

Product with the European mark of conformity 

PRODUCT N.º : 3.199

## TECMADRY® FLEX 2C

Highly flexible cementitious waterproofing coating

### DESCRIPTION:

**TECMADRY® FLEX 2C** is a two-component predosed product based on special cements and synthetic resins in emulsion. **TECMADRY® FLEX 2C** achieves an efficient waterproofing of the surfaces on which it is applied, avoiding the passage of water through them and acting in conditions in favour of pressure. In addition, when it is convenient to assemble (SATECMA BAND AD, ARMAR FIBER 100, etc.) and due to its high flexibility, it is capable of bridging small cracks that occur in the substrate due to settlements, thermal expansion, etc., thus maintaining the impermeability and protection of the support. It allows for the transpiration of the support. It is recommended on concrete, mortar and masonry supports. Due to its high resistance to the exterior and its unbeatable finish, it can be left visible without the need for painting, achieving the aesthetic and decorative properties of other finishes.

### FIELD OF APPLICATION:

**TECMADRY® FLEX 2C** is especially recommended:

- In waterproofing work on cracked supports or which may suffer small movements (such as terraces and roofs), always suitably reinforced with reinforcement of the type FIBRA DE ARMAR 100 and SATECMA BAND AD (singular points), taking extreme precautions in the execution of the different singular points (floor-wall joints, expansion joints, union of different materials, etc.).
- In emergency waterproofing on roofs and terraces on very damp supports or in the event of eminent rainfall, due to the impossibility of using other waterproofing agents on roofs that are sensitive to the humidity of the support.
- In the protection and waterproofing work of the various civil engineering structures: tunnels, irrigation channels, silos, beams and pillars on bridges, dams, treatment plants, etc.
- Waterproofing of water tanks, ponds, swimming pools, fountains, planters, etc.
- Waterproofing and protection of basements and foundations, underground passageways, walls, etc., always working under direct pressure.
- In the waterproofing and protection of structural concrete against carbonation, aggressive environments (industrial, marine, etc.), freeze-thaw cycles, etc.
- In the waterproofing of bathrooms, changing rooms, kitchens and other damp areas inside buildings.

### ADVANTAGES:

- High waterproofing power.
- High flexibility (bridges small cracks)
- Flexible at low temperatures (up to -50°C).
- Impermeable to CO<sub>2</sub> and other contaminating gases, but permeable to water vapour.
- Good adhesion on a wide range of supports.
- Does not contain chlorides
- Resistant to several aggressive environments: salt water, marine environment, contaminated atmospheres etc.
- Resistant to freeze-thaw cycles.
- Can be applied on damp surfaces.
- Resistant to solar radiation.
- Easy to use.

### SURFACE PREPARATION:

The application surface must be solid and clean of grease, oil, remains of paint and/or form release agents, grout, poorly adhered materials, sand, dust or any other contaminant. Adequate preparation of this surface is recommended, preferably by mechanical means (sandblasting, energetic brushing, etc.).

Similarly, if the surfaces are very smooth and/or very non-porous, they should also be treated, preferably by mechanical means, to give them the appropriate roughness and porosity. The efflorescences and mineral salts must be eliminated before the application of **TECMADRY® FLEX 2C**. Deteriorated areas must be properly cleaned and repaired beforehand.

#### INSTRUCTIONS FOR USE:

**TECMADRY® FLEX 2C** is supplied in the appropriate proportions of its two components. For its correct mixing it is recommended to mix initially all the powder component with 75 % approximately of the liquid component and to shake it until obtaining a uniform mixture free of lumps. After this is done, the rest of the liquid is added little by little and it is shaken at low revolutions to avoid the incorporation of air to the mixture. Allow the product to cure for approximately 5 minutes, after which it is mixed again briefly. At this point, the mixture's life is approximately 30 minutes, this time can be reduced or extended depending on the temperature and the humidity. It is possible to add up to a **maximum of 2% of water** on the paste to lower its viscosity of application if necessary.

