



Product with the European conformity mark 

PRODUCT N ° : 3.118

## **TECMADRY<sup>®</sup> ELAST**

**Cement based elastic coating for high protection and waterproofing**

### **DESCRIPTION:**

**TECMADRY<sup>®</sup> ELAST** is a two-component pre-dosed product which is based on special cements and synthetic resins in emulsion. **TECMADRY<sup>®</sup> ELAST** gets efficient waterproofing on the surfaces where it's applied, avoiding the passing of the water through them and acting in positive water pressure conditions. Besides, it's high flexibility offers the possibility of bridging the possible cracks due to setting, thermal expansion, etc., keeping the waterproofing and protection of concrete. Allows transpiration of the support.

### **FIELD OF APPLICATION**

**TECMADRY<sup>®</sup> ELAST** is especially recommended:

- When waterproofing and protecting supports with cracks or which could be submitted to movements. Due to its high weather resistance and its great finish, it can be left as it is with no paint on top, achieving the aesthetic and decorative properties of other finishes.
- When protecting or waterproofing civil works: tunnels, watering channels, silos, beams and pillars in bridges, dams, water treatment plants, etc.
- For waterproofing and protecting basements and foundations, galleries, walls, etc., always working with direct pressure.
- For waterproofing and protecting salt water tanks.
- When protecting structural concrete against carbonation, due to its high resistance to carbon dioxide diffusion.
- When protecting structural concrete against corrosion due to chloride attack, especially in aggressive environments (coastal areas, etc.) due to its high resistance to chloride penetration.
- When protecting concrete against aggressive environments: sulphated waters, salt water, polluted environments, etc., due to its high tightness to pollutant gases and ions.
- When protecting concrete against freeze/thaw cycles.

### **VENTAJAS:**

- Waterproofing coating
- High flexibility (bridges cracks)
- CO<sub>2</sub> tight but permeable to water vapour.
- Excellent adherence on different types of supports.
- Resistant to aggressive environments: salt water, sulphated waters, polluted environments, etc.
- High protection against carbonatation and chloride penetration, as well as other pollutant gases and ions which could reduce durability of the structural concrete.
- Resistant to freeze/thaw cycles.
- Easy to use
- Non-toxic, chloride free and causes no powder

### **SURFACE CONDITIONING:**

The surface where it's going to be applied should be solid and free from grease, oil, paint and/or unmolding agents remains, grout, loose materials, sand, dust or any other pollutant. It's recommended to properly prepare the surface preferably by using mechanical means (sand blasting, strong brushing, etc.) Should the surfaces be too smooth and/or little porous, they must also be treated by mechanical means in order to provide them with the suitable roughness and porosity. Efflorescences and mineral salts should be removed before applying **TECMADRY ELAST**. Damaged areas must be previously repaired with **PREMHOR**.



#### **METHOD OF USE:**

**TECMADRY<sup>®</sup> ELAST** is supplied in the appropriate proportions for both components. In order to mix properly, it's recommended to initially mix the whole dusty product with 60% of the liquid component and stir until getting a uniform and free from lumps mixture. Add the rest of the liquid little by little and stir at low speed in order to prevent the air from getting introduced. Let the product rest for about 5 minutes, mixing shortly afterwards. Once the mixture is prepared, we have about 30 – 60 minutes of mixture life, depending on the temperature and relative humidity. It's possible to add up to **2% water maximum** on the paste in order to reduce viscosity of the application (hot weather) without affecting the properties of the product.

#### **APPLICATION**

It's recommended to apply at least two coats, with an approximate amount of 1-1,2 kg/m<sup>2</sup>, leaving a period of 12 – 24 hours between coats. When applying, follow the steps hereunder:

- Damp the surface by spraying it with clean water.
- Apply a first coat of **TECMADRY<sup>®</sup> ELAST** over the whole surface with a special short haired brush or roller. When applying on smooth surfaces, it's possible to use a trowel.
- Let the coat dry for about 12-24 hours depending on the weather conditions.
- Damp this first coat and apply a second coat of **TECMADRY<sup>®</sup> ELAST** on the first one, thus assuring total covering, and let dry again.
- Follow the same steps in case of applying a third coat.
- Let about 7-14 days before filling with water, depending on the weather conditions.
- For tanks which are going to be in contact with drinking water, rinse several times with water before the final filling.

Tools will be cleaned only with water before the product is dry.

The product must be applied with temperatures between +5 and 30 °C, protecting the application against a very quick drying, especially when the application has to suffer strong winds or strong sunlight. Also protect from rain and frost.

