

DCI MEGARAPID IS A HIGH-PERFORMANCE DEFORMABLE, RAPID-SETTING, POLYMER-MODIFIED, CEMENTITIOUS ADHESIVE FOR THE ADHESION OF CERAMIC AND PORCELAIN TILES.









## **PRODUCT DESCRIPTION**

DCI Megarapid is a high-performance deformable, rapid-setting, polymer-modified, cementitious adhesive for the adhesion of ceramic and porcelain tiles. DCI MEGARAPID is a C2F S1 class cementitious (C), improved (2), fast setting (F), adhesive. DCI MEGARAPID is a grey or white-colored powder made from cement, selected graded sand, synthetic resin, and special additives which can be used on walls and floors for a thin bed and medium bed installations of tiles and stone material. DCI MEGARAPID hardens without noticeable shrinkage to become extremely resistant, adhering perfectly to all the conventional materials used in construction. The product is classified according to EN 12002 and EN 12004.

#### **FIELD OF APPLICATION**

- · For interior and exterior use
- · For floors and walls
- · For thin-bed and medium bed installations of all types of tiles
- · Suitable for application over waterproofing products
- · For heavy-duty and high traffic areas
- · For projects with time constraints
- · Suitable for swimming pool
- · Suitable for installation of large format tiles
- · For thicknesses up to 20 mm
- · Suitable for floor heated substrates
- · For heavy-duty and high traffic areas
- · Over the existing wall and floor tiles.

### **SUITABLE SUBSTRATES**

- · Concrete
- · Cement Mortar
- · Cement Mortar Bed
- · Cement Plaster/Render
- · Cement Block
- · Gypsum Underlayment
- · Gypsum Wallboard
- · Liquid waterproofing membranes
- · Self-Leveling and Patching Compounds
- · Old existing tiles

# **LIMITATIONS**

- · Do not mix with other elements.
- · Do not apply on metallic or rubber substrate.
- Do not apply for marbles or stone tiles subject to staining or efflorescence caused by water absorption
- · Do not apply on substrate subject to large movement or vibration.
- · Do not apply on not sufficient cured substrate.
- · Do not apply for heavy and large format tiles



#### **APPLICATION PROCEDURE**

# A) Preparation of the support

The support must be cured, mechanically strong, free from loose particles, grease, paint, oils, wax, grease, and totally dried. Cement supports must not be subject to shrinkage after the installation of the tiles. During spring and summer, mortars must be cured for at least one week for every centimeter thickness, and cementitious screeds must be cured for at least 28 days unless they have been made with DCI special binders for screeds such as Screed 80, Level S10, or with Level S30. Gypsum supports and anhydrite screeds must be perfectly dry (max. residual moisture 0.5%), sufficiently hard, and free of dust. They must be treated with DCI Grip Primer or Beton Contact, while areas subject to high humidity must be treated with Primer CTA.

## B) Preparing the product

DCI MEGARAPID must be mixed with clean water to obtain a homogenous mixture free of lumps. Leave to rest for 5-10 minutes and re-mix again. The mixture is ready for use. The demand for water to be used is approximately 26-28 parts per 100 parts (by weight) of DCI MEGARAPID (equal to ca. 6.5 -7 liters of water). The mixture, produced in this way, is workable for at least 1 hours.

# C) Applying the product

DCI MEGARAPID is applied with a notched trowel onto the substrate. Choose a trowel that will give coverage to the backside of the tiles of at least 60-70% for walls or for indoor light foot traffic.

#### D) Installation of the tiles

It is unnecessary to wet the tiles before installation, but if the backside of the tiles is with powder, they should be immersed in clean water. The tiles are installed under firm pressure to ensure good contact with the adhesive. DCI MEGARAPID open time in normal temperature and humidity is 10-15 minutes, but unfavorable weather conditions, high temperature, strong sun, drying wind, or highly absorbent substrates may shorten this open time, sometimes drastically, to just a few minutes. Due to these reasons, there must be constant checks to see whether the adhesive has formed a surface skin or is still fresh to the touch. Should a surface skin have formed, the adhesive should be retroweling. It is inadvisable to wet the adhesive when it has formed a skin because, instead of dissolving the skin, a non-adhesive film will be formed. Adjustment of the tiles, if necessary, should be carried out within 60 minutes following installation, after which time adjustment will become problematic. Tiling installed with DCI MEGARAPID must not be subject to washout or rain for at least 6 hours and must be protected from frost and direct sun for at least 2-3 days after application.

# E) Applying the grout

The grout installation can be done after a minimum of 2 hours curing time at 23°C and 50% relative humidity for walls and after a minimum of 4 hours curing time at 23°C and 50% relative humidity for floors. Conditions may change the setting and curing time significantly.

# **COVERAGE / CONSUMPTION**

- · 1,5 kg/m² with a 4 mm notched trowel
- · 3 kg/m<sup>2</sup> with an 8 mm notched trowel
- · 3.5 4 kg/m<sup>2</sup> with a 10 mm notched trowel
- $\cdot$  7 8 kg/m<sup>2</sup> with a 20 mm notched trowel.

#### **PACKAGING**

DCI MEGARAPID is supplied in a 25Kg paper bag.

#### **SHELF LIFE-STORAGE**

Original sealed bags 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**

DCI MEGARAPID contains cement that, when in contact with sweat or other body fluid, causes allergic reactions to those predisposed and irritant alkaline reactions. It can cause damage to the eyes. During usage, wear protective gloves and goggles and take the casual protection for handling chemicals. In case of contact with skin or eyes, wash immediately with plenty of water and seek medical attention.

TECHNICAL DATA			
Product identity			
Consistency		powder	
Color		white or grey	
Bulk density (kg/m³)		1250	
Dry solids content (%)		100	
Maximum grain size		0,6 mm	
Classification		EN 12004	
Application data (at +23°C and 50% R.H.)			
Mix ratio		CI MEGARAPID arts by weight of water	
Consistency of mix		very pasty	
Density of mix (kg/m³)		1450	
pH of mix		12	
Pot life		over 4 hours	
Application temperature		+5°C a +40°C	
Open time		>10 minutes	
Adjustability time		approx. 15 minutes	
Final performances			
Pull off strength according to EN 1348 (N/mm²)  - Initial adhesion strength (after 6 hours):  - Initial adhesion strength (after 28 days):  - Adhesion strength after heat:  - Adhesion strength after water immersion:  - Adhesion strength after freeze-thaw cycles:  Temperature resistance after final cure:  1.78  2.82  2.91  2.77  - Adhesion strength after freeze-thaw cycles:  7.70  7.71  7.72  8.72  9.73  9.75  1			

#### **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 e ye 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/...



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