

# TECHNICAL DATA SHEET

# iRock-MC75

**Repairing Micro Concrete** 

High Strength, Shrinkage Compensated, Flowable Repair Micro Concrete

## **Product Description:**

iRock MC75 is a pre-mixed, high-strength micro concrete that only requires the addition of water on-site. It creates a non-shrink, free-flowing concrete that is ideal for thicknesses of 50mm and greater. With the addition of additives for controlled expansion and reduced water requirements iRock MC75 guarantees excellent flowability and workability. Additionally, its optimal particle size enables easy access to tight reinforcement spaces.





### **Advantages:**



Early Strength



Chloride-free



**High Flowability** 



Shrinkage Compensated



**Premium Quality Materials** 



High Strength



**Reduced Permeability** 



**Eco Friendly** 



**Enhanced Durability** 

#### **Technical Data:**

# **Appearance**

Color Grey
Aggregate Size < 6 mm

#### **Working Properties**

Mixing Proportion 5.5 - 6 L Of Water Per 50 kg Bag

Wet Density @25°C 2.4 kg/L
Pot Life @25°C Approx. 1h

Layer Thickness Min. 50 mm Per Pour

Max. 500 mm Per Pour

# **Compressive Strength**

#### (BS 1881 Pt.1161) 5.5 L water/50 kg at 25°C

1 Day ≥ 23 N/mm2
3 Days ≥ 45 N/mm2
7 Days ≥ 55 N/mm2
28 Days ≥ 75 N/mm2

## Flexural Strength

(BS 1881: Pt 117)

**28 Days** ≥ 10 N/mm2

#### **Tensile Adhesion Strength**

(BS 1881)

28 Days

 $\geq$  2 N/mm2



#### **Uses:**

- Concrete repair specially for congested areas.
- Ideal for casting sections that is too big for grout but too small for standard concrete.
- Perfect for repair of concrete floors, car parks, pathways, and roadways.
- Provides strong resistance to chloride and carbon dioxide making it durable in harsh environments.

#### **Installation Procedures:**

#### **Mix Proportion:**

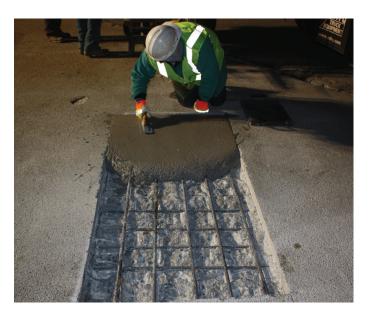
Use approximately 5.5– 6 liters of water per 50 kg bag **Surface Preparation:** 

- Ensure the concrete surface to be repaired is solid, rough, clean, and free from oil, grease, and cement laitance.
- Create a 20mm deep perimeter saw cut around defective areas. Remove all unsound concrete to achieve a solid base, avoiding feather edges.
- Use rigid, well-sealed formwork to prevent material loss and avoid water absorption from the repair material.
- Ensure there is access for pouring iRock MC75.
- Clean embedded reinforcing steel of scale, rust, oil, and grease, and apply a suitable anti-corrosion epoxy coating.
- Saturate the prepared concrete substrates with clean water several hours before placing iRock MC75.

Before application, remove any excess water to aid the flow of the concrete and reduce absorption.

#### **Application:**

- Use a mechanically powered mixer or a suitable drill and paddle for consistency.
- Adjust the water volume as needed for site-specific consistency. Avoid mixing partial bags.
- Initially, add 4.5 liters of water and mix for a minimum of 2 minutes until the mix is uniform and free flowing. Then, add the remaining water and continue mixing for another 2 minutes.
- Prepare only as much grout as can be used within 20 minutes to maximize fluidity and benefit from the expansion process. avoid adding extra water or ingredients, and always mix full bags for optimal results.
- Apply i Rock MC75 in a single pouring operation, ensuring the material is added gradually to avoid air pockets.



#### **Curing:**

After iRock MC75 is applied, protect it from quick drying due to wind, sun, and high temperatures by using a curing compound. This is vital for the proper curing of i Rock MC75, ensuring it reaches its full strength and durability.

#### **Storage:**

iRock MC75 should be stored for up to 12 months from the manufacturing date in its original, unopened packaging. Ensure it is kept under cover in a dry condition, away from humidity.

To preserve its quality, store away from extreme temperatures and direct sunlight exposure.

#### **Health and Safety:**

When applying iRock MC75 , take precautions to avoid inhaling dust and prevent skin or eye contact. It is important to wear appropriate protective gear, including eye protection, gloves, and respiratory equipment. Ensure you wash your hands and tools thoroughly post-application.

If the product contacts the skin, rinse immediately with plenty of clean water. In the event of eye contact or if you have sensitive skin, seek medical advice without delay.

#### Note:

The manufacturer guarantees the consistent quality of the product but not the method of application.

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