



MAXKOLA® FLEX

FLEXIBLE CEMENT-BASED ADHESIVE MORTAR FOR LOW ABSORPTION TILES ON NON-RIGID SUBSTRATES



DESCRIPTION

MAXKOLA® FLEX is an improved flexible cement adhesive mortar, with reduced slip, extended open time (Class C2TE) and transversal deformation (Type S1), composed of hydraulic and synthetic binders, that once mixed with water provides a high performance mortar with excellent adhesion and flexibility, suitable for tiling of low porosity tiles and on non-rigid substrates, in both indoor and outdoor surfaces.

APPLICATION FIELDS

- Fixing of low porosity or non-porous tiles, vitrified tile, glass mosaics, porcelain, marble, natural stone, etc for indoor or outdoor use, on floors and walls.
- Tiling of ceramic tiles on substrates subject to movements such as facades, under floor heating systems, roofs, timber, plastic, etc.
- Tiling on substrates subject to water immersion such as swimming pools, fountains, water tanks, etc.

ADVANTAGES

- Very high adhesion on non-porous substrates and with good mechanical performance.
- Good flexibility, absorbing movements from substrate due to shrinkage processes, thermal dilatations, etc.
- Easy to use. Long open time.
- Excellent water retention, avoids dampen the substrate or tiles.

APPLICATION INSTRUCTIONS

Surface preparation

Surfaces must be structurally sound, clean and free from dust, grease, paints, efflorescence, oils, demoulding agents, gypsum, loose concrete or any other material that could affect the 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. Voids, non active-cracks and surface damages must be prepared by chipping or sandblasting up to 2 cm depth and repaired with a structural mortar such as **MAXREST®** or **MAXRITE® 500** (Technical Bulletins N.: 2 and 50, respectively). Observe a minimum curing time 24 hours before applying **MAXKOLA® FLEX**. Do not apply **MAXKOLA® FLEX** over dead, thin or delayed setting gypsum plasters.

Mixing

A 25 kg bag of **MAXKOLA® FLEX** is mixed with from 6,5 to 7,5 litres of clean water (26 - 28%), according to ambient conditions and desired consistency. Add the necessary amount of water in a clean container and pour **MAXKOLA® FLEX** slowly. Mix mechanically using a low speed drills (400-600 rpm) until achieving a lump free and homogeneous paste. Small quantities of product can also be mixed by hand. Do not mix for prolonged period nor use high-speed mixer. Allow mortar to rest for at least 5 minutes and then, remix briefly again before applying.

Only mix quantities that can be placed in 30 minutes. After this period, setting process starts and mortar loses its workability. If it is required, remix again briefly to keep its workability, but do not add more water.

Application

Apply **MAXKOLA® FLEX** in a thin layer on areas not greater than 2 m² at a time with a 6x6 mm notched trowel 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 6 mm. While mortar is still fresh, place the pieces and press them with slight twisting motion, until flattening the ridges and ensuring the tile back achieves full contact with the mortar. Check the adhesion by occasionally removing a set piece and inspecting mortar transfer onto back of tile.

The open time at 20 °C is 30 minutes and the rectification time is 5 minutes, increasing with lower temperatures and reducing with higher

temperatures. Remove excess mortar from the joint before it sets. Joint grouting can be carried out after 24 hours using a suitable **MAXJOINT®** range product. Large format or non absorbent tiles will take longer time.

For large-format pieces, i.e. bigger than 35x35 cm, it is recommended to apply double spread (application the adhesive on both surfaces of the substrate and the tile).

Application Conditions

Do not apply when if rain is expected within 24 hours after application.

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.

Protect the application from high temperatures (> 30 °C), moderate to high winds, low humidity conditions or direct sunlight exposure, i.e. in summer time. Damp the substrate with water.

Curing

Allow a minimum curing time of 1, 2 and 7 days at 20° C and 50% R.H. before joint grouting, open to pedestrian traffic, and for permanent immersion, respectively.

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

Protect the application during the first hours of curing from high temperatures, high winds, low humidity conditions or direct sunlight exposure.

Cleaning

Before **MAXKOLA® FLEX** sets all tools and equipment should be cleaned immediately with water. Once it hardens, is only be removed by mechanical means.

CONSUMPTION

The estimated consumption for **MAXKOLA® FLEX** is 1,5 kg/m²-mm thickness.

The 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.

IMPORTANT INDICATIONS

- Allow 28 days minimum curing for new concrete and mortars.
- Do not add cements, admixtures or aggregates that may affect the mortar properties.
- Observe the recommended mixing water ratio.
- Remix briefly the mortar in order to keep its workability, but do not add more water.
- Do not exceed the maximum thickness recommended per layer of 6 mm.
- The ceramic tiles must be set within the open time of the mortar, before non adhesive skin is formed on the surface of the mortar.
- Double spread application is preceptive for 35 x 35 cm ceramic tiles or higher dimensions and in heavy pedestrian traffic and with pronounced relief.
- For further information and other uses not specified in this Technical Bulletin, consult our Technical Department.

PACKAGING

MAXKOLA® FLEX is supplied in 25 kg bag and it is available in standard grey and white colours.

STORAGE

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

SAFETY AND HEALTH

MAXKOLA® FLEX 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® FLEX** is available by request.

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

TECHNICAL DATA

Characteristics of the product	
<i>CE Marking, UNE-EN 12004 and CE Marking UNE-EN 12002</i> Description: Improved cement flexible adhesive with reduced slip, extended open time and deformable. C2TES1-S1 Uses: Indoor and outdoor tiling in floors and walls.	
Appearance and colour	White or grey powder
Maximum aggregate size (mm)	0,8
Apparent density in powder form (g/cm ³)	1,15 ± 0,10
Mixing water (% , by weight)	27 ± 1
Apparent density of mortar (g/cm ³)	1,62 ± 0,10
Application and curing conditions	
Ambient and substrate optimum temperature (°C)	5 - 35
Open time at 20 °C (minutes)	30
Rectification time at 20 °C (minutes)	5
Curing time at 20°C and 50% R.H. (d)	
- Tile wound grouting	1
- Pedestrian traffic	2
- Permanent immersion	7
Water retention (g)	2,9
Characteristics of the cured product	
Slip at 23 °C and 50% R.H., EN 1308 (mm)	0,2
Tensile strength, EN 1348 (Mpa)	
- Initial bonding	1,6
- Bonding after immersion in water	1,3
- Bonding after thermal ageing	1,4
- Bonding after freeze / thaw cycles	1,5
Transversal deformation, EN 12004	3,8 – Type S1 (Deformable)
Consumption* / Thickness	
Consumption (kg/m ² ·mm thickness)	1,5
Recommended minimum / maximum thickness per layer (mm)	1,5 - 6

* 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.



DRIZORO, S.A.U.

C/ Primavera 50-52 Parque Industrial Las Monjas
28850 TORREJON DE ARDOZ – MADRID (SPAIN)
Tel. 91 676 66 76 - 91 677 61 75 Fax. 91 675 78 13
e-mail: info@drizoro.com Web site: drizoro.com

ISO 9001
ISO 14001

BUREAU VERITAS
Certification



ES045397-1/ES045396-1