#### CONSTRUCTION CHEMICALS MANUFACTURER

# **ABAFLEX-FCW**

HIGHLY FLEXIBLE CEMENTITIOUS WATERPROOFING MEMBRANE FOR HORIZONTAL & VERTICAL SURFACES

#### **DESCRIPTION**

A two part acrylic polymer modified highly flexible cementitious waterproof membrane supplied in pre-packaged form for the protection of concrete and mortar. ABAFLEX-FCW provides excellent adhesion, flexibility, crack bridging ability, and durability.

#### FIELD OF APPLICATION

Coatings made of ABAFLEX-FCW are wear-proof, elastic and waterproof. Such coatings can be used for areas subject to mechanical stresses and for areas which might be subject to cracking, e.g. waterproofing layers on terraces and balconies, as protection for concrete surfaces which can be walked on, as waterproofing for water tanks, swimming pools, underground concrete structures, pits, basins, wet and damp-rooms underneath tiles and ceramic coverings.

## **ADVANTAGES**

- Resists strong hydrostatic pressure (tested against strong water pressure head both positive and negative)
- Solvent free and non-toxic Environmentally friendly
- Protection against carbonation and chlorides
- Excellent adhesion. Full bonded
- Bridges cracks on positive water pressure side applications
- Minimum surface preparation needed. No priming is necessary in most cases.
- Stands up to pedestrian and light traffic
- Resists abrasion, mechanical wear & deicing salts
- Applied to moist/damp substrates. (Also it can be applied to 24 hour old concrete.)
- Approved for use in contact with potable water
- Breathable (not a vapor barrier)
- Does not support the growth of mold & mildew
- UV resistant

#### SURFACE PREPARATION

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The substrate should be clean and sound, free of dust, loose particles, grease, oil and primers from previous membrane systems or bitumen. Bitumen or primers should be removed by shot blasting or mechanical means. Spalled concrete should be repaired by cutting out to sound concrete and patching with E.M.SUPER REPAIR .Cracks, holes and honeycombs must be repaired prior to application.





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#### MIXING

ABAFLEX-FCW is supplied in premeasured units. Slowly add the powder to the liquid and mix to a lump free smooth consistency. Do not add water or rework a stiffened mix by adding water. Mix sufficient material to use within 30 minutes.

#### **APPLICATION**

Saturate the concrete's surface with clean water. Apply the first coat while the surface is still damp but no free standing water. Apply using a short stiff bristle brush, rubber squeegee or roller at a rate of 1-2 mm. for walls and floors, depending on the expected water pressure. The required thickness is achieved by applying 2 layers, taking care that each layer is not thicker than 1mm. Leave the first coat to dry for 2-4 hours before applying the second coat. The second coat can be rubbed down with a soft dry sponge. Spray or trowel application is acceptable providing the mixing ratio is adjusted to achieve the right consistency. Leave the second coat of ABAFLEX-FCW to cure overnight before proceeding to conduct water ponding test.

## PHYSICAL & TECHNICAL PROPERTIES

**Appearance** Gray

Mixing Ratio 2:3 (by weight) Density (A+B) Approx. 1.65 g/cm<sup>3</sup> Coverage Approx. 1.7 kg/m<sup>2</sup>/mm Service Temperature 0 °C to +50 °C Coverage

Approx. 30 minutes at ".°C Pot Life

>1 MPa (According to EN14891-2013) Tensile Adhesion Strength(Dry)

Tensile Adhesion Strength(Water >0.8 MPa (According to EN14891-2013) Immersion)

**Tensile Elongation** 10-15% (According to ASTM D412) > 0.8 mm(According to EN14891-2013) Crack Over Bridging

Adhesion to Concrete > 2 MPa (Concrete failure) According to ASTM D 4541 Approx. 2 to 4 hours depending on the atmospheric Recoat Time conditions

No water penetration up to 2.5 bar (According to BS EN Resistance to Water Penetration 12390-8)

No water penetration up to 1 bar(According to Water Penetration(Negative) EN14891-2013)

- rain after approx. 3 hours

- pedestrian traffic after approx. 1 day

- pressure water after approx. 7 days

- setting of tiles after approx. 1 day

Exposure to

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Resistance









تهران، خیابان سهروردی شمالی، خیابان شهید قندی غربی، ساختمان شماره ۱۲۴، واحد ۱ تلفکس: ۸۷۷۵۴ www.abadgarangroup.com info@abadgarangroup.com



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#### **CURING**

ABAFLEX-FCW should be protected from high wind & intense sunshine. Keep moist for 3 - 4 days after application.

## **PACKAGING**

40 kg set.

Part A: liquid/16 kg plastic pails; Part B: powder/ 24 kg bags

## STORAGE & SHELFLIFE

The shelf life is 12 months if unopened, stored free from frost, moisture and direct sunlight.

# **HEALTH & SAFETY**

ABAFLEX- FCW is non-toxic but is alkaline in its nature. When applying gloves & goggles should be worn. Wash off splashes to skin with water. If in eyes wash out with plenty of clean water and seek medical attention.

ABAFLEX-FCW is non-flammable. MSDS is available at ABADGARAN website.

# **TECHNICAL SERVICE**

Revision Date: 12/20/2020

The ABADGARAN INTERNATIONAL GROUP Technical Department is available to assist you in the correct use of our products and its resources are at your disposal entirely without obligation.









