

X-Roc Acrylic Latex

Multi-purpose primer, internal bonding agent mortar additive and curing compound

10350518

Product Description

X-Roc Acrylic Latex is a acrylic co-polymer used to improve the mechanical and waterproofing properties of sand cement based renders, screeds and mortars. Renders, screeds and mortars made with X-Roc Acrylic Latex display improved internal bond, resistance to abrasion, freeze/thaw, water ingress with low chloride permeability and increased carbonation resistance.

Advantages

- Easy to use
- Multi function, primer, polymer and curing compound
- Improves mortars, screeds and GRC.

Uses

- Bonding new concrete to old
- Chemical and abrasion resistant screeds
- Repair and patching of concrete floors
- Industrial floors and screeds
- Concrete repair

Laboratory Test Data

Property	Typical Results
Compressive strength	35MPa
Tensile strength	5MPa
Flexural strength	10MPa

The above test data is for a general purpose mortar made with X-Roc Acrylic Latex (see mix design below) tested at 28 days. Results will vary depending on the source of the cement and sand and the actual amount of water used.

Specifications Compliance

Complies with IGRCA
Specification for polymer admixtures

Dosage

When used as an admixture or internal bonding agent the dosage is typically 6 to 10 liters of liquid polymer per 50 kg cement (6 to 10% dry polymer by weight of cement)

Mix Designs

General Purpose Mortar or Screed

50kg	Type 1 Portland cement
150 to 200 kg	Washed sharp sand (medium grading)
6 to 10 liters	X-Roc Acrylic Latex
8 to 12 liters	Water (approximate)
Yield	100 liters (approximate)

Heavy Duty Floor Screed (Min. Thickness 25mm)

50 kg	Type 1 Portland cement
90 kg	3 to 5mm hard aggregate such as granite
90 kg	Washed sharp sand (medium grading)
6 to 10 liters	X-Roc Acrylic Latex
8 to 10 liters	Water (approximate)
Yield	100 liters (approximate)

Installation Guidelines

Surface Preparation

All surfaces must be clean and structurally sound. Oil and grease must be removed. This can be achieved using X-Treat Substrate Cleaner. For best results, the surface of the concrete should be mechanically scarified or scabbled, although other methods, including grit blasting, hydro blasting and acid etching can be used. When using as a concrete repair mortar the edges of the repair must be at least 10mm deep and straight i.e. the patch should be rectangular.

Priming

X-Roc Acrylic Latex is used undiluted straight from the pack. Brush X-Roc Acrylic Latex into the saturated surface dry substrate taking care to avoid ponding or excessive application. Apply the mortar immediately after the product has gone tacky.

Mixing

Using an X-Calibur approved forced action mechanical mixer, add the cement and aggregates and mix for one minute. Continue mixing and add X-Roc Acrylic Latex pre-dispersed in the mixing water and mix for at least a further three minutes until fully mixed.

Mortars

Thickness is dependent on application but 15 to 20mm build per coat, is typical. Normal time between applications is 5 hours but this is dependent on temperature. Where more than one coat is applied ensure that the intermediate coats are cross hatched to provide a mechanical key. If the surface dries out completely then the surface should be re-primed.

Screeds

Apply up to 75mm in one application; the minimum screed thickness should be 25mm. Ensure that the screed is well bonded to the substrate and that it is fully compacted. Do not use water to finish the surface as this will cause cracking, crazing and dusting of the surface.

Curing

X-Roc Acrylic Latex should be brush or spray applied at 5 to 6 m²/liter to the surface of freshly placed mortar immediately after finishing. Hardened concrete or mortar surfaces should be pre-soaked with water prior to the application of X-Roc Acrylic Latex. Cure for a minimum of three days The longer the curing period (up to seven days) the better will be the performance of the mortar. Screeds should be continuously water cured for seven days.

Health and Safety

This product is for industrial use only by trained operatives. It is potentially hazardous if not used correctly. Please refer to the Material Safety Data Sheet (MSDS) prior to the purchase and use of this product. The MSDS can be obtained via our website www.x-calibur.us

Authorized Technical Specialist

Please note that only X-Calibur Authorized Technical Specialists ('ATs') are permitted to change any of the information in this data sheet or to provide written recommendations concerning the use of this product. Visit www.x-calibur.us for a full list of X-Calibur ATs.

Datasheet Validity

X-Calibur makes modifications to its product datasheets on a continuous basis. Please check the datasheet update section on www.x-calibur.us to ensure you have the latest version.

Warranties

X-Calibur supplies products that comply with the properties shown on the current datasheets. In the unlikely event that products supplied are proved not to comply with these properties, then we will replace the non-compliant product or refund the purchase price. X-Calibur does not warrant or guarantee the installation of the products as it does not have control over the installation or end use of the products. Any suspected defects must be reported to X-Calibur in writing within five working days of being detected. X-Calibur Construction Systems Inc. **makes no warranty as to merchantability or fitness for a particular purpose and this warranty is in lieu of all other warranties express or implied.** X-Calibur Construction Systems Inc. shall not be liable for damages of any sort including remote or consequential damages, down time, or delay.