

## Product name

Diamond Flex A12

## Manufacturer

Produced in Philippines for  
Diamond Dry Mortars Inc.

## Product description / General Purpose

Diamond Flex A12 is a premium polymer modified cementitious tile adhesive intended for thin and thick bed heavy duty application where increased bonding and flexibility is needed. Diamond Flex A12 is recommended for mosaics and all sized ceramic tiles and natural stone to be installed internally and externally on non-flexible substrate such as cement screed and concrete for floors and walls. Diamond Flex A12 is a non-slip adhesive with very high bonding strength, extended open time and increased flexibility

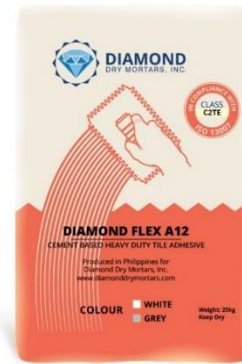
## International Standard

Diamond Flex A12 conforms to ISO 13007-1 as a **C2TE**, slip-resistant cementitious tile adhesive with extended open time, high bonding strength and increased flexibility.

C2=Improved adhesion

T =Slip resistance (No sag)

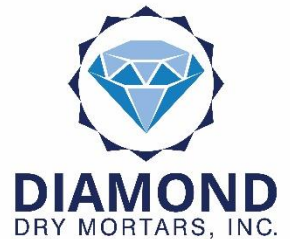
E =Extended open time



## Physical Properties

ISO 13007-1 Class	C2TE
Colour	Grey or White
Dry bulk density EN 1015-6	1,500 to 1,600 kg/m <sup>3</sup>
Thickness	3-6 mm
Coverage	Approx. 1.5 kg/m <sup>2</sup> /mm thickness (approx. 5-6 m <sup>2</sup> per bag in 3 mm thickness)
Mixing ratio	22-24% water to powder (5.5-6.0 liter per 25 kg bag)
Adhesion Strength* ISO 13007-2	>1.0 N/mm <sup>2</sup>
Slip-resistance ISO 13007-2	<0.5 mm
Open time ISO 13007-2	>30 mins
Pot life	3 hours
Shelf life	12 month if product is stored in dry conditions
Packing	25 kg per bag

\*Bonding to the substrate depends very much on the substrate and might vary from the specified value. It is recommended to perform tests on site to verify the actual bonding with the substrate



### 1. Packing and storage

The material is packed in 25 kg paper bags and have to be stored in dry conditions.

### 2. Surface preparation

Ensure the substrate is sound, clean and free from any dust, loose particles and contamination like oil, grease including form-oil compounds. Uneven surfaces should be grinded down or patched. If a screed or render is applied before the tile installation, make sure it is properly hardened before the installation of tiles (typically 7 days).

### 3. Mixing

- Mix the powder with 22-24% clean water (5.5-6.0 liter per 25 kg bag). Diamond Flex A12 is a premixed ready to use product only addition of water is needed for the mixing.

Note: Do not mix with sand

-Thoroughly mix until a homogenous mix, keep for 5 minutes and mix again before use.

- Mixing equipment: Electric stirrer.

### 4. Application

Wet the surface and remove the excess water before applying the Diamond A12. Make sure the area is shaded from sunlight. Apply the Diamond A12 to the substrate with the flat side of the trowel. Press a thin layer of mortar on the substrate to ensure a good bonding. An additional layer is applied with the notched side of the trowel.

- For small tiles up to 300x300 mm a 6x6 mm notch trowel is recommended. Apply to a total thickness of approx. 3 mm.
- For medium size tiles with one side up to 450 mm it is recommended to back butter the tiles to a thickness of 1-1.5 mm to a total thickness of 4-5 mm.
- For big sized tiles with one side exceeding 450 mm it is recommended to use a 6x9 mm notch trowel and back butter the tiles. The total thickness should be no less than 4.5 mm.
- Make sure the tiles are clean from dust, no pre-wetting is needed.
- Grouting can be done after 8 hours for walls and after 24 hours for floors.

**Very important: ensure both the back of the tiles (when back buttering) and the substrate is 100% covered with Diamond Flex A12 to secure perfect bonding between tile and substrate**

### Product Safety

Please refer to Diamond Material Safety Data Sheet.

The product is a cement based product and may cause skin irritation. Avoid contact with skin by wearing suitable clothing and gloves. In the event of contact with skin, wash with clean water to minimize possible irritation. If any material gets into the eyes, wash immediately and repeatedly with eyewash or clean water.

If the irritation persist, seek medical treatment.

### Fire resistance

The product is non-combustible.