# AQUAFIN®-2C

## 2-COMPONENT, FLEXIBLE, POLYMER-MODIFIED, CEMENTITIOUS WATERPROOFING

### Product Description:

AQUAFIN®-2C is a flexible, 2-component, polymer-modified, cement-based, waterproofing protective coating. It has excellent adhesion, abrasion resistance, weatherproofing and waterproofing properties providing seamless protective coats.

### Uses:

AQUAFIN®-2C is an economic, flexible polymer-modified cement-based protective coating for above and below grade, horizontal or vertical surface for:

- Water structures.
- Sewage treatment plants.
- Basement walls.
- Balconies, plaza deck.
- Underneath tile adhesive mortars (showers, sanitary rooms, kitchens swimming pools, etc).
- Wastewater treating plants.
- Reinforced concrete structures.
- Water tanks and reservoirs.
- All similar works.

AQUAFIN®-2C is a stand-alone product. It can be used exposed or over-coated with flexible or rigid mortars (use a separation layer), stuccos or coatings uniform appearance. It bridges shrinkage cracks. Larger static (non-moving) or dynamic (moving) cracks can be sealed with

ASO® Joint-Tape 2000 or ASO® Joint-Tape 2000S in conjunction with AQUAFIN®-2C.

### Advantages:

- Easy to use and apply.
- Environmentally friendly.
- UV-stable.
- Resists hydrostatic pressure (>5 bars).
- Crack bridging ability.
- Flexible.
- Enable substrates to breathe.
- Can be applied to damp surfaces.
- Abrasion resistant.
- Self-curing.
- An active barrier to Carbon Dioxide ($CO_2$).
- Stands up to pedestrian and light traffic.

### Technical Data:

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| Mixing ratio | : 25 kg powder (comp. I) to 10 kg liquid (comp. II). |
| Permeability | : resistant up to 50m water head (positive side). |
| Water Vapour Diffusion µ-value | 1000 |
| Adhesive strength | : 0.6 N/mm$^2$ at 28 days. |
| Tensile elongation | : 30% at +20°C |

### Surface Preparation:

The substrate must be sound, clean and free from voids, gaping cracks or ridges and open-pored (like fine sandpaper). Remove bond breakers such as oil, grease, first, loose particles, remaining of forms oils, water repellents, rust, or other coatings by water blasting or wet or dry sandblasting. Repair holes,


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defects, irregular surfaces, weak mortar joints, etc. with a patching mortar. Round edges at vertical external joints, Close large open pores and joint recesses of CMU locks and joint unevenness in brick walls with sand/cement mortar before applying AQUAFIN®-2C. Pre-dampen all absorptive substrates (excluding drywall or similar) with clean water to saturated surface dry (SSD) condition prior to application. Remove all standing surface water. Seal dry, dusty or very absorptive surfaces (i.e. drywall, gypsum) with one coating liquid component, diluted with water 1:4 to 1:5.

Note: Do not apply AQUAFIN®-2C at temperatures below +5°C.

At high temperatures, i.e., +30°C and above, protect the application from direct sun and wind to prevent premature surface drying and shrinkage cracks. Apply material in 2 (two) coats minimum.

AQUAFIN®-2C may be applied by brush, roller, trowel or appropriate compressed- air spray equipment. The surface can be left brushed or smooth-troweled, depending on the type of application and project specifications. Do not pre- dampen the brush roller with water. Quantities are dependent on the amount of protection desired.

## Mixing:

A. Mixing ratio by weight:
25 g powder to 10 kg liquid.

B. Mixing ratio by volume:
Approximately 2.5 parts powder to 1 part liquid.

Pour UNIFLEX®-2C liquid into a clean container, add AQUAFIN®-2C powder and stir to a lump-free creamy consistency with a strong, slow-speed (300 rpm) mechanical mixer.

## Application:

Horizontal and vertical joints:
Seal horizontal wall-floor joints and internal vertical corners with ASO® Joint-Tape 2000. Alternative: form cove (minimum 40x40 mm) with cement mortar.

Static cracks greater than 1.00mm:
Repair static cracks >1.0mm width with ASO® Joint-Tape 2000 or rout (cut) out and fill with ASOCRET®-RN and cover with AQUAFIN®-2C, reinforced with AQUAFIN matt.

Dynamic cracks and joints:
Seal dynamic cracks and expansion joints with ASO® Joint-Tape 2000-S.

Positive side waterproofing 1.5-2.5 mm:
Apply AQUAFIN®-2C in two coats was specified. Apply the second coat (or multiple coats) as soon as the first coat has sufficiently hardened or wait until the next day.

Negative side waterproofing 2.5mm: Apply 1st coat with AQUAFIN®-1K at 2kg/m$^2$. Apply 2nd coat with AQUAFIN®-2C at 3kg/m$^2$.

EXPOSURE OF APPLICATION TO:

- Rain, vertical surfaces, after approx. 3hrs.
- Rain, horizontal surfaces, minimum 6 hrs.
- Foot traffic after approx. 1hrs.
- Tile mortar and tiles after approx. 1 day.
- Hydrostatic pressure after reaching Shore A Hardness 85 (between 3-7 days).
- Backfilling after approx. 3 days at +20°C and 60% humidity.


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**Important Advice:**

- Clean tools and equipment with water immediately after use. Cured material can only be removed mechanically. Self-curing under normal conditions.
- Provide suitable protection against extreme weather conditions while setting.
- Attach drainage and protection boards after full curing of application (after 3 days).
- The cured application can be troweled over with parging (rendering/ plaster) after 1 day or painted with a vapor open ("breathable"), solvent-free paint.
- Do not expose the application to water during the setting time.
- Expect prolonged setting and hardening time in rooms with high humidity, poorly ventilated areas and corners (i.e. water tanks).
- Negative water pressure, if exposed to freezing, can create spalling of the application.
- If the application is exposed to intense sunlight against the movement of the sun.
- Carbonation protection and carbon dioxide screen: 1mm AQUAFIN®-2C thickness warrants the same protection as 30 cm of concrete.

**Limitations:**

- Do not use in contact with alkali-sensitive metals, such as copper, aluminium, galvanized or zinc-treated metal. Protect and seal metal first with an anti-corrosive primer.


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