

# KAROFLEX



**KAROFLEX** an improved cementitious tile adhesive with normal deformability having an extended open time for ceramic tiles, particularly recommended for laying large format porcelain and natural stone tiles.

## KEY FEATURES

- **KAROFLEX** is a grey powder composed of cement and fine aggregates.
- It contains special high performance additives.
- Good capability to accommodate the different deformation of the covering from the substrate.
- Extended open time and adjustability time.
- Tiled floor can be made available to light traffic after 24 hours.
- It is suitable for heavy duty applications with structural movements.
- It is suitable for application on wooden substrates

## GUIDELINES FOR KAROFLEX APPLICATIONS

Size of tile (cm <sup>2</sup> )	50 < S ≤ 500	500 < S ≤ 1600	1600 < S ≤ 1800	1800 < S ≤ 3600	3600 < S ≤ 10000
Interior floor	✓	✓	✓	✓✓	✓✓
Exterior floor	✓	✓	✓	✓✓	✓✓
Interior wall	✓	✓	✓	✓✓	✓✓
Exterior wall	✓	✓	✓	✓✓	✓✓
Interior tiling over existing tiles	✓	✓	✓	✓✓	✓✓
Exterior tiling over existing tiles	✓	✓	✓	✓✓	✓✓
Wet area	✓	✓	✓	✓✓	✓✓
Natural Stone	✓	✓	✓	✓✓	✓✓
Pool	✓	✓	✓	✓✓	✓✓

✓ Recommended  
(Single Bedding)

✓✓ Recommended  
(Single Bedding + back Buttering)

## RECOMMENDATIONS

**Do not** use **KAROFLEX** in the following cases:

- On metallic, rubber, PVC surfaces
- Where a fast setting tile adhesive is required

# APPLICATION METHODOLOGY

## SURFACE PREPARATION

- New floor and wall surfaces must be allowed to cure for a minimum periods, as tabulated below, to ensure that tile installation is not subjected to dry shrinkage movements:  
All supporting substrates must be free of oil strains, dust, laitance and other bond inhibiting compounds.

Type of Substrate	Age of Curing
New concrete	6 weeks
New Screed	4 weeks
New Render	2 weeks

- Ensure that the substrate is flat, stable, well adhered and has a normal absorption.
- Correct all imperfections on the substrate at least 48 hours before application of the tile adhesive.
- Humidify the surface with a masonry brush before applying **KAROFLEX**.

## MIX PREPARATION

- Gradually add the contents of a bag of 25Kg of **KAROFLEX** to 7.125 L of clean water and mix mechanically until obtaining a smooth and homogeneous paste.
- It is important to pour the product in water and not vice versa.
- Fresh paste is allowed to rest for 5 mins. The adhesive is now ready to use.

## APPLYING THE MIX

- In case of external floors and finishing materials, subject to unusual environment such as basins and swimming pools, floors subject to heavy loads or tiles sizes greater than 600 mm x 600 mm, **KAROFLEX** should also be spread on the back of the tile (back-buttering method).
- Apply **KAROFLEX** over the surface using the straight edge of the notched trowel and then comb the applied adhesive using the notched side of the trowel.

## LAYING THE TILES

Within the open time, place the tile on the substrate and press firmly to ensure contact with both surfaces and perform back and forth movement to evacuate air from the surface.

## TECHNICAL DATA

In compliance with EN 12004

### PRODUCT IDENTITY

Class	C2ES1
Type	Powder
Colour	Grey
Storage	6 months in a cool dry place
Packaging	25 kg

### COMPOSITION AND PROPERTIES

Mixing ratio	7.125 L per bag
Fresh mix	1,800 kg/m <sup>3</sup>
Pot life	2 hours
Open time	> 30 mins
Adjustability time	< 60 mins
Set to light foot traffic	After 24 hours
Ready for use (Normal surface)	7 days
Ready for use (Swimming pool)	7 days

### TECHNICAL PERFORMANCE

<b>TENSILE ADHESION STRENGTH</b>	<b>(N/mm<sup>2</sup>)</b>
Initial Tensile Adhesion	≥ 1.0
Tensile Strength after heat ageing	≥ 1.0
Tensile Strength after water immersion	≥ 1.0
Tensile Strength after Freeze/Thaw cycles	≥ 1.0
<b>OPEN TIME</b>	<b>(N/mm<sup>2</sup>)</b>
Open Time after 30 minutes	≥ 0.5
<b>DEFORMABILITY *</b>	
Deformability according to EN 12004	S1

### TESTS / STANDARDS

- The initial tests of **KAROFLEX** has been performed by LGAI Technological Centre S.A (APPLUS), a notified laboratory, as per the norm EN 12004
- Drymix Ltd is certified ISO 9001, as such there is a factory production control system in place to ensure good quality of raw materials, semi-finished materials and finish goods.

## APPROXIMATE COVERAGE

Coverage (m<sup>2</sup>) per bag

Test Description	Coverage (m <sup>2</sup> )
Single buttering using notched trowel (10 x 10 x 10) - Trowel positioned at 60°	6.9
Double buttering using notched trowel (10 x 10 x 10) on floor + application of adhesion at the back of tile (2.5 mm). Trowel positioned at 60°	4.3
Double buttering using notched trowel (10 x 10 x 10) on floor + application of adhesive using notched trowel (10 x 10 x 10). Trowel positioned at 60°	3.9

## PRECAUTIONS

- It is not necessary to wet the tiles before installation; only in case of very dusty backs is washing recommended, by quickly immersing them in clean water.
- The open time of **KAROFLEX** in normal conditions of temperature and humidity, is 30 minutes; unfavorable environmental conditions (strong sunlight, drying wind, high temperature as well as a highly absorbent substrate), could drastically reduce this time.
- Therefore constantly check that the adhesive has not formed a superficial skin and is still fresh; where there is a formation of superficial skin the adhesive must be reworked with notched trowel. Wetting the adhesive after it has produced the skin is not recommended because the water forms an anti-adhesive film instead of dissolving it.

## GROUTING

- Wall joints can be grouted after 5 – 8 hours, depending on absorbency and floor joints can be grouted after 48 hours.
- Always allow grout joints of at least 2 - 5mm between tiles.

## HEALTH & SAFETY NOTES

As with all cement based products:

- Wearing of gloves, goggles are highly recommended during application
- Avoid contact with the eyes & skin
- In case of contact with skin or the eyes, wash abundantly with clean water
- In case irritation persists, consult a doctor immediately

For further information and advice on the safe handling, storage and disposal of this product, user shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

## NOTES

The information, and, in particular, the recommendations relating to the application and end-use of DRYMIX products, are given in good faith based on DRYMIX's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with DRYMIX's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered.

\* Test performed in supplier's lab.