

# Scudo Revolution

**One-component polymeric elastic cement-based waterproofing product, vapor permeable and resistant to negative and positive water pressure**



## Fields of application:

- elastic waterproofing of tank and swimming-pool bearing structure before installing ceramic tiling and mosaic;
- waterproofing of pavements, terraces of every size, flat and sloped roofs, before installing tiles and roof coverings;
- waterproofing of old balconies and showers with the installation of new flooring without demolishing the existing ones;

## Characteristics:

**Scudo Revolution** is a one-component elastic cement-based waterproofing coating. The accurate formula of **Scudo Revolution** made up of aggregates, finely micronized Hi-Tech binders together with a mix of additives and polymers guarantees a strong adhesion even on non-absorbing substrates, high resistance to water pressure and back pressure. The resistance to contact with chlorinated water and in an alkaline environment, allow the product a safe durability. Indicated for indoor and outdoor civil, commercial and industrial applications.

## Preparation:

Substrates must be cured, dry, stable, sound, flat, compact and free of removable parts, clean of dust, grease, oil, paint, wax, rust or efflorescence. Holes or uneven sections can be repaired with Fibrocem, shrinkage splits and cracks with Epofix Flow. Concrete substrates must be seasoned for at least 30 days, casting burrs removed. Before application, saturate the substrate with water and then remove the excess with compressed air, a liquid suction system or with absorbent cloths to obtain a slightly damp base which, nevertheless, has a dry surface. On old floors, remove wax and grease and clean using **Detergente Basico**. Protect surfaces to be treated from direct sunlight.

- waterproofing of ground walls;
- protection of concrete (pillars, beams, etc.) against mechanical decay and degradation due to carbonation and aggressive agents;
- to smooth flexibly prefabricated concrete structures subject to vibrations and deformation;
- elastic smoothing plaster for micro-cracked renders;
- professional use only.

## Application:

mix **Scudo Revolution** with 4,8 l of water in a clean bucket with a low-speed stirrer until a lump-free paste is obtained. For terraces, sidewalks, swimming pools, showers, ecc, apply **Scudoband** or **Scudoband Adesivo** insulating the perimeter and the dividing joints, taking care to make outdoor applications no larger than 3 m x 3 m. After applying the first coat of **Scudo Revolution**, immediately embed the mesh **Scudonet**. When the product has hardened, apply the second coat of for a total thickness of at least 2 mm. On gypsum or anhydrite substrates, use **Primer GS** to passivate the support. For installing tiles, apply **SPM Professional**, **RT Universal** or **Aquaria**, for swimming pools **S9 Ultrawhite** + **Isoflex** or **Aquaria**.

## Quality and Environmental Standards:

**Scudo Revolution** undergoes constant, careful testing at our laboratories, in compliance with the legislation in force - UNI EN ISO 9001/2015.

|   |  |
|---|--|
| <b>CE</b>   | <b>Opera Srl</b><br>Via degli Scavi 19/21<br>47122 Forlì - Italy |
| <b>DOP-IT-01-066</b><br><b>SCUDO REVOLUTION</b><br><b>EN 14891:2012</b>   |  |
| One-component cementitious liquid applied waterproofing product CM 02P, for all outdoor installations and pools, tiled over with ceramics (glued with C2 adhesive in accordance with CEN 12004) |  |
| Initial tensile adhesion  | ≥ 0.5 N/mm²  |
| Crack-bridging  | No penetration   |
| - in standard conditions (+ 23 °C)  | ≥ 0.75 mm  |
| - at very low temperatures (-20 °C)   | ≥ 0.75 mm  |
| Durability for:   |  |
| - tensile adhesion after thermal aging  | ≥ 0.5 N/mm²  |
| - traction adhesion after immersion in water  | ≥ 0.5 N/mm²  |
| - tensile adhesion strength after water immersion   | ≥ 0.5 N/mm²  |
| - tensile adhesion after freeze-thaw cycles   | ≥ 0.5 N/mm²  |
| - traction adhesion after immersion in chlorinated water  | ≥ 0.5 N/mm²  |
| Release of dangerous substances See safety sheets   |  |

