

# **ARDEX RG 12 1-6**

## **Epoxy joint, fine**

Colour-stable and chemical-resistant jointing of ceramic tiles and plates as well as glass and porcelain mosaics

Gluing of glass and porcelain mosaics on floor surfaces

Gluing of tiles and plates on floor surfaces

For joint widths of 1 to 6 mm

Very fine and smooth joint surface

Easy jointing and washing

High degree of filling

Chemical-resistant

Highly resilient





#### Colours:

White
Grey
Silver-grey
Basalt
Anthracite
Sand grey
Grey-brown
Bahama beige
Bali brown

# **ARDEX RG 12 1-6**

### **Epoxy joint, fine**





#### Scope of application:

Internal and external, wall and floor.

Colour-stable and chemical-resistant jointing of ceramic tiles, plates, clinker bricks, split tiles and mosaic in the event of stresses against which a cement-based mortar does not provide sufficient resilience or stability, e.g. in moderately strained large kitchens, workshops, washing facilities, swimming pools and spas, shower facilities, bathrooms, sales rooms, sports and leisure facilities, commercial areas as well as in any other areas in which chemical and high mechanical stresses occur.

Gluing of glass and porcelain mosaics on wall and floor surfaces.

Installation of tiles and plates on floor surfaces.

For joint widths of 1 to 6 mm.

#### Type:

Jointing mortar consists of a pasty resin and hardener component.

The 4 kg unit consists of 3.2 kg resin paste and 0.8 kg hardener.

The 1 kg unit consists of 0.8 kg resin paste and 0.2 kg hardener.

#### Capacity

ARDEX RG12 1-6 is already accessible after a hardening period of 12 hours at temperatures of  $+18^{\circ}$ C to  $+20^{\circ}$ C and can be mechanically loaded.

ARDEX RG12 1-6 is water-tight, frost-resistant and weather-tight after hardening.

#### **Chemical resistance:**

Within 3 to 4 days after hardening, ARDEX RG 12 1-6 is resistant against chlorine water, conventional cleaning agents, aqueous salt solutions, mineral oil, greases, alkaline solutions and fruit juices (see technical data sheet).

The full chemical resistance is reached at temperatures between  $+18\,^{\circ}\text{C}$  and  $20\,^{\circ}\text{C}$  after approximately 7 days.

For special cases, an enquiry is necessary.

The smooth and closed surface of the jointing is resistant towards dirt as well conventional domestic and swimming pool cleaning agents.

ARDEX RG 12 1-6, white, only has a low yellowing tendency.

In the event of intensively discolouring substances, e.g. tea, coffee, fruit juices and similar, colour changes cannot be excluded.

#### Working:

The quantities of the resin and hardener components in the containers are tuned with each other in the container and are to be stirred intensively with a suitable agitator – e.g. a spiral agitator – until they form a uniform and homogeneous mortar.

In temperatures between  $+18\,^{\circ}\text{C}$  and  $+20\,^{\circ}\text{C}$ , ARDEX RG 12 1-6 can be processed for about 45 minutes. Low temperatures increase and higher temperatures reduce the processing period.

ARDEX RG 12 1-6 is to be inserted into the dry joints by means of an epoxy jointing board, a plastic or a rubber spatula, and scraped off sharply. Excessive material is to be removed by means of a sponge and water within the processing period of approximately 45 minutes and carefully wiped up with a viscose sponge / epoxy sponge; here, the joint is smoothened. Any residue films on the tiles are to be avoided.

In persistent cases and with extremely rough surfaces, for pre-cleaning, white Scotch Brite can be used, as well.

We recommend using ARDEX RG Cleaner to remove any resulting epoxy clouding after hardening. Please note the information in the technical leaflet ARDEX RG Cleaner epoxy cleaner.

#### Gluing:

ARDEX RG12 1-6 is also suitable for gluing mosaic of glass and porcelain on floor areas and for laying ceramic tiles, plates, etc. on floor areas.

We recommend ARDEX WA epoxy joint/adhesive for bonding on wall areas.

In order to reduce the processing time by self-heating, we recommend applying the ARDEX RG 12 1-6 – grout to the substrate at once, without interruption after mixing it.

ARDEX RG12 1-6 is not to be processed at temperatures below +10°C and above +30°C. Work equipment can be cleaned with water and a brush before the grout cures. If in doubt, test grout on small area first.

#### To be observed:

Structured tiles and plates and those with porous surfaces may have a residue film after jointing. Create a test area and observe the instructions of the tile and plate manufacturers. Here, it can be helpful to insert the material into the joints in an injection procedure by means of a cartridge in order to have less material remaining on the surfaces. When re-jointing, the joint depth should amount to a minimum of 5 mm.

Excessive material should not be removed with hot water. Do not use any thinning agents, solvents or water for obtaining the desired mortar texture.

#### Note:

**Resin component:** Contains epoxy compounds. May cause allergic reactions. Causes skin irritations. May cause allergic skin irritations. Causes severe eye irritation. Harmful for aquatic life with severe consequences. Avoid any release into the environment. Wear protective gloves. Wear eye protection.

