Aquafin Pakistan (Pvt) Ltd Steel House, West Wharf Road,

Karachi - 74000 Pakistan

Phone: +92-21-32313113, 92-21-3231160

Email: marketing@aquafinpakistan.com Website: www.aquafinpakistan.com



Technical Data Sheet

AQUAFIN®-2C

2-component, flexible, polymer modified, Cementitious Waterproofing

Description:

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

Uses:

AQUAFIN-2C is an economic, flexible polymer-modified cement-based protective coating for above & below grade, horizontal or vertical surfaces 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 for 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-2000-S in conjunction with AQUAFIN-2C.

Advantages:

- Easy to use and to apply
- Environmentally friendly
- UV-stable
- Resists hydrostatic pressure (> 5 bars)
- Crack bridging ability
- Flexible
- Enables substrates to breathe
- Can be applied to damp surfaces

- Abrasion resistant
- Self-curing
- Active barrier to Carbon Dioxide (CO₂)
- Stands up to pedestrian and light traffic

Technical Data:

All data are averages of several tests under laboratory conditions. In practice, climatic variations such as temperature, humidity, and porosity of substrate may affect these values.

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 d

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 sand paper). Remove bond breakers, such as oil, grease, dirt, loose particles, remains of form oils, water repellents, rust or other coatings by water blasting or wet or dry sandblasting. Repair holes, 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 blocks and joint unevenness in brick walls with sand/cement mortar before applying AQUAFIN-2C.

Pre-dampen all absorbtive 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 coat liquid component, diluted with water 1:4 to 1:5.

AQUAFIN®-2C

- A. Mixing ratio by weight: 25 kg 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.

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

At high temperatures, i.e. +30 °C and above, protect 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. Surface can be left brushed or smooth troweled, depending on type of application and project specifications.

Do not pre-dampen brush or roller with water. Quantities are dependent on the amount of protection desired.

Horizontal and vertical joints:

Seal horizontal wall-floor joints and internal vertical corners with ASO-Joint-Tape-2000. Alternative: form cove (minimum 40 x 40 mm) with cement mortar. Static cracks greater than 1,0 mm:

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 as specified. Apply the second coat (or multiple coats) as soon as the first coat has sufficiently hardened or wait until next day. Negative side waterproofing 2,5 mm:

Apply 1st coat with AQUAFIN-1K at 2 kg/m² Apply 2nd coat with AQUAFIN-2C at 3 kg/m²

EXPOSURE*) OF APPLICATION TO:

- rain, vertical surfaces, after approx. 3 hrs
- rain, horizontal surfaces, minimum 6 hrs
- foot traffic after approx. 1 day
- tile mortar and tiles after approx. 1 day
- hydrostatic pressure after reaching Shore A Hardness 85 (between 3-7 days)
- back filling after approx. 3 days *) at +20 ° C and 60% humidity

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 extremeweather 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 (non silicate) after 3 days (at +20 °C).
- 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 application is exposed to intense sunlight work against movement of sun.
- Carbonation protection and carbondioxidescreen: 1 mm 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, aluminum, galvanized or zinc treated metal. Protect and seal metal first with a Anti-corrosive primer.