



DUROBUILD MC

Shrinkage Compensated Free Flowing Micro Concrete

PRODUCT INFORMATION

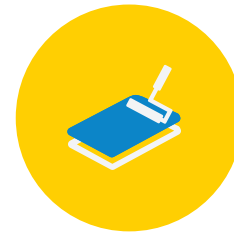
Introduction

Durobuild MC is a high strength, shrinkage compensated, free flowing micro concrete. It requires only on site addition of water to provide a free flowing concrete. The material is based on Portland cement, graded aggregates and special fillers and applied and cured as per specification. Durobuild MC will produce a free flowing micro concrete free from bleeding and segregation. Durobuild MC maintain good handling characteristics while mixing with water.



APPROPRIATION

- The product is ideally suitable for vertical and horizontal repair of concrete where hand or trowel application is difficult
- Durobuild MC is suitable for pile head reprofiling and general void filling
- It can be applied for large volume repairs of order 40mm to 150mm
- Due to rheoplastic nature of Durobuild MC, it can be used as grout and poured



CHARACTERISTICS

- Shrinkage compensated
- Very good bond to concrete substrates without primer
- Low alkali cement minimizes the danger of alkali silica reaction
- Self-compacting nature eliminates honeycombing
- Displaces air without vibration

TECHNICAL DATA AND PROPERTIES

Standard Confirms to	ASTM C 387:77A Din 1048 & DIN 1045 Class B
Color and Appearance	Grey Powder
Density	1.65
Compressive Strength @ 28Days	> 60 N/mm ²
Flexural Strength @28Days	> 9 N/mm ²
Tensile Strength @ 28Days	> 5 N/mm ²
Bond Strength @28 Days	<26 N/mm ²
Water Absorption	2%
Pot Life @ 25°C	30min
Recommended Application thickness	10-50mm/ layer

PRODUCT MANAGEMENT

- ◆ **Surface preparation:** Concrete substrate to be repaired should be sound, clean and uncontaminated. The formwork should be rigid and tight to prevent loss of material and have properly sealed faces to ensure no water is absorbed from the repair material. Saw cut or cutback the extremities of the repair locations to a depth of least 10mm to avoid feather edging and to provide a square edge. After saw cutting chip concrete down to sound base using light pneumatic chipping tools or chisel hammer. Surface should be made free of oil or grease. Any corroded steel in the repair area should be cleaned well and remove all loose and corrosion deposits.

Priming:

- ◆ Prior to placing of Durobuild MC, substrate the surface with water for several hours and immediately before placing, prime the substrate with Durobond SBR.

Mixing:

- ◆ One bag (25kg) of Durobuild MC requires 2.75 to 3.15 litres of clean potable water. Mixing in a suitable sized drum using an approved spiral paddle in a slow speed (400/500rpm) heavy duty drill is recommended. Pour required amount of water into mixer followed by Durobuild MC for 3 minutes to get a homogeneous consistency mixture.

Placing:

- ◆ The mixed material should be placed within 30 minutes of mixing. It can be simply poured or pumped onto the repair area and fill the cavity to the required level. No vibration is required. After leveling concrete is slightly hardened surface may be finished to the desired texture.

Coverage /Yield:

- ◆ 12.8 Litre per 25kg/Bag

Curing:

Start curing Durobuild MC immediately after finishing and formwork is stripped with clean water or Mixcure

Precautions:

- ◆ Not recommended to be used @ temperature under 5°C
- ◆ Should not mix with any other product.
- ◆ Ponding method of curing is not suitable.

PACKING AND SHELF LIFE

- ◆ Durobuild MC is available in 25 kg bags. Durobuild MC should be stored in cool, dry and shaded warehouses. Shelf life is 12 months when stored under cover, out of direct sunlight, protected from extreme temperatures and as per recommendations. In extreme tropical climate, the product must be stored in cooled ambience. Excessive humidity and over exposure to UV will result in the reduction of shelf life.

HEALTH & SAFETY

- ◆ DUROBUILD MC contains no hazardous substances. As with all construction chemical products, caution should always be exercised. Protective clothing such as gloves and goggles shall be worn whilst handling. Wearing long sleeve overall, safety shoes and face mask is recommended for maximum safety. Reseal all containers after use and ensure product is stored as instructed on the safety section of the labeling. Treat any contact to the skin or eyes with fresh water immediately. Should any of the products be accidentally swallowed, do not induce vomiting, but call for medical assistance immediately. For more details, please refer to the MSDS released on each Durotech product.



14 Essex Street, P.O Box 5092, Minto, NSW 2566

+61 2 9603 1177

+61 2 9475 5059

sales@durotechindustries.com.au

www.durotechindustries.com.au

The information provided in this data sheet is correct at the time of printing (albeit is subject to change at any time) and is intended to give a simple description of the product and its capabilities. In practice, the substrate, intended surface to be treated and environmental conditions vary widely, making it essential for the user to determine the products suitability for a particular application and to ensure that the product is not used beyond its physical limitations. If in doubt contact the manufacturer. The product will perform as described herein provided it is applied in accordance with the manufacturer's instructions as stated in this data sheet and provided that the building and installation is structurally sound and the application is carried out competently. Durotech terms and conditions of sale apply.