| Characteristics   | Application method                 | Consumption  |
|---|------------------------------------|--|
| One-component<br>Vapor permeable<br>Waterproof to positive and negative water pressure<br>Concrete protection certificate<br>Crack bridging ability (-20°C)<br>Initial adhesion 2.15 N/mm²<br>Temperature: from -30° to +70°C<br>High yield/performance<br>Horizontal and vertical installation<br>High elasticity<br>Waiting period for 2nd coat: about 4 hours<br>Final elongation: 30%<br>UV resistant | Trowel/Spatula<br>Brush<br>Airless | 1.2 kg/m²<br>every mm of thickness                                     |
|   |                                    | Storage  |
|   |                                    | Shelf life of 12 months<br>in the original packages and in a dry place |

| Code   | Product          | Form and color | Packages | Pallet  |
|--------|------------------|----------------|----------|---------|
| 406045 | Scudo Revolution | Grey powder    | 10 kg    | 400 kg  |
| 406040 | Scudo Revolution | Grey powder    | 20 kg    | 1200 kg |

### Warning

- Always apply at least two coats, waiting for the first to dry before applying the next;
- Do not apply in thicknesses over 2 mm per coat;
- Do not apply when the temperature is below +5°C;
- Protect against rain for at least 72 hours;
- If laying on very porous substrates (such as lightweight screeds or expanded clay) provide ventilation ducts every 25 m<sup>2</sup> to vent humidity from the substrate.
- Do not apply on gypsum or anhydrite substrates without using **Primer GS** beforehand.
- Do not apply on metal, wooden or bituminous surfaces.



### Technical and application specifications

|  |                         |                        |
|--|-------------------------|------------------------|
| Hazard classification as per Directive 99/45/EC:                         | irritant                |                        |
| Specific weight of mixture:  | 1.50 g/cm <sup>3</sup>  |                        |
| Pot life:  | approx. 60 minutes      |                        |
| Application temperature:   | from +5°C to +35°C      |                        |
| Mixing water:  | 24% (4.8 l per bag)     |                        |
| Average time before applying second coat:                                | approx. 4 hours         |                        |
| Waiting time before laying ceramic tiles:                                | 3-4 days                |                        |
| Maximum coat thickness:  | 2 mm                    |                        |
| Maximum achievable thickness:  | 5 mm                    |                        |
| Low organic volatile emissions:  | EC2                     |                        |
| Operating temperature:   | from -30°C to +70°C     |                        |
| FINAL PERFORMANCE SPECIFICATIONS - EN 14891                              | Requirement             | Level                  |
| Initial adhesion:  | ≥ 0.5 N/mm <sup>2</sup> | 2.15 N/mm <sup>2</sup> |
| Adhesion after water immersion:  | ≥ 0.5 N/mm <sup>2</sup> | 1.00 N/mm <sup>2</sup> |
| Adhesion after heat action:  | ≥ 0.5 N/mm <sup>2</sup> | 3.00 N/mm <sup>2</sup> |
| Adhesion after freeze-thaw cycles:                                       | ≥ 0.5 N/mm <sup>2</sup> | 1.10 N/mm <sup>2</sup> |
| Adhesion after immersion in calcium-saturated water:                     | ≥ 0.5 N/mm <sup>2</sup> | 1.00 N/mm <sup>2</sup> |
| Adhesion after immersion in calcium-saturated water:                     | ≥ 0.5 N/mm <sup>2</sup> | 1.00 N/mm <sup>2</sup> |
| Impermeability to water at 1.5 bar for 7 days (under positive pressure)  | no penetrat             | no penetrat            |
| Impermeability to water at 1.5 bar for 7 days (under positive pressure): | not required            | not required           |
| Crack bridging ability under standard conditions:                        | ≥ 0.75 N/mm             | 1.10 mm                |
| Crack bridging ability at low temperatures (-20°C)                       | ≥ 0.75 N/mm             | 0.82 mm                |
| Final elongation:  | not required            | 30%                    |
| Water vapour permeability – EN 52615                                     | not required            | 410 μ                  |
| Harmonised customs code:   | 38245090                |                        |

Data measured at +23°C / 50% R.H. and no ventilation. Data may be significantly altered by installation conditions.