



Technical Data Sheet (TDS)

Ceramic Adhesives / Cement Based

ALJADI K91

Tile and Ceramic Adhesive Mortar (White/Grey)

DISCRIPTION

White cement based, single component, polymer added tile and ceramic adhesive with extended open time, reduced slip and extra properties. C2TES1 ceramic

APPLICATION AREAS

- Indoor and outdoor
- Horizontal and vertical surfaces,
- Bonding large size floor and wall tiles, granite, porcelain ceramic.
- Places that are exposed to heavy pedestrian traffic, such as offices, shopping malls, schools and hospitals.
- Places that are exposed to high temperature changes, such as cold storage depots, flash freezing facilities and floor heating systems,
- Places that are exposed to water and weather conditions, such as restrooms, balcony.
- Bonding ceramics on old ceramic.

TECHNICAL PROPERTIES

| | |
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| Appearance | Grey/White colored coarse powder |
| Powder Density | ~ 1.80 kg/L |
| Mixing Rate | 6 – 7 L of water / 25 kg powder |
| Resting Period | 5 – 10 minutes |
| Pot Life | 2 . 5 – 3 hours |
| Extended Open Time Tensile Adhesion Strength | After min. 20 minutes $\geq 0,5$ N/mm ² (EN 1346) |
| Application Temperature | Between +5°C and +55°C |
| Tensile Adhesion Strength | ≥ 0.5 N/mm ² 28 days (EN 1348) |
| Slip | $\leq 0,5$ mm (EN 1308) |
| Transverse Deformation (Deformability) | ≥ 2.5 mm and < 5 mm (EN 12002) |
| Walk-on Time | 24 hours |
| Service Temperature | -20°C / +70°C |

ADVANTAGES

- Very flexible and provides strong adhesion.
- Has transverse deformation property.
- Resistant to water and frost, and to the tensions on the surface that are caused by sudden temperature changes.
- Provides longer time for working, saves time and labor.
- Allows sufficient time to adjust bonded plates.
- Provides high stability, does not cause sagging in vertical applications.
- Resistance to mold/bacteria growth. It does not support microbial growth.



APPLICATION

PREPARATION OF THE SURFACE

The surface must be cured.

The surface must be clear of materials which prevent bonding, such as dust, oil, tar, bitumen, paint, silicone, curing agents, detergents and mold release oils.

The surface must be dry.

PREPARATION OF THE MORTAR

Add 25 kg of **ALJADI K91** Tile and Ceramic Adhesive Mortar to approximately 6 - 7 liters of clean water and mix it with a low speed mixer until there are no lumps.

Leave the mortar to mature for 5-10 minutes, then mix again 1 – 2 minutes before use.

The mortar must be used within 2.5 - 3 hours.

APPLICATION

First form a contact layer by pressing the adhesive mortar strongly on the surface, then comb it with a notched trowel selected according to the size of the tiles.

The adhesive mortar must contact at least 80% of the backside of the ceramic.

Prefer double sided bonding method on uneven surfaces, in places that are exposed to heavy pedestrian or load traffic, and in cold storage depots or floor heating systems where the temperature changes are high, depending on the size of the plates, and

apply the adhesive mortar both on the backside of the ceramic and on the surface, and fix them with combing directions perpendicular to each other.

For better bonding, apply force with a rubber hammer.

In hot weather use cold water to cool the mixed material's temperature.

In cold weather use warm water to raise the mixed material's temperature.

CAUTION

Pay attention to the amount of water added to the mortar. Do not add more than necessary.

Do not add cement sand, or any other additives which may affect its properties.

PACKAGING

25 kg kraft bags

SHELF LIFE

Unopened packages can be stored in non-humid environments for up to 12 months, stacked maximum 10 packages on a pallet



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CONSUMPTION

4 – 6 kg/m²

HEALTH AND SAFETY

As with all chemical products, contact with food, skin, eyes and mouth should be avoided during usage and storage. During the application, work wears, protective gloves, goggles and mask should be used according to the workplace health regulations. If swallowed by accident, consult a doctor. In case of contact with skin, rinse with water. Do not leave the package open. Keep out of reach of children.

* The application instructions and technical values given for the products have been obtained in our tests in accordance with international standards and our experience, at $23 \pm 2^{\circ}\text{C}$ temperature and $50 \pm 5\%$ relative humidity. These values may vary depending on ambient conditions. High temperatures shorten the durations, low temperatures extend them. Before starting the application, whether the product is suitable for the application and purpose should be tested by the user. **JDK** Construction Chemicals is not responsible for application errors that may occur if the product is used outside of its intended purpose or if the application conditions and recommendations mentioned above are not followed. This Technical Data Sheet is valid until the next revision is published. **JDK** reserves the right to change the values specified in this Technical Data Sheet, provided that a new version is published. It is the user's responsibility to check the currency of the document. For more information, please contact our sales department.
