

TWO-COMPONENT, FLEXIBLE CEMENTITIOUS MORTAR FOR WATERPROOFING CONCRETE SURFACES









### **PRODUCT DESCRIPTION**

Seal Master is a two-component flexible cementitious waterproof slurry comprising a liquid polymer and cement-based powder. When are mixed and applied after curing, it forms a flexible, continuous waterproofing membrane. The product protects cement-based plasters and concrete, including those on grade. Seal Master meets the requirements defined by EN 1504-2 coating (C) according to the Pl, MC, and IR principles ("Protection systems for concrete surfaces").

#### FIELD OF APPLICATION

- · Interior and exterior use.
- · For waterproofing before installing all types of tiles.
- · Swimming pools, fountains, and water features.
- · Terraces and balconies over unoccupied spaces.
- · Restoring old balconies without removing the existing floor.
- · Shower pans, stalls, and tub surround.
- · As a flexible leveling compound subject to vibrations or movement on the concrete.
- · Protection of concrete from aging and carbonation.
- · Protection of concrete on grade.
- · Flexible leveling over plasters and screeds with micro cracks.

### **SUITABLE SUBSTRATES**

- · Concrete
- · Cement Mortar Bed
- · Cement Mortar
- · Cement Plaster/Render
- · Concrete Masonry
- · Masonry
- · Cement Backer Board
- · Ceramic Tile and Stone

#### **LIMITATIONS**

- · Do not mix with other cement or components.
- · Do not apply on metallic or rubber substrate.
- · Do not apply on not sufficient cured substrate.
- · Do not apply over 4 mm thicknesses per coat.
- · Do not apply in temperatures above 40°C and below +5°C.
- · It must be protected from rain or bad weather for at least 24 hours after application.
- · Avoid direct sunlight during application.
- · Prime highly absorbent surfaces to improve adhesion.
- · In case of negative water pressure can lead to delamination during frost conditions.
- · Always apply at least two layers, making sure to wait until the previous layer is dry



before applying the next.

### **APPLICATION PROCEDURE**

# a) Preparation of the support

All substrates must be mechanically strong, free of dirt, oil, grease, paint, laitance, concrete sealers, efflorescence, or curing compounds. Any grease or wax must be removed from old ceramic floors using a basic detergent. Screeds and concrete must be completely cured, at least 30 days for screeds and 3 months for concrete. Prime highly absorbent surfaces like lightweight concrete with Seal Primer or DCI Grip Primer to improve adhesion. For exterior applications, always maintain expansion joints from the substrate and treat with DCI Tape W12. For all coves, corners, columns, expansion joints, floor/wall transitions, and other changes in substrate plane, treat with appropriate TAPE before application of Seal Master.

# b) Preparing the product

Pour the B component (liquid) into a suitable, clean container, then slowly add the A component (powder) while stirring with a mechanical mixer making sure that no powder remains stuck on the bottom or to the sides of the container. Continue stirring until a homogenous mixture is formed. Use a low-speed mechanical mixer for this preparation to avoid too much air being dragged into the mix. Do not prepare the mix by hand. Preparation of Seal Master can also be made with a mortar mixer, which is usually connected with the mortar sprayer. In this case, make sure that the mixture is homogenous before it is poured into the pump's hopper.

### c) Applying the product

Apply Seal Master within 60 minutes after preparation. Applied on the prepared surface to a feather edge with a thin layer of Seal Master with a smooth trowel or brush; then, while the first coat is still fresh, apply a second coat to form a final thickness of at least 2 mm thick. In the case

of waterproofing terraces, balconies, basins, and swimming pools, we recommend embedding alkali-resistant reinforcement mesh in the first layer of Seal Master while it is still fresh. The mesh must be used in areas with either small cracks or regions under particular stress. After installing the mesh, finish off the surface with a flat trowel and apply a second layer of Seal Master when the first one has set (after 4-5 hours). After applying Seal Master, wait 5 days for curing before laying ceramic tiles.

