

Description

Galaxie WP FLEX is a two-component acrylic modified cementitious waterproofing membrane for use on concrete, masonry and most construction substrates. Mixed on site, it forms a seamless, flexible, hardwearing membrane that waterproofs and resurfaces structures while providing high resistance to carbonation and chloride ion penetration. WP FLEX provides an effective barrier to waterborne salts and atmospheric gases. A 1 mm coating provides an anti-carbonation cover equivalent to over 80 mm of concrete. Unlike conventional coatings requiring the concrete to cure for 7–28 days, WP FLEX can be applied to 24-hour-old concrete, giving immediate protection. WP FLEX should not be left exposed; it should be protected by tiles or an appropriate protective coating where required.

Benefits

- Waterproof resists up to 15 bar (150 m head) positive pressure and 3 bar (30 m head) negative pressure
- Flexible 150% elongation
- Non-toxic — suitable for potable water tanks and reservoirs
- Excellent adhesion to both porous and non-porous surfaces
- Breathable — repels liquid water while allowing substrate vapour to escape
- High resistance to carbon dioxide and chloride ion diffusion
- A 1 mm coating provides anti-carbonation protection equivalent to over 80 mm of concrete
- Can be applied to 24-hour-old concrete — no extended curing wait required
- Seamless membrane — eliminates joint failure risk associated with sheet membranes
- Light trafficable once cured
- Can be spray applied using a hopper gun
- Good chemical resistance to gasoline, diesel, oil, sodium hydroxide, calcium chloride, de-icing salts and treated sewage

General Application

- Basements and below-ground structures
- Water tanks and reservoirs (potable and non-potable)
- Swimming pools
- Bathroom, wet areas and planter boxes
- Protected roof waterproofing
- Seawater channels and marine structures
- Refacing and protection of concrete surfaces
- Sealing and coating of tie bar holes
- Protection against carbonation and chloride attack
- Tile fixing in water-retaining structures

Technical Data

Application Guidelines

Galaxie WP FLEX	
Property	Value
Mix Ratio (powder:liquid by weight)	25:10
Elongation (ASTM D2370)	>150%
Adhesion to substrate (ASTM D4541)	>0.4 N/mm ²
Tensile Strength unreinforced (ASTM D2370)	>1.6 N/mm ²
Water Permeability Coefficient K (m/s)	5.84 x 10 ⁻¹³
Resistance to water pressure (2 mm coating)	15 bar positive / 3 bar negative (no leakage)
Toxicity	Non-toxic
Application Temperature	Not less than +4°C
All technical data based on laboratory testing at 25°C	

Surface Preparation

- All surfaces must be thoroughly clean and free from laitance, loose material, dust, dirt, oil, grease and all contaminants
 - All structural and non-structural cracks must be repaired or treated prior to coating. Active leaking cracks and construction joints should be treated with Galaxie PU CUT or PU FLEX before applying WP FLEX
 - Fill holes and indentations with a suitable repair mortar and allow to cure
 - Remove all existing renders, coatings and tiling back to the base structure. Make brick pointing flush
 - Apply 45° fillets to all internal angles using a suitable repair mortar
- Newly placed concrete can be coated after 24 hours or as soon as it can be walked on

Mixing

WP FLEX consists of two components — Powder (Part A) and Liquid (Part B). Always add the powder to the liquid. Mix using clean containers and a slow-speed paddle mixer until the material is homogeneous. Keep the mix moving throughout application. **Do not add water.** Mix only the quantity that can be applied within 20–40 minutes depending on temperature and ventilation conditions.

Application

- Dampen all surfaces with potable water before applying the first coat. No free-standing water
- Apply the first coat by brush, roller or trowel at 1.5 kg/m², ensuring even coverage
- Apply the second coat at right angles to the first at 1.5 kg/m² to ensure full coverage



- Pay particular attention at expansion joints and over movement cracks. Bed 30 g/m² glass fibre mesh into the wet first coat at all joints and cracks
- Allow the coating to dry completely before light foot traffic. For heavy use, protect with a floor screed
- Water-bearing structures can be filled 24 hours after the final coat has cured
- Total coating thickness must not exceed 3 mm — excessive build may cause splitting or cracking
- Do not apply to bitumen

Packaging

Galaxie WP FLEX Standard is supplied as a 35 kg set: Part A Powder 25 kg, Part B Liquid 10 kg.

Storage

Store at room temperature between 10°C and 38°C, dry and out of direct sunlight. Shelf life is up to 6 months in unopened original packaging.

Health & Safety

Galaxie WP FLEX should only be used as directed. We always recommend that the Safety Data Sheet is carefully read prior to application. Our recommendations for protective equipment should be strictly adhered to for your personal protection. Please contact your local Galaxie representative for the current SDS.

