

# CEMENT-BASED TILING MORTAR WITH LOW-POROUS ELEMENTS ON TRADITIONAL SUBSTRATES FOR URGENT PUTTING INTO SERVICE APPLICATIONS

# DESCRIPTION

**MAXKOLA®** -M EXPRESS is an improved cementbased adhesive, with reduced slip, suitable for the installation of low, medium and high porosity ceramic tiles for indoor and outdoor applications, allowing an urgent open to pedestrian traffic in 3 hours and road traffic in 9 hours.

## **APPLICATION FIELDS**

- Fixing of low/medium/high porosity (ceramic tiles, vitrified tiles, glass mosaics porcelain, marble, natural stone claddings, etc.) on floors and walls, both indoor and outdoor uses.
- Tiling on cementitious substrates, screed walls, electric floor warming systems, existing tiling, etc.
- Outdoor tiling on facades, pedestrian pavements, etc.
- Tiling on substrates subject to permanent immersion such as swimming pools, fountains, water tanks, etc.

## **ADVANTAGES**

- Urgent putting into service of the ceramic flooring, allowing pedestrian traffic in 3 hours and road traffic in 9 hours.
- Very high adhesion on non-porous/ low porosity tiles.
- Excellent water retention avoids dampen the substrate or tiles.
- Good thixotropy and initial adhesion, prevents sliding of the placed pieces and tiles.

#### **APPLICATION INSTRUCTIONS**

#### Preparation of the substrate

Surfaces must be structurally sound, clean and free from dust, grease, paints, efflorescence, oils, gypsum, loose concrete or any other material that could affect to adhesion of the product. Substrate must be as flat as possible, with no unevenness greater than 5 mm measured with a 2 meters long guide.

On gypsum substrates, use **MAXKOLA® Y** and in outdoor use **MAXKOLA® FLEX**. Do not apply **MAXKOLA® -M EXPRESS** over dead plaster, setting retarders or substrate with a thin plastering layer.

#### Mixing

A 25 kg bag of **MAXKOLA®** -**M** EXPRESS prequires from 5,0 to 5,5 litres (20-22%, by weight) of clean water depending on environmental conditions and desired consistency. Mix mechanically using a low speed drill (400-600 rpm) for 2-3 minutes until achieving a lump free and homogeneous paste. Prepare only the amount of product that can be applied in the first 15 minutes.

#### Application

Apply **MAXKOLA®** -M EXPRESS on areas not greater than 2 m<sup>2</sup> at a time with a 6x6 mm notched trowel in horizontal direction in vertical walls in order to control the application thickness and avoid the slumping of the tiles placed on vertical surfaces. Do not apply in thickness greater than 8 mm.

While mortar is still fresh, place the pieces and press them with slight twisting motion by using a rubber hammer, until flattening the ridges and ensuring the tile back achieves full contact with the mortar. Check the product adhesion by occasionally removing a set piece and inspecting mortar transfer onto back of tile.

Remove excess mortar from the joint before it sets. Joint grouting can be carried out after 3 hours using a suitable *MAXJOINT*<sup>®</sup> range product.

For large-format pieces, i.e. bigger than 35x35 cm, apply the adhesive on both surfaces (double spread gluing) of the substrate and the tiles, or use of *MAXKOLA*<sup>®</sup> *FLEX* preferably.

#### **Application conditions**

Do not apply when rainfalls or contact with condensation, dew or moisture are expected the following 24 hours after its application.



Optimum temperature of application interval is estimated between 10°C and 30°C. Do not apply with ambient or substrate temperatures below 5°C or if lower temperatures are expected during the following 24 hours. Do not apply on frozen or frosted surfaces.

In applications with high temperatures, moderate to high winds or low humidity conditions, dampen the surface without creating puddles. Avoid direct sunlight exposure in extreme hot temperature conditions.

# Curing

Allow a minimum curing time of 3 hours before joint grouting or open to pedestrian traffic and 9 hours for open to vehicles traffic, at 20°C.

Applications carried out at lower temperatures or with poor ventilation will require longer curing times.

## Cleaning

After **MAXKOLA®** -**M EXPRESS** application, all tools and equipment should be cleaned immediately with water. Once harden, can only be removed by mechanical means.

## CONSUMPTION

The estimated consumption for **MAXKOLA®** -**M EXPRESS** is 1,5 kg/m<sup>2</sup>·mm thickness.