### d) Installing the tiles

Wait approx one day after applying Seal Master before installing tiles and using a C2 adhesive.

# **COVERAGE / CONSUMPTION**

The consumption is approximately 3 - 4 kg/m<sup>2</sup> at 2.5 - 3 mm thickness.

#### **PACKAKING**

Seal Master is supplied in:

- 13kg and 25 kg paper bags COMP. A
- 4kg and 8kg plastic canisters COMP. B

### **SHELF LIFE**

Original sealed packaging of this product is guaranteed to be of first quality for 12 months. Areas with high humidity will reduce the shelf life of the bagged product.

#### SAFETY INSTRUCTION

SEAL MASTER contains cement that, when in contact with sweat or other body fluid, causes allergic reactions to those





predisposed and an irritant alkaline reaction. It can cause damage to the eyes. During the usage, wear protective gloves and goggles and take the usual precautions for handling chemicals. When in contact with skin or eyes, wash immediately with plenty of water and seek medical attention.



Product identity	COMP. A	COMP. B
Consistency:	powder	liquid
Color:	white & gray	white
Bulk density (kg/m³):	1250	1050
Dry solids content (%):	100	40
Classification:	EN 1504-2; EN 14891	
Application data (at +23°C and 50% R.I	Н.)	
Mix ratio:	25 parts SEAL MASTER A with 8 parts SEAL MASTER B by weight	
Consistency of mix:	Liquid pasty	
Density of mix (kg/m³)	1750	
pH of mix:	13	
Pot life:	over1 hours	
Application temperature:	+8°C to +40°C	
Final performances		
Adhesion strength to concrete according EN 1542:  - Adhesion strength after 28 days at +20°C and 50% R.H. (N/mm²):  - Adhesion strength after 7 days at +20°C and 50% R.H. + 21 days in water (N/mm²):  Thermal compatibility to freeze/thaw cycles, according to EN 1542 (N/mm²):  Flexibility according to DIN 53504 expressed as elongation:  - Flexibility after 28 days at +20°C and 50% R.H. (%):  Static crack-bridging at -20°C according EN 1062-7 expressed as the maximum width of the crack (mm):  Dynamic crack-bridging at -20°C according EN 1062-7 of a film of SEAL MASTER ELASTIC reinforced with fiber mesh, expressed as resistance to cracking cycles: Impermeability to water expressed as capillary water absorption according EN 1062-3 (kg/m²-h0.5):  Permeability to carbon dioxide (CO2) according EN 1062-6  - diffusion in an equivalent thickness of air SDCO2 (m):  Crack-bridging ability at +20°C according EN 14891-A.8.2 (mm):  Crack-bridging ability at -20°C according EN 14891-A.8.3 (mm):  Initial bond strength according to EN 14891-A.6.2 (N/mm²):  Adhesion strength after immersion in water according to EN 14891-A.6.3 (N/mm²):	1.45 1.12 1.24 30 Class A3 classB3.1(-20°C) No Fail < 0.05 > 50 0.97 0.92 0.88 0.59	
Adhesion strength after application of heat source according to EN 14891-A.6.5 (N/mm²):  Adhesion strength after freeze-thaw cycles according to EN 14891-A.6.6 (N/mm²):  Adhesion strength after immersion in basic water according to	1.14 0.67	
EN 14891-A.6.9 (N/mm²):	0.69	

### **WARNING**

Danger. Contains Portland Cement: Chromium VI < 2 ppm within the validity period of the product. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H335 May cause respiratory irritation. P261 Avoid breathing dust. P280 Wear protective gloves/protective clothing/eye protection/face protection. P302 + P352 IF IN CONTACT WITH YOUR SKIN: Wash with plenty of water/... P305 + P351 + P338 IF IN CONTACT WITH YOUR EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER/doctor/...



+155 12 258 428 info@dc-industries.us www.dc-industries.us

