

REPAIREX 350



Cement based, non-shrink, high performance, pourable grouting mortar

DESCRIPTION

REPAIREX 350 is a cement based, non-shrink, ready to use, polymer modified, pourable grouting mortar for applications above 8 cm thickness.

STANDARDS

Ministry of Public Works Pos. No: 04.613/3c

ASTM C1107 type B, C

APPLICATION FIELDS

- * Fixing of industrial machines, turbines on foundations.
- * Fixing of steel columns on foundations.
- * Fixing of the generators, compressors on foundations.
- * Fixing of the precast concrete elements.
- * Construction of sheer wall and column caps.
- * Filling of voids in jacketing applications.

ADVANTAGES

- * Excellent bonding to concrete and steel.
- * Non-shrink.
- * Waterproof.
- * Self compacting.
- * Resistant to freeze-thaw cycle.
- * Resistant to chemicals like oil, chloride, sulfate.
- * High compressive strength.

APPLICATION

Preparation of machine and foundation

The concrete surface must be clean and free of curing membranes, oil stains, laitance, dust and any other treatment that may block the adherence of the grout.

Water leakages must be stopped using proper products.

Concrete surface may be chipped for better adhesion.

Base plate, rods and bolts should be free of oil, stain and dust.

Enough number of holes should be opened on the base plate for air drain.

Machine should be assembled and balanced before grouting.

(do not balance the machine after grouting)

Surface must be saturated with water at least 6 hours before grouting.

Make sure there is no free water on the surface before application.

Formwork preparation

The forms must be resistant to the hydrostatic force of the grout.

For pouring the product, an opening of 15-20 cm should be designed in the formwork.

From the pouring side, the forms must be as high as possible for constant pressure.

In grouting huge base plates, water ratio may be increased by 5-10 %.

Mixing

Put enough water into a clean bucket and add the powder product mixing slowly and continuously with an electric mixer (300-600rpm) for 4-5 minutes until a homogeneous consistency is achieved.

Let the mortar rest for 3-4 minutes and mix again for

30 seconds and start the grouting application.

Water quantity; 2.75 – 3.25 Lt. per 25 kg of powder product.

Application

* Do not operate any neighboring machines during grouting and until the grout has cured.

* Do not use a vibrator for placing the mortar.

* The grout must be poured under pressure from one side only and continuously.

Curing

Immediately after application, the surface must be protected with appropriate methods if the applied surface is subject to direct sunlight, rain or wind.

USAGE

~ 21 kg / m² / cm

SUGGESTIONS

In high temperature conditions;

* Store the product in cool conditions.

* Use cold water for mixing.

* Apply during morning and afternoon.

In low temperature conditions;

* Store the product in warm conditions.

* Use hot water for mixing.

SAFETY PRECAUTIONS

* Avoid contact with eyes and skin.

If in contact with eyes and skin, wash with plenty of water immediately.

* If accidentally ingested, seek medical attention.

* Wear protective gloves and eyeglasses during application.

PACKING AND STORAGE

REPAIREX 350 is packed in 25 kg bags.

If stored at ventilated, covered and dry premises between +5°C / +35°C, shelf life is about 12 month

MIXING WATER (Do not use water with a pH value below 5.5)

| Consistency | Slump (UNI 8997) | Water needed per 25 kg bag | % of Water |
|--------------------------|--------------------|----------------------------|------------|
| Pourable – self leveling | (S2-S5) 100 - 200 | 2.75 – 3.25 liters | %11 - 13 |

MECHANICAL STRENGTHS (TS EN 196)

| Consistency | %11 water Self leveling | | | |
|--|-------------------------|--------|--------|---------|
| | 1 day | 3 days | 7 days | 28 days |
| Curing | | | | |
| Flexural strength (N / mm ²) | 8 | 10,5 | 11,5 | 12 |
| Compressive strength (N / mm ²) | 30-40 | 40-50 | 50-60 | 60-80 |

ADHESION TO STEEL (pull out)

| Curing | 1 day | 7 days | 28 days |
|--|-------|--------|---------|
| Straight steel (N / mm ²) | 4 | 5 | 8 |
| Ribbed steel (N / mm ²) | 13 | 15 | 16 |

TECHNICAL SPECIFICATIONS

| | |
|--------------------------------|---|
| Density of the mix | ~2100 kg / m ³ |
| Application temperature | +5°C / +35°C |
| Service temperature | -30°C / +40°C |
| Pot life | 30-45 minutes (20°C) |
| Bleeding | None (UNI 8998) |
| Chlorides | None |
| Capillary water absorption | ≤0.5kg.m-2.hour0-5 |
| Freeze-thaw cycle | -18 / +5°C, 300 cycles, % 5 (ASTM C666) |
| Expansion | 7 days ; > % 0.03 28 days ; > % 0.035 (UNI 8146-8147) |
| Adhesion to concrete and steel | >2.0 N / mm ² (TS EN 1542) |
| Modulus of elasticity | >20.000 N / mm ² (28 days) (TS EN 13412) |
| Resistance to chemicals | Chlorides, sulphur, carbon dioxide |
| Open for foot traffic | 24 hours (+20°C) |
| Final curing | 28 days |
| Application thickness | >8 cm (use REPAIREX 750 below 10cm) |