



ARDEX RG 12 1-6

High-Performance, Fine Epoxy Grout

- Grout joints up to 6 mm wide
- Use for setting all types of tile
- Use where chemical resistance and/or hygiene and cleanliness are required
- Use for applications in food processing, industrial, institutional and commercial facilities
- Very easy to clean with only water
- Use for interior and exterior floors and walls
- Waterproof and frost resistant



DESCRIPTION

ARDEX RG 12 1-6 is a solvent-free, two-component epoxy grout and adhesive. ARDEX RG 12 1-6 is suited particularly for tile installations in industrial areas, swimming pools, hot tubs, showers, bathrooms, dairies, meat packing facilities, breweries, hospitals and any installation requiring high standards of hygiene and chemical resistance.

ARDEX RG 12 1-6 combines the performance of epoxy based grouts with the ease of application associated with cement based grouts.

ARDEX RG 12 1-6 has high chemical and abrasions resistance, and being impervious it also produces hygienic joints that require minimal maintenance. Unlike traditional epoxy grouts however, it is easy to apply and clean off, requiring no special tools and cleaning off up to 30 minutes after application

The hardened ARDEX RG 12 1-6 mortar can withstand full loads after 3-4 days curing at normal temperatures and is resistant to aqueous salt solutions, chlorine water, commercial cleaning agents, alkalis, as well as a wide range of dilute mineral acids. Please refer to the table overleaf for a full list of chemicals. Full chemical resistance is achieved after 7 days at normal temperatures

USE

ARDEX RG 12 1-6 is particularly suitable for use in swimming pools, showers, bathrooms, shops, hospitals, hydrotherapy and spa baths, sports centres and other buildings where high standards of hygiene and cleanliness are required.

ARDEX RG 12 1-6 can also be used as a floor tile/mosaic wall tile adhesive in areas where a chemically resistant adhesive bed is required.



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24030
EN 12004:2007+A1:2012

24030 ARDEX RG 12 1-6, EN 12004:R2

Improved reaction resin adhesive for internal and external tiling

| | |
|------------------------------------------------|--------------------------------|
| Fire Class | : E |
| Bond Strength | |
| Initial Shear Adhesion Strength | : $\geq 2,0$ N/mm ² |
| Durability of Bond Strength | |
| Shear adhesion strength after thermal shock: | : $\geq 2,0$ N/mm ² |
| Shear adhesion strength after water immersion: | : $\geq 2,0$ N/mm ² |
| Release of dangerous substances | : NPD |



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PREPARATION

Before grouting, ensure the tiles are firmly fixed and that the tile faces and joints are clean and free of dust, excess adhesive or standing water. Before tile fixing, ensure the tile background is clean, sound, free of dust, dirt, oil, grease and other barriers to adhesion, as well as being strong enough to support the weight of the tiles being fixed.

MIXING

Note: Wear suitable eye/face protection and gloves when mixing. Avoid contact with the skin. See precautions section below.

Add the complete contents of the hardener container into the paste container. Thoroughly mix the paste and hardener using a propeller type stirrer in a slow speed drill until a uniform mortar is produced.

Some of the mixed components should be reintroduced back into the hardener container in order to activate any residue (back mixing) and then poured back into the larger mixing vessel and re-mixed for 30 seconds.

NOTE: Back mixing ensures that no unreacted material is present and that the packaging can be safely disposed of as non-hazardous waste.

ARDEX RG 12 1-6 is ready for immediate use and has a working time of approximately 45 minutes at 20°C. The working time is reduced at higher temperatures and extended at lower temperatures. It is recommended that the mortar is spread out immediately after mixing, as selfheating in the container will reduce the working time. Apply at temperatures above 10°C and no higher than 30°C.

GROUTING APPLICATION

For joint widths between 1-6mm.

ARDEX RG 12 1-6 is applied into the dry joint using a suitable grouting squeegee/float. It is important to select a squeegee that is flexible enough to maintain good surface contact with the profile of the tile to aid removal of the residues.

Excess grout should be removed from the surface of the tile with the squeegee as work proceeds. After removing the excess, apply a fine mist of clean water from a suitable spray bottle to the surface of the tiles to emulsify/soften the grout residues prior to cleaning down.

The grout should be cleaned off the face of the tiles when the grout is slightly hardened in the joints, which can be as little as 30 minutes in good conditions. This time is affected by the ambient conditions, porosity of the tiles and the width of the joints. However, cleaning can commence as soon as the grout surface is firm enough to resist damage and excavation of the joint during the cleaning process. Cleaning must be completed by 60 minutes after grouting.

Using a clean, firm, grouting sponge, such as the ARDEX sponge, emulsify the residues using a circular motion, re-misting with water if required. On wider joints >3mm, smoothing of the joints using a clean, slightly damp sponge edge is recommended to create a smooth profile. Then wipe off the remaining residues using a clean face of a slightly damp sponge running diagonally across the joints. Clean the sponge frequently and also ensure the wash water is frequently changed to avoid transferring residue back to the surface.

