

ISOLION RG 151

CEMENT-BASED FAST SETTING FIELD MANHOLE REPAIR MORTAR

Product Definition	<ul style="list-style-type: none"> › It is a highly liquid repair mortar that is single-component, cement based, powder polymer reinforced with high resistance, that is developed specially for repair of edges of culvert doors, does not shrink.
Fields of Use	<ul style="list-style-type: none"> › Raising of culvert and manhole covers, › Mounting of bordure and pavement stones, › Fixation of poles, › Repair of concrete surfaces exposed to vehicle and pedestrian traffic.
Characteristics and Advantages	<ul style="list-style-type: none"> › Provides ease of application thanks to liquid quality. › Offers 12 N/mm² endurance resistance after an hour. › Achieves very fast resistance. Can be opened to traffic after 1 hour. › Since it does not shrink, its field of use are vast. › Indissoluble and does not form water. › High solidity and wear resistance. › Since it has high level of adherence, it operates monolithically with old concrete. › Resistant against various chemicals, oils and acids. › Not affected by moisture because it does not contain any metals. › Resistant to freezing and dissolution.
Application Details	<ul style="list-style-type: none"> › Surfaces should be clean, smooth and solid as purified from adhesion prohibiting materials and wastes such as dust, oil, dirt, rust, mold lubricant and detergents. If any cracks and holes exist on the surface to be applied, they should be repaired with ISOLION RG 151 REPAIR MORTAR. Absorbent surfaces should be dampened, but no water accumulations and drops should be left.
Surface Preparation	<ul style="list-style-type: none"> › 5 l clean water taken from normal environmental temperature is included into a clean container. ISOLION RG 151 in 25 kg is poured into container filled with water. It is mixed until a homogeneous mixture without lumps is achieved with the help of low speed mixer or a drill. Mixing duration should be 1 min. at least. Mortar achieved at the end of this process is placed quickly in its place. After material enters into reaction, it should not be mixed again by adding water.
Application	<ul style="list-style-type: none"> › Prepared mixture should be placed within 1.5 minutes depending of air temperature and amount of water. ISOLION RG 115 should be poured from one side to fill hollows that is covered from four directions and covered on top. Thus, this prevents gravities occurring by removing air. Pouring interval should be 10 – 60 mm as layer thickness at one application. For filling of small dimension anchorages in the form of cylinder, a preliminary trial is recommended. After application, it is quickly cleaned with the help of sponge and it becomes ready for vehicular traffic after one hour.

Warnings and Recommendations

- › Reagent times in cement-based products are affected by the environment and ground temperatures. Reaction times are shortened in hot environments and extended in cold environments.
- › During the application, work clothes should be worn, suitable goggles and respirators should be used in accordance with work and worker health rules.
- › Prepared mixture should be placed within 2 minutes depending of air temperature and amount of water.
- › After application, it should be protected against negative weather conditions such as direct sunlight, high winds, high temperatures (+35°C), rain and frost. Hands should be cleaned with water and detergent before ISOLION RG 115 receives complete cure and hardens.
- › Immediately after application, before hardening, equipments should be cleaned with water. After the product hardens, it should be cleaned by mechanical means.

Technical Specifications

Color	Gray
Appearance	Dust
Grain Size	Dmax 2 mm
Temperature of the Surface to be Applied	(+5°C) – (+35°C)
Mix Ratio	3 – 4 l water/25 kg powder
Application Thickness	10 mm – 40 mm
Processable Duration	Max. 2.5 dk
Setting Start	Approximately 2 min.
Plaster Density	2.30 ± 0.1 kg ./l
Shrinkage	0.07 mm/m
Pressure Resistance	1 hour ≥ 16 N/mm ²
	24 hour ≥ 35 N/mm ²
	28 days > 65 N/mm ²

*** Tests have been performed in a laboratory environment at 23 °C and 50% relative humidity.

Consumption

- › 1.5-2.0 kg/m² (for 1mm thickness)

Packing

- › Craft bag of 25 kg.

Shelf Life

- › 12 months in unopened packing in dry environment.

Standard

- › Conforms to TS EN 1504 – 3, R4 Class.