#### APPLICATION:

The minimum application of two coats is recommended, with an approximate load per coat of 1 kg/m<sup>2</sup>, leaving an interval of between 12 and 24 hours between coats. In the application the following steps will be followed:

- Moisten the surface by spraying it with clean water.
- Apply a first coat of **TECMADRY® FLEX 2C** on the entire surface using a special short hair brush, roller. On smooth surfaces it can be applied with a trowel.
- Allow the applied layer to dry between 12 and 24 hours depending on the weather conditions.
- Moisten this first layer and apply a second layer of product on the first, so as to ensure total coverage, and let it dry again.
- Proceed in the same way if you apply a third layer.
- Allow a minimum of 7-14 days to elapse before filling with water, depending on the weather conditions.

The tools should only be cleaned with water before the product dries.

The product must be applied at temperatures between +5 and 30° C, and the application must be protected from drying too fast, especially in applications subject to strong winds or high amounts of sunshine. It must also be protected from rain and frost.

#### SPECIAL RECOMMENDATIONS:

- Do not apply at temperatures below 5°C if frost is expected within 24 hours after application.
- Do not apply on frozen or frosted supports.
- Do not wet excessively the wall when the temperature is low without reaching below 5°C.
- Do not apply on plaster, paint or lime.
- Allow a minimum period of 7-14 days for curing (depending on the temperature and humidity) before filling with water.
- It allows the subsequent application of cementitious products of the flexible type or those recommended for non-absorbent substrates, although previous tests are recommended.

#### CONTRAINDICATIONS:

Do not apply the product under backpressure water conditions (negative side).

Do not apply in thicknesses greater than 2 mm in a single application.

Do not apply on **TECMADRY® FLEX 2C** coatings with solvent (e.g. chlorinated rubber based swimming pool paint, polyester based coatings, etc.).

## CONSUMPTION:

For a correct waterproofing, the recommended amount to use per coat is approximately 1.0 kg./ m<sup>2</sup>. It is recommended to apply a minimum of two coats.

## COLOURS:

**TECMADRY® ELAST** is available in white and grey.

## ACCREDITATIONS:

Marked **CE** in accordance with **EN 1504-2** and the European standards for construction products.

## TECHNICAL DATA:

Apparent density of the powder component	1.18 g/cm <sup>3</sup>
Density of the liquid component (EN ISO 2811-1)	1.02 g/cm <sup>3</sup>
Granulometry (EN 12192-1)	0 – 0.5 mm
Mix life span ("pot life")	30 minutes
Application temperature	+5 °C to +30 °C
Apparent density of fresh mortar (EN 1015-6)	1540 kg/m <sup>3</sup>
Superficial drying time (EN ISO 1517)	< 3 horas
Permeability to CO <sub>2</sub> (EN 1062-6) (Equivalent air barrier)	S <sub>D</sub> > 50 metros
Permeability to water vapor (EN ISO 7783) (Equivalent air barrier)	S <sub>D</sub> < 5 metros Class I (EN 1504-2) Permeable to water vapor
Permeability to water (EN 1062-3)	< 0.1 kg/ m <sup>2</sup> .h <sup>0</sup> Impermeable to water (EN 1504-2)
Direct tensile bonding to concrete support (EN 1542)	≥ 0,8 MPa (Cohesive breakage in the product)
Dangerous substances (EN 1504-2)	In accordance with section 5.3 of the standard EN 1504-2

## PRESENTACION AND CONSERVACION:

**TECMADRY® FLEX** is presented in predosed sets of 35 kg. (25 kg of powder component and 10 kg of liquid component). **TECMADRY® FLEX** must be kept in the original closed bags. The estimated storage period in the original packaging should not exceed 12 months.

**TECMADRY®** is a registered trademark, property of Industrias Químicas Satecma® S.A.

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