

ARACO REP 350

Shrinkage Compensated, Cement-Based, Free Flowing Micro Concrete

Product Description

ARACO REP 350 is a single component, cement-based, polymer modified, shrinkage compensated repair mortar. When mixed with water, it provides a shrinkage compensated, self-compacting and free flowing micro-concrete suitable for large volume concrete repairs. After drying, it gives a high strength repair mortar with excellent bond properties to concrete and steel reinforcement. **ARACO REP 350** is a durable, low permeability chloride free mortar. A typical application is the re-profiling of damaged concrete members.

Applications

- Large area concrete repairs.
- Refurbishment of columns, bridges, tunnels and retaining walls.
- Single application, high build application.
- Repair of fire damaged structures, marine structures, piers, quays, off shore platforms etc.
- Sealing of mine roadways, tunnels, etc.
- Swimming pool construction.



Package: 25 Kg Bags

Product Application

- Economical, reduces waste and risk of mixing failures.
- High build – up to 150mm can be applied at one pass.
- Single component – ready to use
- Excellent adhesion to concrete and steel.
- Non-shrinkage material.
- High compressive strength, high bond strength and low permeability.
- High resistance to carbon dioxide penetration.
- Excellent mechanical strengths.
- Increased freeze/thaw durability and resistance.
- Compatible modulus of elasticity to concrete generally used for building/facade construction.
- Can be applied easily by hand or by low-pressure wet spray method

Surface Preparation

- The surface to be coated must be clean, sound, dust free and un-contaminated.
- Remove Loose parts, form release agents, cement laitance and paint that may impair the adhesion of the **ARACO REP 350**. must be removed by suitable means.
- The perimeter of the damaged area should be marked and saw cut to a depth of 10 mm.
- Remove the defected concrete to a minimum thickness of 10 mm.
- Mechanically cleaned, use suitable cleaning method including high pressure water jetting, grit blasting and grinding Surface should be roughened and open-pored.
- If steel reinforcement is corroded, extend removing the concrete ensuring that the back of the steel is exposed.
- Remove the rust from the steel reinforcement using suitable method such as wire brushes, suitable power tools, grit blasting..etc.
- If steel reinforcement is severely corroded causing significant loss in its cross section, consult structural engineer as it may require replacement and/or adding new steel bars.
- Wash the substrates with clean water and remove any excess water at the time of application to achieve SSD Condition.

Product Application

- **ARACO REP 350** should be applied in a single continues operation.
- Dampen the surface thoroughly with clean water prior to the application.
- Before pouring, however, let the mixed mortar stand for 2 - 3 minutes after mixing with water to allow entrapped air to escape.
- The mixed materials should be poured slowly to avoid air entrapment

Mixing

- Always empty the full contents of the bag into a suitable mixer. Mix dry for 3 minutes before adding the water.
- **ARACO REP 350** micro concrete can be obtained by mixing a 25 kg bag of **ARACO REP 350** with approx. 4 ± 0.25 liters of clean water.
- Mix using slow speed drill fitted with suitable mixing paddle or a high shear stationary mixer. Don't mix by hand or use part bag.
- Damp down the inside of the mixer with water prior to mixing the first batch.
- Ensure that the mixer is damp but free from standing water.
- In hot weather, use chilled water. The temperature of the mixed mortar should not exceed 30°C .
- In cold weather, use warm water. The temperature of the mixed mortar should be above 10°C .
- Add the premeasured quantity of water into the mixer and then add the powder component slowly while mixing.
- Mix for 5 minutes minimum till a fully homogeneous, lumps-free micro concrete is achieved without segregation or bleeding.

Curing

- As with all cement-based products, good curing is very important to ensure that the optimum characteristics are obtained.
- Treat exposed surfaces with **ARACO CURE W** curing compound or use other approved curing methods such as polyethylene sheeting or wet hessian.
- Cover the work with plastic sheet fixed over wet hessian and keep damp for 5 days.

Consumption

11.5 liters/25 kg bag

- Site trials are advisable to obtain accurate wastage factors due to variances in surface preparation, equipment and nozzle men.
- Coverage rate depends on surface porosity, imperfections, application thickness, wastage during application, temperature and tools.

Technical Data

Density	2.4 Kg/m ³
Compressive Strength	60 – 70 N/mm ² ASTM C 307
Flexural strength	8 - 10 N / mm ² ASTM C 307
Bond strength	60 – 70 N/mm ² ASTM C 307
Application thickness	50 mm per pour 500 mm per pour
Pot Life	60 minutes at 20°C

Product Data

Composition	Hydraulic binders, modified shrinkage-compensated powders, special fillers, and polymers.
Appearance	Grey powder
Grain size	5 mm
Storage condition	Store in a dry area between 5°C and 35°C. Protect from direct sunlight
Shelf Life	12 months minimum from production date if stored properly in original an opened packaging

Safety Instructions

The product may cause skin irritation. Wear gloves and goggles and apply barrier cream to your hands. In contact with eyes or mucous membrane. flush immediately with plenty of warm water and seek medical attention without delay.

Legal Notes

The information, recommendations, and application are based on ARACO current knowledge and experience of the products when properly stored, handled, and applied under normal conditions. ARACO products are guaranteed against defective materials and manufacture and sold subject to standard conditions. Users should always refer to the most recent technical data sheet for the product concerned, copies of which will be supplied on request.

More from ARACO

A wide range of construction chemical products is manufactured by ARACO which include:

- Premixed mortar
- Tile adhesives & Grout
- Concrete Repair
- Flooring systems
- Protective Coating
- Waterproofing
- Bonding Agents
- Concrete Admixtures
- Surface Treatments
- Grout & Anchors
- Sealants
- Sports Flooring