sandblasting, mechanical abrasion.

The decayed or damaged area to be repaired should be marked with a marker. Cut the marked area to a depth of at least 10mm using a hand held concrete saw or disc grinder to avoid feather edging and to provide a square edge. Break out or chip the complete repair area down to sound base using sharp tools or chipping hammer.

#### **Steel Preparation**

All corroded steel should be completely cleaned. It is recommended that grit blasting be used to clean the reinforcing steel. Particular attention should be paid to the rear side of the bar to ensure all corrosion products have been removed.

#### Priming

#### **Concrete Priming**

The prepared surface should be primed with PRIMER POXY FF, the contents of the curing agent should be emptied into the base component and stirred with a spatula until the products appear uniform. The primer should then be applied to the prepared substrate by a stiff brush. If surface is highly porous, apply a second coat.

Allow the primer to remain tacky prior to the application of EPOMORT GP.

## Steel Priming

The cleaned steel should be coated within 3 hours. Apply one coat of BETOFER, a corrosion proof cementitious based primer or EPOZINC, a two component Zinc rich EPOXY PRIMER, continuously with brush onto the cleaned bar reinforcement ensuring that the whole steel surface area is completely covered. Allow to dry before proceeding with the repair.

## Mixing

EPOMORT GP is supplied as a three component kit consisting of a base component, a curing agent and a bag of selected, graded aggregate. The two resin components should be stirred separately for three minutes or until thoroughly blended. Then slowly add entire amount of aggregate to the resins with the mixer running. The mixing of part packs should not be undertaken.

## Application

Apply the mixed product firmly onto the tacky primer using a trowel to build the required thickness. Use a wooden float to ensure complete compaction and a secure bond. The application is always completed by finishing the surface of the mortar with a steel trowel before it sets. The material should not be applied at less than 10 mm or more than 50 mm for horizontal surface and 15 mm for vertical. Greater thickness can be achieved by the application of subsequent layers within 10 – 12 hours. If this time is exceeded, the surface should be re-primed prior to the succeeding applications.

## Cleaning

Tools and equipment should be cleaned with SOLVENTE 10 from Colmef immediately after use. Hardened material should be removed mechanically. Spillages should be absorbed with sand or sawdust and disposed of in accordance with local regulations.

## Recommendations

- Do not use during rainy days or if temperature is less than +5°C.
- Application should not be carried out when atmosphere humidity exceeds 90%, or when the surface to be coated is less than +3°C above the dew point.
- Do not expose packing to the direct sunrays.
- Do not apply if humidity exceeds 75%.

## Technical Data

Properties	Results
Appearance	Grey mortar
Wet density at 25°C	1.95 to 2.1 kg/L
Pot life at 25°C	60 minutes
VOC	3.6 g/L
Compressive strength (ASTM C579)	55 N / mm <sup>2</sup>
Flexural strength (ASTM C580)	32 N / mm <sup>2</sup>
Tensile strength (BS 6319 Pt7)	7 N / mm <sup>2</sup>
Compressive modulus (ASTM C469-56)	4.6 N/mm <sup>2</sup>
Initial hardness (at 25°C)	24 hours
Full cure at 25°C	7 days
Chemical resistance at 25°C Substrates treated with EPO-MORT GP sustains excellent chemical resistance to the following solutions:	
Citric acid	10%
Phosphoric acid	10%
Tartaric acid	10%
Sulphuric acid	10%
Hydrochloric acid	25%
Sodium hydroxide	50%
Petrol / Diesel	100%
Hydrocarbons	100%

**Note:** Please contact Colmef Technical Department for the effect of other solutions or if the product is being fully immersed.

All values are subject to 5-10 % tolerance.

## Consumption

One kit of EPOMORT GP will cover 1 m<sup>2</sup> at 4 mm thickness, depending on surface condition.

## Packaging

EPOMORT GP is supplied in three-component 8kg kit

## Storage

Keep the product in dry and cool sheltered place. In these conditions, product shelf life is 12 months from the date of production.

## Health & Safety

During application, wear appropriate protective clothing, goggles, gloves and respiratory equipment if necessary.

In case of contact with skin, rinse with water and again wash thoroughly with soap and water. In case of contact with eyes, rinse with plenty of water and seek medical advice accordingly.

If ingested, obtain medical attention immediately. Do not induce vomiting.

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