Technical Datasheet Waterproofing Products



ARDEX 4+5

Waterproof Coating

- For indoors & outdoors
- Flexible & deformable
- Crack bridging even at low temperatures *
- Conforms to EN 14891, CM 01 P Class
- Quick and easy to apply with a roller, paint brush or trowel
- · Ideal for wet rooms, power showers and bathrooms
- Sovent Free

* At least 0,75 mm at 5°C as defined in EN 14891

DESCRIPTION

ARDEX 4+5 is a two-component, solvent free, cementitious, liquid applied waterproof coating that can be used both indoors and outdoors.

Comprised of an acrylic-based liquid compound and a Portland and other hydraulic cement-based powder, ARDEX 4+5 can be applied easily with a paint roller or a brush to produce a high flexible waterproof coating. This coating protects from topside water infiltration and provides an excellent bonding layer for ARDEX tile and stone mortars. When properly installed, ARDEX 4+5 reduces the risk of efflorescence

USE

ARDEX 4+5 is used to waterproof backgrounds such as cement or gypsum plaster, plasterboard or wood-based materials prior to fixing tiles in domestic or commerical kitchens, showers and bathrooms.

Indoors

commercial kitchens, showers and bathrooms. Beneath tiles and slabs against the stresses that occur in shower rooms, baths, shower areas above bath tubs and rooms with a floor outlet.

Outdoors

Protection of terrace and balcony substrates against water. Used on cement screeds and concrete substrates. Terraces with subsoil contact have to lie on an anti-capillary layer.

Sufficient slope must be to hand in order to avoid rising water in the long term. ARDEX 4+5 sealing compound prevents moisture penetration and thus efflorescence, but does not replace bituminous dampand waterproofing.





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Waterproofing Coating

SUBSTRATE PREPARATION

All substrates must be structurally sound, solid, dry, thoroughly clean and free of oil, wax, grease, asphalt, latex and gypsum compounds, curing compounds *, sealers and any contaminant that might act as a bond breaker.

Gypsum plaster must be dry and of adequate strength to support the weight of the tiling. Any boarded background must be able to support the tiles, and be rigidly and securely fixed with closely spaced screws.

Moisture sensitive backgrounds should be protected from moisture ingress from behind i.e. external walls should be of a cavity type or suitably protected solid single skin construction.

Note on curing compounds: Test areas of ARDEX 4+5 can be installed and evaluated over concrete slabs that have been treated with either silicate or acrylic resin curing compounds. These compounds must be installed in strict accordance with the compound manufacturer's written recommendations. If a silicate type has been used, all residual salts must be removed.

Please be advised, however, that there are a number of curing compounds sold today that are wax- or petroleum-based emulsions. These are permanent bond breakers that must be removed completely prior to patching or leveling. Dissipating compounds must also be removed completely by mechanical means prior to installing any ARDEX material.

It is imperative to be able to determine the type of curing compound that was used before proceeding. Any curing compound that cannot be identified should be completely, mechanically removed.

MIXING

Mix ARDEX 4 liquid & ARDEX 5 powder in a clean mixing vessel with a strict ratio of 1:2 and stir vigorously, until you have a lump-free, soft, thick paste-like mortar.

Prepare only as much mortar as can be worked within 2 hours. Do not re-dilute solidifying mortar with ARDEX 4 acrylate dispersion or any other liquid.

The mixed ARDEX 4+5 has a pot life of approximately 45 minutes at 20° C. This time will be shortened at high temperatures and extended at low temperatures

APPLICATION

Just prior to application on the substrate, the mixture should be stirredagain to ensure a creamy, smooth, lump-free consistency.

Apply the first coat of the paintable mixture to the surface with a paint roller. Use a paintbrush to coat reinforced corners, edges and around drains.

Coat the entire area and allow thorough drying (approx 6 hours). To obtain an effective waterproof protection layer, a second coat will be necessary and the total thickness should be at least 2 mm. This second coat must be applied at a 90° angle to the first coat.

Do not apply ARDEX 4+5 at temperatures below 5°C. The drying time will be shortened at high temperatures and extended at low temperatures

TILE FIXING

Allow the final layer to dry thoroughly (approximately 24 hours at 20°C prior to installing the tile using ARDEX setting materials.

Once the final coat is dry to the touch, cover ARDEX 8+9 with mortar within 24 hours to avoid dust contamination. If dust contamination occurs, clean with a damp ARDEX sponge before applying mortar

Tiles can be fixed with any ARDEX cement based tile adhesives. The application and working instructions available in respective technical data sheets are thereby to be observed.

For backing surfaces that are still shrinking, or other surfaces which are inclined to warp, such as e.g. building boards, as well as for bonding fine stoneware tiles and in highly stressed areas, we recommend the application a flexible adhesive.

In outside areas, on balconies and terraces, ARDEX FB 9 L flexible fluidized bed mortar and ARDEX X 32 flexible bedding mortar/intermediate bed mortar needs to be used.

NOTES

FOR PROFESSIONAL USE ONLY.

All tools should be cleaned with water immediately after use. ARDEX 4+5 is not recommended for roofing applications or as exterior primary waterproofing over indoor spaces.

As always, ARDEX recommends the installation of test areas to confirm the suitability of the product for the intended use.

Never mix with cement or additives other than ARDEXapproved products. Observe the basic rules of tile work.

Do not install below 5°C surface temperature.

Prefer to use ARDEX SK 100 W for swimming pools applicationshaving any public living spaces like car parks beneath them.

For areas subject to excessive chemical impacts like industrial kitchens, laundries, food manufacturing plants we recommend the use of ARDEX SK 100 W waterproofing membrane.

Do not expose the coating to water for the first 24 hours. $(+20^{\circ}C, \%50 \text{ rH})$. Use ARDEX 8+9 for shorter drying times or the environment alconditions are harsh in terms of drying.

PRECAUTIONS

Carefully read and follow all precautions and warnings on the product label. For complete safety information, please refer to the Safety Data Sheet (SDS) available at www.ardex.com.tr

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Technical Data According To ARDEX Quality Standards

Mixing ratio:	1:2 ratio. i.e 10kg ARDEX 4 acrylate dispersion 20 kg ARDEX 5 reactive powder
Weight of fresh mortar:	1,4 kg/lt
Material requirement:	For 2 mm wet thickness (2 layers) 2.2 kg powder + 1.1 kg liquid = 3.30 kg fresh mortar
Working time/Pot life *:	Approx. 2 hours
Setting time *:	1. coat approx 6 - 8 hours 2. coat approx 18 - 24 hours

Walkability / Accept coversings *: After approximately 1 day

*All data is approximate and 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.

EMICODE:	EC 1PLUS - Very low emission
GHS/CLP classification:	ARDEX 4 - None ARDEX 5 - GHS 05 "Corrosive" Signal Word: Danger
GGVSEV/ADR classification:	None
Packaging:	ARDEX 4 acrylate dispersion 10 kg plastic can ARDEX 5, reactive poweder, 20 kg paper bag
Storage and Shelf life:	ARDEX 4+5 must be stored in unopened packaging, clear of the ground in cool dry conditions and be protected from excessive draught. If stored correctly, as detailed above, the shelf life is 12 months from the date shown on the packaging.

Recommended mixing paddle:



The information provided in this document is based on current scientific and practical data and may vary depending on site conditions and use of product. ARDEX is only obliged to ensure the quality of the product at the foreseen standard conditions. ARDEX does not authorize anyone, including ARDEX Representatives, to make any statements which supersede, modify or supplement the information provided on its printed literature or package labels without written confirmation from the Ardex Technical Service Department. This document is valid until future revisions.

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