

MERCK (c2) Tile adhesives

Deformable Ceramic &
Tile Adhesive



DESCRIPTION

This is a deformable and slip —resistant cement-based ceramic adhesive with extended open time and added polymer that it is improved with additional features.

AREAS OF USAGE

It is used to bond materials such as marble ,granite ,ceramic tiles and other materials which will be used in pools or other interior or exterior horizontal and lateral surfaces plastered with lean concrete ,ferroconcrete or cement plaster.

ADVANTAGES

- Easy to apply.
- Does not slip.
- Its adherence is high strength.
- It can be processed easily and for a long time.
- Due to its high polymer content ,it has water impermeability ,can be used in wet areas and pools.
- It can be used when conducting ceramic application on old ceramics .
- Due to its high elasticity ,it is resistant to surface tensions that may occur due to sudden heat changes it can be used in areas where there are sudden heat changes such as cold storages shocking facilities ,outer surfaces of ovens ,and under floor heating systems.

TECHNICAL SPECIFICATIONS

Slip: ≤ 0.5 mm

Adhesion strength:

-after open time : ≥ 0.5 N/mm² after at least 30 min.

-Initial: ≥ 1 N/mm²

-After Dipping in water: ≥ 1 N/mm²

-After Heat Aging: ≥ 1 N/mm²

-After Freeze-Thaw Cycle: ≥ 1 N/mm²

Temperature Resistance: (-40 °C) — (+80 °C)

Reaction to fire class: A1

***The above values are valid for 28 days of performance and they are obtained through laboratory tests.**

APPLICATION INFORMATION

Application Temperature:(+5 °C) — (+35 °C)

Mixing Ratio : 5.5-7.5 it water /20 Kg powder

Usable for : 4 hours

Open waiting time: 30 min

Application thickness : 3-10 mm

Grouting time: 24 hours

Consumption Average: 3 -5 Kg / m

***These values are valid for 23 °C and 50% relative humidity . Times may vary depending on ambient conditions.**

SURFACE PREPARATION

-The application surface should be made clean from dust, dirt, oil, paint residue, and other similar adherence reducing foreign materials.

-Care must be taken to ensure that the application surface is set.

-The surface must be moistened before the application.

-The dusty surface behind the ceramic should be moistened and wiped.

MIXTURE PREPARATION

20kg of MERCK is added to slowly 5.5-7.5 liters of water. Mixed until a homogeneous mixture is obtained.to leave no lumps with a trowel or low-speed mixer .The homogeneously mixture is left for 5 minutes and then mixed again to make it ready for application. The prepared mixture should be used within a maximum of 4 hours , and the mixtures that are unused during this period should be mixed intermittently .And any mixture mortar that has started to harden or has expired should not be used



APPLICATION

The prepared mixture should be spread on the surface with the flat part of the trowel to ensure good adhesion and then combed with a notched trowel suitable for size of the tile to be used. Ceramics must be bonded to the combed mortar within 30 minutes. Good adhesion should be provided by applying pressure on the laid material by hand and applying force with a rubber hammer.

-Adhesive should be used by applying to small batches and any adhesives whose material bonding was delayed and that has started to get crusty should be cleaned by scraping off from the surface.

-Bonding should be achieved by applying force on the combed mortar within 30 minutes .this period may be shorter in application made in unsuitable ambient conditions such as high temperature ,low humidity ,and wind .Bonding process should not be performed on expired mortar and any such mortar should be scraped off the surface.

-The excess adhesive in the joint gaps should be scraped off before drying occurs, and any mortars smeared on the surface should be cleaned with a damp cloth.

-Applications should not be carried out in temperatures below -5°C.

-Applications should not be made on surfaces that are exposed directly to sun and wind without taking protective measures .

-Foreign materials should never be mixed into the mortar.

-After application used tools should be washed with plenty of water before drying occurs.

-Grouting can be started after 24 hours.

-Tiles bonded with MERCK should not be exposed to water for at least 24 hours.

-Depending on the location and the type of ceramic to be applied, double-sided bonding should be done .

***MERCK white should be used for light-colored ceramic application.**

