#### TECHNICAL DATA SHEET

# **NEOTEX**®

# **Revinex<sup>®</sup> Flex 2006**

# Flexible cementitious waterproofing system, suitable for use in contact with potable water

# Description

Two-component cementitious waterproofing system, ideal for applications which require flexibility.

Suitable for use in contact with drinking water, acc. to the Ref. No. 30/013/000/68/07-01-2021 report issued by the General Chemical State Laboratory of Greece.

# **Fields of application**

- Potable water tanks
- Surfaces under tiles in swimming pools, balconies, terraces, flat roofs, wet rooms (bathrooms, kitchens, etc.)
- Shafts, silos, planter boxes
- Wastewater treatment tanks
- Basements and underground walls, internally or externally (to be backfilled)





Packing Sets (A+B) of 34kg

> Colour Grey

### **Properties - Advantages**

- Offers waterproofing and long-term protection to horizontal and vertical construction surfaces
- Increased flexibility ideal for surfaces that are subjected to contractions-expansions and vibrations
- Remarkable adhesion on numerous types of substrate, such as concrete, cement screed, bricks, metal, gypsum boards, polystyrene, ceramics
- Protects concrete against carbonation and prevents corrosion of steel reinforcement
- Resistant to positive and negative hydrostatic pressure
- Water vapour permeable
- Bridges cracks and seals pores or cavities
- Resistant to sewage water
- Protects from underground radon and chloride migration
- Eco-friendly & user-friendly

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CE

### Certificates – Test reports

- Tested and evaluated for its suitability in contact with drinking water by the General Chemical State Laboratory of Greece Report Ref. No. 30/013/000/68/07-01-2021: Fulfils requirements of Directive (EU) 2020/2184 of the European Parliament and the Council (DWD), for use in contact with drinking water at ambient temperature and for containers with a maximum surface to volume ratio of 0.5 dm<sup>-1</sup> (container volume >1m<sup>3</sup>)
- CE certification acc. to EN 1504-2 Certificate of Conformity No. 1922-CPR-0386
- Test report by the external independent quality control laboratory Geoterra (No. 2015/397 & 2020/190\_2)

#### **Technical characteristics**

| Mixing ratio A:B (by weight)                                               | 24:10                                  |
|----------------------------------------------------------------------------|----------------------------------------|
| Density of mixture (EN ISO 2811-1)                                         | ~1,80kg/L                              |
| Compressive strength (EN 1015-11)                                          | 14MPa (±1)                             |
| Flexural strength (EN 1015-11)                                             | 4,1MPa (±0,5)                          |
| Resistance to penetration (52 hours, EN 1015-9)                            | 18,4MPa                                |
| Elongation at break (28 days, DIN 53504)                                   | 16,8%                                  |
| Tensile strength (28 days, DIN 53504, reinforced with Gavazzi® 0059-A)     | 9,61MPa                                |
| Adhesion strength (EN 1542)                                                | >1,5N/mm <sup>2</sup>                  |
| Liquid water permeability (EN 1062-3)                                      | <0,1kg/m <sup>2</sup> h <sup>0,5</sup> |
| CO <sub>2</sub> diffusion - Equivalent air layer thickness Sd (EN 1062-6)  | >50m                                   |
| Water-vapor diffusion - Equivalent air layer thickness Sd<br>(EN ISO 7783) | <5m (Class I - permeable)              |
| Consumption: 2-2,5kg/m <sup>2</sup> for two layers                         |                                        |

#### Application conditions - Curing details

| Application temperature (ambient - substrate)                                                            | +5°C min. / +35°C max.   |  |
|----------------------------------------------------------------------------------------------------------|--------------------------|--|
| Pot life (+20°C, RH 50%)                                                                                 | 30 minutes               |  |
| Drying time (+20°C, RH 50%)                                                                              | 8 - 10 hours (per layer) |  |
| *Low temperatures and high humidity during application and/or curing prolong the above times, while high |                          |  |
| temperatures reduce them                                                                                 |                          |  |

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#### Instructions for use

#### Substrate preparation

The cementitious substrate must be properly prepared mechanically (e.g. grinding, water jetting, shot blasting, milling etc.) to smooth out irregularities, open the pores and create conditions for optimum adhesion. Older coatings and loose friable material must be completely removed by brushing or by the use of a suitable sander and a high suction vacuum cleaner etc.

Repairs to the substrate, filling of joints, blowholes/voids and surface leveling, repairs in areas with tie holes (after being cut and opened at a depth of 3cm) must be carried out using appropriate repairing products, such as the non-shrinking fiber-reinforced cementitious repairing mortar **Neorep®**. Existing construction joints and cracks of width greater than 0,4mm shall be opened longitudinally in V shape at a depth of app. 3cm and then filled as above.

If any oxidized reinforcement is visible, it is recommended, after removing the loose rust, to use the rust converter **Neodur® Metalforce** and then apply the anti-corrosive mortar **Ferrorep®**. These spots shall be also covered later with **Neorep®**.

In spots where there is existing flow of water, **Neostop**<sup>®</sup> is recommended to be used prior to the application of **Neorep**<sup>®</sup>.

