

KingRep[®] 30

2-Component Thixotropic Epoxy Adhesive & Repair Mortar.

DESCRIPTION

KingRep 30 is a two-component solvent-free epoxy adhesive and repair mortar, designed principally for use in construction and renovation work. The lightweight graded filler system along with thixotropic additives, allows repairs for high build applications particularly in vertical and overhead situations.

When used in conjunction with either KingFloor Primer S the product provides excellent adhesion to a wide range of building materials. When finished correctly, KingRep 30 provides an impermeable layer with good resistance to abrasion, weathering and chemical attack. KingRep 30 will cure in damp conditions and has a strength that exceeds normal concrete strength. KingRep 30 can be supplied in a grey color to match existing concrete substrates.

KingRep 30 application areas include, repairs to spalled in-situ concrete columns, soffits, lintels, gutters, stone, and precast units.

METHOD OF USE

Surface Preparation

The surface must be structurally sound, free from oil, grease and other forms of contamination. Concrete surface should be dry and suitably prepared either by scabbling or grit blasting to remove any surface laitance. Steel surfaces should be grit blasted to remove all rust and scale. (See the KINGKRETE Guide to Surface Preparation for further details).

Priming

Substrates should be primed with KingFloor Primer S. The primer should be applied so that the surface is thoroughly wet, ensuring there is a continuous film of resin over the surface. Particular attention should be paid to cracks. A nominal 500 microns of resin should be applied to exposed reinforcement.

The KingRep 30 should be applied between 15 - 30 minutes after application of the primer, whilst the primer is still tacky.

TECHNICAL PROPERTIES @ 7 days:

Compressive strength: BS 6319, Part 2 : 1983	≥ 60 MPa
Tensile strength: BS 6319, Part 7 : 1985	≥ 12 MPa
Flexural strength: BS 6319, Part 3 : 1990	≥ 22 MPa
Bond strength to concrete:	> 3.0 MPa (concrete failure)
Mixed density:	1.1 ± 0.05 g/cm ³
Pot life:	40 - 80 min
VOC:	< 10 g/ltr

Mixing

KingRep 30 comprises two components, a resin base and hardener which are supplied pre-weighed in the correct proportions. Under no circumstances should part mixing be carried out. Taking care to ensure that the bottom and sides are thoroughly scraped, transfer the entire contents of the HARDENER container into the RESIN container. Using a mixer attached to a slow speed electric drill, mix for approximately 2 minutes until a uniform consistency is obtained.

Application

The KingRep 30 should be applied and well compacted, by trowel, wood float or gloved hand before the primer has hardened - normally within 1 hour. The mortar should be applied in successive layers, each layer being well compacted before each application of subsequent material. If the mortar has been allowed to harden, the surface should be abraded and a further coat of KingFloor Primer S applied.

Where necessary, the mortar is shaped to the required profile e.g. to form a cove and trowelled to a smooth finish. This operation will be aided by lightly wiping the trowel with KingRep solvent.

If formwork or shuttering is to be used a suitable release agent should be used to prevent the KingRep 30 adhering to it.

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WORKING TIME

KingRep 30 has a working time of approximately 60 minutes at 25°C. Mixed material should not be left standing for any length of time prior to application as this will considerably reduce its working time.

WORKING CONDITIONS

KingRep 30 should not be applied at temperatures below 5°C.

CURING

KingRep 30 should be allowed to cure for 24 hours at 25°C before being subjected to foot traffic. At the same temperature, full mechanical and chemical properties are achieved after 7 days (please consult our Technical Department for details of curing times at other temperatures).

CLEANING

Clean uncured material with KingKrete solvent. Cured material can only be removed mechanically.

PACKAGING

KingRep 30 is available in 10 kg pack size comprising resin base and hardener component.

KingFloor Primer S is available in 5 kg packs comprising resin base and hardener.

SPECIFIED THICKNESS RANGE

Horizontally: 3 – 50 mm in a single layer.

Vertically: 3 - 30 mm in subsequent layers in the same application process.

Over head: Up to 15 mm.

YIELD

KingRep 30: 9 litre/10 kg packs.

KingFloor Primer S: 5.0 m²/kg.

STORAGE

Shelf life is 1 year when stored under cover, out of direct sunlight and protected from extremes of temperature. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult KingKrete's Technical Services Department.

HEALTH AND SAFETY

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs. Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Reseal containers after use. Use in well ventilated areas and avoid inhalation.

NOTE

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local KingKrete representative. KingKrete Inc. reserves the right to have the true cause of any difficulty determined by accepted test methods.

QUALITY AND CARE

All products originating from KingKrete's manufacturing facilities are manufactured under a management system independently certified to conform to the requirements of the quality standard ISO 9001.

* Properties listed are based on laboratory-controlled tests.

® = Registered trademark of the KingKrete-Group in many countries.

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STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this KingKrete Inc. publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

NOTE

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