IN THE EVENT OF EYE CONTACT: Carefully rinse with water for a few minutes. If possible, remove any existing contact lenses. Continue rinsing your eyes.

IN THE EVENT OF SKIN CONTACT: Wash with a lot of water and soap.

Hardener component: Causes skin irritations. May cause allergic skin irritations. Causes severe eye damage. Harmful for aquatic life with severe consequences. Avoid any release into the environment. Wear protective gloves. Wear eye protection.

IN THE EVENT OF EYE CONTACT: Carefully rinse with water for a few minutes. If possible, remove any existing contact lenses. Continue to rinse your eyes.

IN THE EVENT OF SKIN CONTACT: Wash with a lot of water and soap. Dispose of the content/container in accordance with the local/regional/national and international regulations.



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EN 12004:2007+A1:2012

#### **ARDEX RG 12 1-6**

Reaction resin adhesive EN 12004:R2

Bond shear strength after dry storage:  $\geq$  2.0 N/mm<sup>2</sup> ≥ 2.0 N/mm<sup>2</sup>

Bond shear strength after water storage:

Bond shear strength after temperature

change: Determination of open time:

≥ 2.0 N/mm<sup>2</sup>  $\geq 0.5 \text{ N/mm}^2$ after a minimum of 20 minutes

Determination of slippage: NPD Fire class: Ε

#### Technical Data according to ARDEX quality standard:

Mixing ratio: Is provided by the container.

Fresh weight of the

mortar: approx. 1.7 kg/l

Material requirement

For jointing:

Tile dimensions [cm]	Joint width [mm]	Joint depth [mm]	Consumption [kg/m²]
2 x 2	2	3	ca. 1
5 x 5	3	5	ca. 1
15 x 15	2	4	ca. 0,18
30 x 60	2	7	ca. 0,12

Any losses due to excessive material may amount to 0.10 to 0.20 kg/m<sup>2</sup>, depending on the type of tiles and the working method.

For gluing - with a soft underground, with a

toothing of 3 x 3 x 3 mm and approx. 1.3 kg/m<sup>2</sup> (floor only) with a toothing of 6 x 6 x 6 mm approx. 2.5 kg/m<sup>2</sup> (floor only) with a toothing of 8 x 8 x 8 mm approx. 3.1 kg/m<sup>2</sup> ARDEX RG12 1-6 - jointing mortar required.

Working time

(+20°C): approx. 45 minutes

Laying time

(+20°C): approx. 30 minutes

Correction time

(+20°C): approx. 30 minutes

Accessibility

(+20°C): After sufficient hardening after

approximately 12 hours

Tensile bond

strength: After 28 days of dry storage greater than

2.5 N/mm<sup>2</sup>

Compression

strength: After 1 day, approx. 55 N/mm<sup>2</sup>; after 28

days, approx. 70 N/mm<sup>2</sup>

Bending tensile

ADR:

After 1 day, approx. 30 N/mm<sup>2</sup>; after 28 strength:

days, approx. 33 N/mm<sup>2</sup>

Marking according to

GHS/CLP: Resin component:

GHS07 »Irritant materials« Signal word: Caution Hardener component: GHS05 »Corrosion« GHS07 »Irritant materials«

Signal word: Danger

Marking according to

EMICODE: EC 1 PLUS R - very low-emission PLUS Packaging:

Bucket with 4 kg 3.2 kg resin paste,

application can with 0.8 kg hardener

cans with 1 kg

0.8 kg resin paste, application can

with 0.2 kg hardener

Storage:

Store in dry rooms.

Store the bucket in a vertical position, do

not tilt it!

In the original closed containers, ARDEX RG 12 1-6 can be stored for  $\,$ 

approximately 12 months.

A stiffening of the resin component during storage does not impact the quality of

ARDEX RG 12 1-6.

#### Resistant against:

All-purpose cleaners, pure Formic acid, 1 % Ammonia, conc.
Bref cleaner, pure Cilit Bäng cleaner, pure DanKlorix (green) pure Acetic acid, 5 % Ethyl alcohol Ethylene glycol Fixative (photo.)
Hydrofluoric acid, 1 % Hydrofluoric acid, 5 %

Formalin solution, 3% Glycerine
Urea solution
Potash, saturated
Vehicle petrol
Methyl alcohol, 50%
Lactic acid, 5%
Lactic acid, 10%

Lactic acid, 10% Lactic acid, 20% Moorland water Motor oil

Caustic soda, saturated Vegetable fats

Phosphoric acid, 10% Phosphoric acid, 40% Nitric acid, 10%

Hydrochloric acid < 36 % Sulphuric acid, 80 %

Animal fats

Hydrogen peroxide, 8% Tartaric acid, saturated Citric acid, saturated Sugar solution

### Short-time resistant against:

Formic acid, 3 % Chloroform Acetic acid, 10 % Nitric acid, 40 %

#### Non-resistant against:

Acetic acid, 20% Methylene chloride