Textured or profiled non-slip tiles may require the use of a Scotchbrite pad to emulsify the residues. For modern "sand-paper texture" non-slip tiles used in swimming pools and other wet areas we recommend the manufacturer also be consulted for additional cleaning guidelines.

For contrasting colours (grouts/tiles) and textured tiles, a final clean using a proprietary epoxy grout remover may be required to remove any traces of emulsified residues. Certain types of tile may be prone to surface discoloration or scratching when using this grout, e.g. some made of natural stone and some absorbent, textured or soft glazed ceramic tiles.

Where acid based cleaning products are to be used on the hardened

grout, we recommend that the product is first tested on the wetted grout before application, to ascertain the resistance of the colour/grout.

Thorough rinsing off is required to remove any residues of the acidic cleaner to prevent discolouration/damage to the grouted joint.

ARDEX RG 12 1-6 may show marginal yellowing if subjected to UV light. Tools should be cleaned before the mortar has hardened using a brush and water.

FIXING APPLICATION

The surface being adhered to must be dry, dimensionally stable, sound and free of dust, contamination and other barriers to adhesion. Suitable tiling surfaces include concrete, cement/ sand renders and screeds, Terrazzo and other building materials. Where doubt exists to the suitability of the background apply a test area to check adhesion.

NOTE: ARDEX RG 12 1-6 is suitable for fixing wall mosaics, generally no larger than 25mm x 25mm. ARDEX RG 12 1-6 White is recommended where glass/ translucent tiles or mosaics are being fixed, or where thin tiles or mosaics are to be grouted with white ARDEX RG 12 1-6.

When fixing tiles, mosaics, etc. spread the ARDEX RG 12 1-6 over the surface with a trowel and comb with a suitable notched trowel to give a ribbed mortar bed.

Press the tiles into the ribbed adhesive layer and thoroughly bed in using the appropriate technique to ensure good contact throughout. Once bedded, the tiles can be adjusted up to 30 minutes after fixing; tiles can be grouted 12 hours after fixing at 20°C.

PRECAUTIONS

ARDEX RG 12 1-6 can be irritating to the eyes, respiratory system and skin, and may cause sensitisation by contact. Consult the relevant health and safety data sheets for full information. In case of accidents seek medical advice.

Recommended mixing paddle



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Technical Data According To ARDEX Quality Standards

Mixing ratio specified by the packaging

Fresh mortar weight: ca.1,7 kg/l

Material requirement

Used for grouting:

| Tile Size (cm) | Joint width (mm) | Joint depth (mm) | Consumption (kg/m ²) |
|----------------|------------------|------------------|----------------------------------|
| 2 x 2 | 2 | 3 | approx. 1,00 kg |
| 5 x 5 | 3 | 5 | approx. 1,00 kg |
| 15 x 15 | 2 | 4 | approx. 0,18 kg |
| 30 x 60 | 2 | 7 | approx. 0,12 kg |

Used for fixing: Assuming a smooth substrate
3x3x3mm trowel size approx 1,3kg/m²
6x6x6mm trowel size approx 2,5kg/m² (only for floors)
8x8x8mm trowel size approx 3,1kg/m² (only for floors)

Working time/ Pot Life *: approx. 45 minutes

Open time *: approx. 30 minutes

Fixing time *: approx. 30 minutes

Walkability *: approx 12 hours

*All data is approximately based on laboratory test made at a temperature of +20°C and relative humidity of %65. Environmental conditions may change these values. Higher temperatures and lower relative humidity decrease these duration whereas lower temprature and higher relative humidty increases them.

Tensile adhesion strength: After 28 days of dry stroage higher than 2,5 N/mm²

Compressive strength: After 1 day 55 N/mm²
After 28 days 70 N/mm²

Flexural strength: After 1 day 30 N/mm²
After 28 days 33 N/mm²

EMICODE: EC 1 Plus - Very low emission

GHS/CLP classification GHS 07, Dangerous

GGVSEV/ADR classification None

Packaging 4 kg bucket contains 3,2 kg resin and 0,8 kg hardener
1 kg bucket contains 0,8 kg resin ve 0,2 kg hardener

Storage and Shelf Life Store in dry conditions. ARDEX RG 12 1-6 has a storage life of not less than 12 months in the original un-opened containers.

RESISTANCE TO CHECIMALS IN ACCORDANCE WITH ARDEX QUALITY STANDARDS

Resistant to:

All-purpose cleaners, pure
Formic acid, 1%
Ammonia, conc.
Bref cleaner, pure
Cilit Bång 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, 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-term resistance to:

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

Not resistant to:

Acetone
Acetic acid, 20%
Methylene chloride

NOTE: For the latest technical or health and safety information on this product, consult the current technical or health and safety datasheet online at www.ardex.com.tr



YAPIDAKİ GÖRÜNMEZ GÜÇ

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