#### **SPECIAL RECOMMENDATIONS**

- Do not apply with temperatures below 5 °C or when frost is expected during the 24 hours after application
- Do not apply on frozen or frosted supports.
- Do not damp the wall excessively when temperature is low, always above 5 °C.
- Do not apply on gypsum, paint or lime.
- Let cure for at least 7-14 days (depending on the temperature and relative humidity) before filling with water.
- For tanks which are going to be in contact with drinking water, rinse several times with water before filling the tank.

The product admits the subsequent application of flexible cement based products or products recommended for non-absorbent supports although it's recommended to make a previous test.

#### **CONTRAINdicATIONS**

Do not apply the product with water against pressure.

Do not apply solvent-based coatings on **TECMADRY ELAST** (i.e.: chlorinated rubber-based paint for swimming pools)

#### **YIELD**

For a correct waterproofing, the recommended yield is about 1,0-1,2 kg/m.<sup>2</sup> each coat. It's recommended to apply 2 coats minimum.

#### **COLOURS:**

**TECMADRY<sup>®</sup> ELAST** is supplied in grey, white and blue



**CERTIFICATIONS:**

Product with the European conformity brand **CE**: product complying with the European standard **EN 1504-2** and **Directive 89/106/CEE about construction products**.

**TECMADRY<sup>®</sup> ELAST** is recommended to be used in contact with drinking water according to the **Migration Report N° 6063** by the Official Laboratory Joaquín Riera Tuebols (O.T.E.C.).

**TECHNICAL DATA:**

<i>Powder apparent density</i>	1,20 g/cm <sup>3</sup>
<i>Liquid apparent density (EN ISO 2811-1)</i>	1,04 g/cm <sup>3</sup>
<i>Particle size distribution (EN 12192-1)</i>	0 – 0,6 mm
<i>Pot life</i>	30 minutes
<i>Application temperature</i>	+5 °C up to +30 °C
<i>True specific density of fresh mortar (EN 1015-6)</i>	1540 kg/m <sup>3</sup>
<i>Surface drying time (EN ISO 1517)</i>	< 3 hours
<i>Elongation until breaking (UNE EN 527/3) (28 days)</i>	140%
<i>CO<sub>2</sub> permeability (EN 1062-6) (Equivalent air barrier)</i>	S <sub>D</sub> > 400 metres
<i>Water vapour permeability (EN ISO 7783-1/-2) (Equivalent air barrier)</i>	S <sub>D</sub> < 5 metres Class I (EN 1504-2) Water vapour permeable
<i>Water permeability (EN 1062-3)</i>	< 0,1 kg/ m <sup>2</sup> .h <sup>0,5</sup> Non-permeable to water (EN 1504-2)
<i>Bond strength on concrete support (UNE-EN 1542:2000) (28 days)</i>	1,15 MPa (Product cohesive breakage)
<i>Bond strength on ceramics support (UNE-EN 1542:2000) (28 days)</i>	1,10 MPa (Product cohesive breakage)
<i>Bond strength on concrete support (UNE-EN 1542:2000) (6 months)</i>	1,37 MPa (Product cohesive breakage)
<i>Bond strength on ceramics support (UNE-EN 1542:2000) (6 months)</i>	1,30 MPa (Support cohesive breakage)
<i>Hazardous substances (EN 1504-2)</i>	According to En 1504-2, section 5.3
<i>Penetration depth of water under pressure (direct pressure) (UNE-EN 12390-8:2001) ( 5 kg/cm<sup>2</sup> – 72 hours)</i>	0 mm (no water penetration)
<i>Penetration depth of water pressure (counterpressure) (UNE 83309/90) ( 1,3 and 7 kg/cm<sup>2</sup> – 96 hours)</i>	0 mm (no water penetration)
<i>Water absorption of the coating after 24 hours immersion (on 2 mm thick specimens)</i>	1,78%
<i>Capability to be used in contact with water for human consumption (Migration test report n° 6063 – O.T.E.C.)</i>	Suitable

**PACKAGING AND STORAGE**

**TECMADRY<sup>®</sup> ELAST** is supplied in 30 kg pre-dosed sets (20 kg powder component and 10 kg liquid component). **TECMADRY<sup>®</sup> ELAST** must be kept in tightly closed original containers. Storage life in original containers won't be longer than 12 months.

**TECMADRY<sup>®</sup>** is a trade mark owned by Industrias Químicas Satecma<sup>®</sup>S.A.

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