Sika fully understands the regulator requirements of the NRC for safety related materials. We have trained customer service, production and quality control teams that monitor dedicated commercial grade materials from production to delivery site. Easy to apply and fast curing concrete repair materials allow high quality, durable repairs with fast return-to-service and radiation resistance.

CONCRETE REPAIR SOLUTIONS PORTFOLIO FOR NUCLEAR FACILITIES



BUILDING TRUST

SOLUTIONS PORTFOLIO FOR NUCLEAR FACILITIES

REPAIR MORTARS

SikaEmaco® S 466 Flowable structural-repair concrete with integral corrosion inhibitor

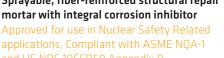


Approved for use in Nuclear Safety Related applications, Compliant with ASME NQA-1 and US NRC 10CFR50 Appendix B

A flowable, shrinkage-compensated repair concrete. It is designed for large volume repairs, including structural elements in applications from 1" (50 mm) to full depth. It has a unique formulation that provides excellent bond, resistance to sulfates and chlorides, high electrical resistivity, low permeability, high compressive strengths, and protection from corrosion.

- Interior and exterior
- Large volume structural repairs
- Repair or replacement of concrete elements

SikaEmaco[®] 488CI Sprayable, fiber-reinforced structural repair



SikaEmaco S 488CI repair mortar is a one-component, shrinkage compensated, fiber-reinforced product that contains an integral corrosion inhibitor. It can be applied vertically or overhead by low pressure spraying or hand troweling.

Interior and exterior

- Vertical and overhead
- Severe service environments such as sewer, lift stations, marine structures, and water collection

SikaEmaco[®] 440MC

Flowable micro concrete

A one-component, shrinkage compensated micro concrete. It is designed for large volume structural repairs from 3/4" (19 mm) to full depth.

- Dual expansion system compensates for shrinkage in plastic and hardened states
- Low permeability protects against carbon dioxide and chloride intrusion
- Excellent freeze/thaw resistance for durability in cold, wet environments
- Self-consolidation minimizes honeycombing without vibration
- Only requires the addition of potable water

APPLICATIONS

- Nuclear Safety Applications
- Commercial Grade Dedication
- Cooling towers
- Secondary containment areas
- Floors and walls
- Honeycomb and rock pocket defects
- Structural and surface repair
- Corrosion of reinforcing steel, protection and repair

SikaEmaco 440

Pourable and pumpable pre-extended, self-consolidating repair mortar

A one-component, shrinkage-compensated, self-consolidating repair mortar. It is designed for large volume repairs, including structural elements in applications from 2" (51 mm) to full depth.

- Dual expansion system compensates for shrinkage in plastic and hardened states
- Low permeability protects against carbon dioxide and chloride intrusion
- Excellent freeze/thaw resistance for durability in cold, wet environments
- Self-consolidation minimizes honeycombing without vibration

SikaEmaco 440CI

Pourable and pumpable pre-extended self-consolidating repair mortar with integral corrosion inhibitor

A one-component, shrinkage-compensated, self-consolidating repair mortar that is polymer-modified and contains an integral corrosion inhibitor. It is designed for large volume repairs, including structural elements in applications from 3" (76 mm) to full depth.

- Dual expansion system compensates for shrinkage in plastic and hardened states
- Low permeability protects against carbon dioxide and chloride intrusion
- Excellent freeze/thaw resistance for durability in cold, wet environments
- Self-consolidation minimizes honeycombing without vibration
- Very low chloride permeability and an integral corrosion inhibitor protects reinforcing steel
- Only requires the addition of potable water

SikaEmaco 425 Gel Patch

Non-sag concrete repair mortar with integral corrosion inhibitor for vertical and overhead applications

A one-component fast-setting polymer modified portland cement-based repair mortar for vertical and overhead concrete and masonry surfaces.