Consumption may vary depending on the texture, roughness, porosity, flatness of the substrate and the ceramic tile as application method as well (single or double gluing). A preliminary test on-site will determine the coverage exactly.

# **IMPORTANT INDICATIONS**

- Allow 28 days minimum curing for new concrete and mortars.
- Dampen of the surface prior to the mortar application is not required.
- Do not add cements, admixtures or aggregates that may affect the mortar properties.

- Do not exceed recommended water dosage.
- Do not exceed the maximum thickness recommended per layer of 8 mm.
- Tiles must be placed before the curing time has expired, when a surface dry film which avoid the adhesion of the pieces has appeared.
- Double spread application is preceptive for 35 x 35 cm ceramic tiles or higher dimensions and in heavy pedestrian traffic, outdoor façades and pronounced reliefs.
- For further information and other uses not specified on this Technical Bulletin, consult our Technical Department.

## PACKAGING

*MAXKOLA*<sup>®</sup> -*M* EXPRESS is supplied in 25 kg bag and is available in grey colour.

## STORAGE

Twelve months in its original unopened packaging, in a dry covered place protected from direct sunlight, humidity and frost, at temperatures above 5°C.

## SAFETY AND HEALTH

**MAXKOLA®** -M EXPRESS is non-toxic but has abrasive compounds, so protective rubber gloves and safety goggles must be used to prepare and apply the mixture. In case of eye contact, rinse thoroughly with clean water, but do not rub. In case of skin contact, wash affected areas with soap and water. If irritation continues, seek medical attention.

For further information, Safety Data Sheet of **MAXKOLA®** -**M EXPRESS** is available by request.

Disposal of the product and its empty container must be made by the final user and according to official regulations.



# **TECHNICAL DATA**

Characteristics of the product CE Marking, UNE-EN 12004	
Description: Improved cement adhesive with reduced slip and fast settin	g time. C 2FT
Uses: Indoor and outdoor tiling in floors and walls.	-
Appearance and colour	Grey powder
Maximum aggregate size, (mm)	0,5
Apparent density in powder form, (g/cm <sup>3</sup> )	1,30 ± 0,10
Mixing water, (%, by weight)	21 ± 1
Apparent density of mortar, (g/cm <sup>3</sup> )	2,20 ± 0,10
Application and curing conditions	
Ambient and substrate optimum temperature, (°C)	10-30
Open time at 23°C and 50% H.R., EN 1346 (min)	15-20
Setting time (initial/final), (min)	30-40 / 50-60
Curing time at 20°C and 50% H.R., (h)	
<ul> <li>Pedestrian traffic and jointing</li> </ul>	3
- Vehicle traffic	9
Water retention, (g)	2,96
Characteristics of the cured product	
Cured product density, (g/cm <sup>3</sup> )	2,10 ± 0,10
Tensile strength, EN 1348, (Mpa)	
<ul> <li>Initial bonding after 6 hours</li> </ul>	0,5
- Initial bonding	1,0
- Bonding after immersion in water	1,0
- Bonding after thermal ageing	1,0
- Bonding after freeze / thaw cycles	1,0
Consumo* / Espesor	0.0.0.0
Minimum and maximum recommended thickness per coat, (mm)	3,0-8,0
Consumption per continuous coat, (kg/m <sup>2</sup> ·mm)	1,5

\* Consumption may vary depending on the roughness, porosity and other conditions for both tile and surface. A preliminary test on-site will determine the coverage exactly.

# GUARANTEE

The information contained in this leaflet is based on our experience and technical knowledge, obtained through laboratory testing and from bibliographic material. **DRIZORO®**, **S.A.U.** reserves the right to introduce changes without prior notice. Any use of this data beyond the purposes expressly specified in the leaflet will not be the Company's responsibility unless authorised by us. We shall not accept responsibility exceeding the value of the purchased product. The data shown on consumptions, measurement and yields are for guidance only and based on our experience. These data are subject to variation due to the specific atmospheric and jobsite conditions so reasonable variations from the data may be experienced. In order to know the real data, a test on the jobsite must be done, and it will be carried out under the client responsibility. We shall not accept responsibility exceeding the value of the purchased product. For any other doubt, consult our Technical Department. This version of bulletin replaces the previous one.



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