

# ISONEM<sup>®</sup> M 03



## Polymer Modified Repair Mortar

ISONEM M 03 is a cementitious, polymer modified, fiber reinforced, one component repair mortar for horizontal, vertical and overhead applications. ISONEM 03 can also be used in combination with ISONEM EP epoxy bonding agent for trafficked repairs.

**USES:** •Fair faced concrete repairs •Repairs of wall and ceiling •Preparation of substrates before tile applications

**CHARACTERISTICS / ADVANTAGES:** •One component, it can be mixed with water only •Adjustable consistency •Because of its thixotropic behavior, suitable for vertical applications •Applicable in a layer up to 100 mm thickness •Non corrosive, non-toxic •Suitable for wet spray method

**TECHNICAL PROPERTIES:** •**Appearance / Colour:** Grey powder •**Chemical Base:** Cementitious mortar modified with polymers and fiber materials. •**Density Fresh mortar:**  $2,0 \pm 0,1$  kg/l (at +20°C) •**Grading Dmax:** 1.3 mm •**Layer Thickness:** 10 mm min. / 100 mm max. •**Application temperature:** between + 5°C and +30°C •**Potlife:** ~ 1 hour (at +20°C) •**Compressive Strength:** (21±2) °C and (60±10) % r.h. 7 days; 45 N/mm2 28 days; 55 N/mm2 •**Flexural Strength:** (21±2) °C and (60±10) % r.h. 7 days, ~ 7,5 N/mm2 28 days, ~ 9,8 N/mm2 •**Bond Strength:** > 1,5 N/mm2

### APPLICATION PROCEDURE

**SUBSTRATE QUALITY / PREPARATION:** The concrete must be premoistured, structurally sound, clean and free from dust,dirt, oil, grease, loose or friable particles other contaminants (such as paint etc.). ISONEM D10 LATEX Super bonding layer is applied in order to increase adhesion and improve impermeability by brush and then the mortar is applied wet on wet to the surface.

**APPLICATION CONDITIONS / LIMITATIONS:** •Substrate Temperature +5°C min. / +30°C max. •Ambient Temperature +5°C min. / +30°C max.

### APPLICATION INSTRUCTIONS

**MIXING RATIO:** For 20 kg bag, 4,0 liter water must be used. Water/Powder ratio must be 0,20–0,22 by weight Water/Powder= 1: 4,5 – 5,0 by weight

**MIXING:** Pour water in correct proportion into a suitable mixing vessel. Add powder, whilst stirring slowly. To avoid entraining too much air mix mechanically for at least 3 minutes, using low speed electric stirrer (max. 500 rpm) in order to maintain a homogeneous mortar.

**APPLICATION METHOD / TOOLS:** ISONEM M 03 can be applied by wet spray equipment with spatula or trowel. The mortar is applied wet on wet to the ISONEM D10 LATEX bonding layer. For thickness grater than 100 mm, ISONEM M 03 must be applied in several layers. As soon as the mortar has started to set it can be smoothed by wooden or synthetic float or a styrofoam block. For very fine surface finish, the application of ISONEM M 03–T is advised.

**CLEANING OF TOOLS:** Clean all tools and application equipment with water immediately after use. Hardened/cured material can only be mechanically removed.

**CURING:** The mortar must be cured with suitable curing materials to prevent premature drying out of the mortar or standard curing methods are recommended. Keep it moist if exposed to strong sunshine or wind.

**NOTES ON APPLICATION / LIMITATIONS:** •Please do not use more water than advised. •Do not use the product below the allowed min. temperature so that the material completes the setting. The setting is slowed down under low temperatures and speeded up under high temperatures. Workability period also varies inversely depending on the temperature

**CONSUMPTION:** For one coat of 1 mm ~2,00 kg/m2 powder material is required. Material consumption depends on substrate conditions and application method.

**PACKAGE:** 20 kg craft bag

**HEALTH AND SAFETY INFORMATION:** For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safetyrelated data.

**STORAGE CONDITIONS/SHELF LIFE:** 12 months from date of production if stored properly in unopened and undamaged original sealed containers at temperatures between +5°C to +35°C at dry conditions. Protect from excessive temperature and frost.



The information contained in this leaflet has been prepared to our best knowledge, and in consistency with the results of our experiments and experience, and are the products of our know-how based on our accumulation of decades. However, the application of our products accurately and successfully, is entirely beyond our control and responsibility. Therefore, the scope of our liability is limited to the quality of our products and this technical leaflet supercedes all the previous technical leaflets and all the explanations and the information contained in the product labels.