Yapı Kimyasalları - Construction Chemicals

ZNR™ REPAIR AC
Corrosion Protection and Concrete Bonding Agent

Product Description
A special cement-based, one-component, polymer-modified material designed for corrosion protection and enhancing adhesion between old and new concrete surfaces.

Product Number
306

Areas of Application
- Protection of reinforcement bars against corrosion
- Adhesive for bonding old and new concrete in construction
- Repairing and plastering exposed concrete surfaces
- Filling and leveling surface defects in precast concrete elements
- Floor leveling prior to final coatings
- Repair and plastering of walls and ceilings
- Primer layer before applying repair mortars or plasters

Characteristics /Advantages
- Excellent adhesion to concrete and reinforcement steel
- Easy to prepare and apply
- Resistant to frost and harsh weather conditions
- Enhances corrosion resistance of steel against water and chloride penetration
- High alkali resistance
- Polymer-modified with superior physical performance characteristics

Technical Data

Powder Color	Grey
Package	25 kg kraft bags
Density (fresh mortar)	~1.55 kg/m³
Working Temperature	Surface temperature +5°C / +35°C
Adhesion Strength	≥ 1.5 N/mm² (28 days at 23°C)
Pressure Strength	~ 30-50 N/mm² (28 days at 23°C) (complies with TS EN 196–1)
Pot life	Approximately 60 minutes (at 23 °C)
Consumption	~1.55 kg/m² material for 1mm thickness (variable, depending on surface conditions)
Storage	Shelf life is approximately 12 months. Products should be stacked in a cool and dry place, with maximum 6 bags on each other.

Surface Preparation
Concrete Surfaces:
Remove all loose particles, grease, oil, and other contaminants. Ensure the surface is clean and dry. Before application, moisten the surface using a brush or sponge to prepare it for repair.
Steel Surfaces:
Surfaces must be free from grease, rust, burrs, concrete residues, and chemical contaminants. Prepare the surface by sandblasting to achieve a clean, rough profile. If oil or grease is present, use an appropriate degreaser prior to sandblasting.

Preparation Instructions
Pour 25 kg of powder material into approximately 4.5 kg of clean, cool mixing water (adjust based on the desired consistency). Mix with a suitable low-speed mixer for 3–4 minutes until a smooth, homogeneous mixture is achieved. Allow the mixture to rest for about 5 minutes before use. **Do not add water into the powder**—always add the powder to the water.

Application
As an Adherence Mortar:
Re-mix the matured material until uniform. Apply using a brush or spray method, ensuring it is well worked into the surface. Immediately after application, while the ZNR **REPAIR AC** material is still wet, proceed with the application of the repair mortar.
As an Anti-Corrosion Primer:
Re-mix the matured material thoroughly. Apply a uniform coat onto the prepared steel reinforcement using a soft paintbrush. After the first layer has dried (approximately 3–4 hours), apply a second coat. Concrete surfaces and reinforcements may be coated with repair mortar approximately 30 minutes after the final primer application.

Considerations
- The prepared material must be used in about 1 hour; do not add water or powder into mixtures that have begun setting.
- Protect the application area from direct sunlight, wind, rain and frost for the first 24 hours.
- It is recommended to make the application at a temperature between +5 and +35 °C; do not make application under temperatures below - 5°C.

General Matters
The information and recommendations provided above are based on our experience and thorough research, and are intended for general guidance. However, as we cannot control the variety of related materials and job site conditions, our warranty is limited solely to the quality of the purchased product. No warranty is offered for the application process itself.

	This technical document supersedes all previous editions. The final quality of the work depends on the professional handling of the product. In case of uncertainty, we recommend conducting a preliminary test or consulting our technical support team.
Disposal	Empty packaging should be disposed of in designated collection bins in accordance with local or regional regulations and recycling guidelines. Used material should be disposed of as construction waste after it has fully dried and hardened. **Do not burn** leftover product, as it may pose serious health and environmental hazards.
Safety Information	Keep the product out of reach of children. Always keep containers tightly sealed when not in use. It is strongly recommended to wear protective gloves and safety goggles during application. In case of skin contact, wash thoroughly with soap and water. If the product comes into contact with the eyes, seek medical attention immediately. For detailed safety information, please consult the Material Safety Data Sheet (MSDS).