Prior to the application of **Revinex® Flex 2006**, the substrate must be stable, clean and free of dust, oil, grease, dirt, moss or any poorly adhering material. The surface must be as flat and smooth as possible.

#### Priming

The cementitious surface must be moistened thoroughly by water. The application of the waterproofing system shall begin once a saturated surface-dry (SSD) condition is achieved, without any ponding water. Alternatively, it is recommended to prime the surface by roller with the co-polymer emulsion **Revinex**<sup>®</sup> diluted with water in a ratio **Revinex**<sup>®</sup> : water - 1:4.

#### Application

The A component (powder) is gradually added to the B component (liquid) at the predetermined ratio (24A :10B w/w) and the mixture is thoroughly stirred with a low-speed electric stirrer, until it is homogeneous, without any lumps. Then, the mixture is applied initially in all the corners reinforced with the alkali-resistant fiberglass mesh **Gavazzi® 0059-A** ("wet-on-wet" application of two layers with the fiberglass mesh positioned in between) and, at the same time, in one layer over the whole horizontal and/or vertical surfaces by brush or smooth trowel.

As soon as the first layer of cementitious waterproofing has hardened and after slightly saturating it with water, the second layer of **Revinex® Flex 2006** is applied in a vertical or different direction than the previous one.

If required, every subsequent layer is applied in the same way. The thickness of each layer should not exceed 1mm of thickness, in order to ensure proper curing of the material. For enhanced tear resistance, it is recommended that the system is thoroughly reinforced with the alkali-resistant fiberglass mesh **Gavazzi® 0059-A**.

After the application of the final layer, it is advisable to protect the waterproofing system from the outside weather conditions (direct sunlight, wind, rain, frost) for a time period of 3-5 days.



## **Special notes**

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- No water or other aggregates should be added during the mixing of system's components
- The system should not be applied under wet conditions, or if wet conditions or rainy weather are expected to
  prevail during the application or the curing period
- Revinex<sup>®</sup> Flex 2006 should not be left exposed to solar radiation

- It is recommended to allow Revinex<sup>®</sup> Flex 2006 to cure for 5 to 8 days, before overcoating with tiles or other coatings
- In the case of applying tiles on top of Revinex<sup>®</sup> Flex 2006, it is strongly recommended that the tile adhesive has sufficient elasticity (indicative proposed type C2TE S1)
- Water tanks should be filled with water after at least 7-10 days (depending on prevailing atmospheric conditions) have passed from the application of the final layer. The water used for the initial filling of the tank should be disposed.
- The durability of the waterproofing system (and especially its resistance to water pressures) is enhanced by the increase of the total dry film thickness, which may be achieved through the application of an additional layer or layers
- When the product is applied on vertical surfaces, the ratio 3A: 1B w/w may be used alternatively to avoid material spills

| Colour                                | Grey                                                                                                                                                                                                         |  |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Packing                               | Sets (A+B) of 34kg                                                                                                                                                                                           |  |
| Cleaning of tools –<br>Stains removal | By water immediately after the application. Prior to hardening, stains may be removed with the aid of solvent <b>Neotex® 1111</b> and a piece of wire. In case of hardened stains, by mechanical means only. |  |
| UFI code                              | Component B: VMC0-K0F0-700Y-45ET                                                                                                                                                                             |  |
| Storage stability                     | <i>Component A:</i> 12 months, if kept in the original sealed packaging, protected from frost, humidity and exposure to solar radiation.                                                                     |  |
|                                       | <i>Component B:</i> 2 years, if kept in the original sealed packaging, protected from frost, humidity and exposure to solar radiation.                                                                       |  |

The system should not be applied on cementitious substrates that are not sufficiently cured



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|--------------------------------------------------------------------------------|-----------------------------------------|--|
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| NEOTEX S.A.                                                                    |                                         |  |
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| 14                                                                             |                                         |  |
| 1922-CPR-0386                                                                  |                                         |  |
| DoP No.: 4950-02                                                               |                                         |  |
| EN 1504-2                                                                      |                                         |  |
| Revinex <sup>®</sup> Flex 2006                                                 |                                         |  |
| Surface protection products                                                    |                                         |  |
| Coating                                                                        |                                         |  |
| Water vapour permeability                                                      | Class I                                 |  |
| Adhesion strength                                                              | ≥1,5N/mm²                               |  |
| Capillary absorption and permeability                                          | W<0,1kg/m <sup>2</sup> h <sup>0.5</sup> |  |
| to water                                                                       | W < 0, 1 Kg/ III II                     |  |
| Permeability to CO <sub>2</sub>                                                | S⊳>50m                                  |  |
| Reaction to fire                                                               | Euroclass F                             |  |
| Dangerous substances                                                           | Complies with 5.3                       |  |

The information supplied in this datasheet, concerning the uses and the applications of the product, is based on the experience and knowledge of NEOTEX<sup>®</sup> SA. It is offered as a service to designers and contractors to help them find potential solutions. However, as a supplier, NEOTEX<sup>®</sup> SA does not control the actual use of the product and therefore cannot be held responsible for the results of its use. As a result of continual technical evolution, it is up to our clients to check with our technical department that this present data sheet has not been modified by a more recent edition.

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