- Non-sag consistency able to be placed in 2" (51 mm) thick lifts
- Readily sculpted, shaved, and finished to match existin substrate
- Very low chloride permeability and an integral corrosion inhibitor protects reinforcing steel
- Only requires the addition of potable water



SikaEmaco T 545 and T 545HT Very rapid-setting chemical action mortar

SikaEmaco T 545 is a one-component magnesium phosphatebased mortar. Offered in two formulations: T 545 for ambient and substrate temperatures below 85° F (29° C) and T 545HT for ambient and substrate temperatures ranging from 85 to 100° F (29 to 38° C).

- Single component to just add water and mix
- Wide temperature use range from below freezing to hot weather exposures
- Air cure only, no wet curing compounds required
- Coefficient of thermal expansion similar to Portland cementconcrete for more permanent repairs
- Higher sulfate resistance than conventional mortars

CRACK REPAIR BONDING

SikaEmaco ADH 326

Liquid epoxy concrete bonding adhesive with long pot life

SikaEmaco ADH 326 is a two-component 100% solids liquid epoxy bonding adhesive. It is designed for use in warm environments or applications requiring a long working time.

- Bonds to damp concrete surfaces
- Very long working time
- Versatile formulation allows extension with properly graded sand
- High-build liquid allows adequate coverage in a single application

Sikadur®-31 Hi Mod LPL

Liquid epoxy concrete bonding adhesive with short pot life Sikadur®-31 Hi Mod LPL is a two-component 100% solids non-sag epoxy adhesive. It is used for vertical, overhead, and horizontal applications. It is recommended for short-term or moderate-intensity loads and application when ambient or concrete-surface temperatures are in the 32 to 50° F (0 to 10° C) range. It may also be used between 50 and 70° F (10 and 21° C) when rapid curing is required.

- Moisture insensitive bonds to damp surfaces
- Ease of installation
- Non-sag gel consistency ideal for overhead application
- Cures quickly at moderate temperatures to minimize downtime

MasterInject 1380

General-purpose structural concrete-bonding injection resin MasterInject 1380 is a two-component low-viscosity liquid epoxy adhesive for pressure-injection grouting.

- Low viscosity; can be injected in cracks from 0.005-0.25" (0.125-6 mm)
- Solvent free, environmentally friendly
- Fast cure rate, quickly returns repaired areas to service
- High heat-deflection temperature (HDT), provides increased resistance to creep and stress relaxation
- 2 to 1 mix ratio, easy to mix and use

CORROSION

Sika® Ferrogard®-650 / 670 / 675

Embedded galvanic anodes for the protection of reinforcing steel Sika[®] Ferrogard[®]-650 / 670 / 675 are engineered discrete zinc anodes encased in a proprietary mortar. Integral galvanized tie wires permit easy connection to concrete reinforcement. As a key component of a complete concrete repair strategy, the sacrificial zinc core generates a small electrical current as it is consumed, protecting the reinforcing steel from accelerated corrosion.

- Chelation-Driven System
- Lower pH mortar
- High grade ASTM B418 type II zinc alloy
- Pre-twisted tie wires
- Increased zinc surface area
- Generates small current as it deteriorates, to protect reinforcing steel
- Enhanced transport of reaction by-products
- Not affected by carbonation or auto-corrosion



GLOBAL BUT LOCAL PARTNERSHIP



WE ARE SIKA

With more than 100 years of experience, Sika is a worldwide innovation and sustainability leader in the development and production of systems and products for commercial and residential construction, as well as the transportation, marine, automotive, and renewable energy manufacturing industries.

Sika has offices in 103 countries with over 400 manufacturing facilities and more than 33,000 employees worldwide. With annual sales of CHF 11.24 billion in 2023, our commitment to quality, innovation, and the environment as well as putting our customer's needs first, encompasses why Sika is the global leader in our industries.



Our most current General Sales Conditions shall apply. Please consult the Data Sheet prior to any use and processing © 2024 Sika Corporation, 14001160 rev 02/2024

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