

UniSeal® 430

Elastomeric, acrylic-based waterproofing coat

Description

UniSeal 430 is a high quality, semi-fluid aqueous acrylic co-polymer dispersion. After drying, it gives a high-build, elastomeric, waterproofing and protective coat.

It is also used as a washable and decorative anti-carbonation coating of outstanding durability.

Features and benefits

- Forms an impermeable elastic membrane. Withstands normal movements due to expansion and shrinkage of the substrate cause by change in weather conditions.
- Excellent resistance to extreme weather conditions.
- Excellent adhesion to porous and non-porous surfaces such as metal, wood, cement-based substrates and roof tiles.
- Water-based. Environmentally friendly.
- Resist occasional foot traffic.

Recommended for

- As a waterproofing coat for sloped roofs.
- As a protective coating for concrete substrates from carbonation attack.
- As a protective coating for sprayed polyurethane foam system for roofing heat insulation and waterproofing.

Composition

UniSeal 430 is formulated around acrylic co-polymer resin, special fillers and additives.

Packaging

UniSeal 430 is available in 15 kg pails.

Coverage

Waterproofing: 0.7-1.0 kg/m²/three coats.

Movement cracks up to 2.0 mm width: 0.8- 1.1 kg/m²/three coats.

Movement cracks 2.0 – 3.0 mm width: 1.1-1.3 kg/m²/three coats

Walls and ceilings coating: 0.35-0.45 kg/m²/two coats.

Note:

Coverage rate takes no account of wastage and may vary according to surface condition and application method.

Technical data

| | |
|---|--|
| Density | 1.35 – 1.45 kg/liter |
| Washability | Highly washable |
| Elongation ASTM D638 | >75% |
| Tensile strength ASTM D638 | >0.5 N/mm ² |
| Crack bridging ASTM C1305 | Up to 2.0 mm crack bridging capacity without reinforcement |
| CO ² permeability ASTM D1434 | >325 CC/m ² . day |
| Drying time (at 20°C and 60% relative humidity) | Touch dry: 30 – 60 minutes |
| | Re-coat: 4 - 5 hours |
| Thinner | Water |
| Colors | White – grey - beige |

Surface preparation

Cement-based substrates

Substrates to be coated should be clean, sound, and free from any contamination. Remove any traces of curing compound, laitance, organic growth or any other loose materials. This is best obtained by using high pressure water or light grit blasting. Honey combing, damaged or deteriorated concrete exists, the substrate should be repaired using suitable low permeability repair mortar from ACC repair systems before commencing the coating. Cracks and surface defects should be filled and surface to be smoothed using **UniPutty 100**. Wash the substrate with clean water and leave it to dry.

Apply one coat of **AcrySeal 799** to seal the substrate and improve adhesion.

Metal substrates

Metal substrate to be treated must be clean, dust free and un-contaminated. Remove any loose scale and rust using wire brush. It is advisable to apply suitable metal primer prior to the application of **UniSeal 430**.

Wooden substrates

Wooden substrate to be treated must be clean, dust free and un-contaminated. Clean the surface thoroughly using suitable hand-tools or emery paper. It is advisable to apply suitable wood primer prior to the application of **UniSeal 430**.

Coated substrates

Ensure that the existing coating is not loose. Chalked coats should be brushed down. Lightly grind the surface using very fine emery paper. Wash the substrates with clean water and remove any excess water at the time of application.

Apply one coat of **MagicSeal 900** to seal the substrate and improve adhesion.

Mixing

First coat : 10-15% with water.
Second coat : up to 5% with water.
Third coat : Un-diluted.

Application

General

UniSeal 430 can be applied by brush, long haired roller or trowel. Leave 3 hours minimum drying time between coats. Finish each coat in one direction to eliminate cold joints and marks between different applications.

Protect the surface from rain for at least 3 hours after application. No interruption in **UniSeal 430** membrane due to surface irregularity is allowed.

If non-woven fabric will be used, it may be used in bandage form over cracks at a

minimum width of 200 mm or in sheet form with a minimum overlap of 50 mm.

If expansion joints, fillet joints between horizontal and vertical surfaces or drains are present, please consult ACC Technical Department for application details.

Waterproofing

- Primer coat (according to the type of substrate).
- First coat of **UniSeal 430**.
- Second coat of **UniSeal 430**.
- Third coat of **UniSeal 430**.

The final dry film thickness of the three coats must be at least 0.8 mm.

Movement cracks up to 2.0 mm

- Primer coat (according to the type of substrate).
- First coat of **UniSeal 430**.
- Second coat of **UniSeal 430**.
- Third coat of **UniSeal 430**.

The final dry film thickness of the three coats must be at least 0.8 mm.

Movement cracks between 2.0–3.0 mm

- Primer coat (according to the type of substrate).
- First coat of **UniSeal 430**.
- Second coat of **UniSeal 430**.
- Push the non-woven fabric into the second coat before skinning occurs, lightly rolling it to ensure flatness and to avoid creases or bubbles.
- Third coat of **UniSeal 430**.

The final dry film thickness of the three coats & non-woven fabric must be at least 1.0 mm.

Walls and ceiling coating

- Primer coat (according to the type of substrate).
- First coat of **UniSeal 430**.
- Second coat of **UniSeal 430**.

The final dry film thickness of the two coats must be at least 250 microns.

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Cleaning

Clean tools with water immediately after use. Hardened materials should be cleaned mechanically

Storage and shelf life

If stored unopened in a dry place at a temperature between +5°C and +30°C away from sources of heat and moisture, shelf life is 12 months from the date of manufacture printed on the pack.

Health and Safety

This product is not considered dangerous according to the current regulation regarding the classification of mixtures. It should not be ingested. Wear protective gloves, eye goggles and clothing. In case of skin contact, wash with plenty of water. In case of eye contact, rinse continuously with water for several minutes and seek medical attention. Dispose excess material to special waste collection point in accordance with local & national regulation. Keep out of reach of children. For further information, please ask for Safety Data Sheet for this product.

The most up-to-date TDS can be obtained from ACC Customer Service Department, or downloaded from our website: www.acc.com.eg.

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A wide range of construction chemicals, specialty mortars and specialized building materials are manufactured by ACC which include:

- Waterproofing.
- Flooring.
- Tile Adhesives & Grouts.
- Concrete Repair.
- Non-Shrink Grouts.
- Bonding Agents.
- Exterior Façade Coatings.
- Premixed Fairing Coats, Renders & Mortars.
- Putties (stucco).
- Sealers & Emulsion Paints.