

# ATECH PLUS

## Waterproofing Solutions

### Savvy Cemprufe

## Cementitious Flexible Waterproof Membrane

### Description

CEMPRUFÉ is a two-component acrylic modified cementitious coating that requires only on-site mixing to form the ideal product to waterproof and resurface concrete, masonry and most other construction materials. CEMPRUFÉ provides an effective barrier to waterborne salts and atmospheric gases. CEMPRUFÉ provides a hardwearing, seamless, waterproof membrane for roofs and concrete protection.

### Typical Applications

- To reface concrete surfaces
- Waterproof lining
- For coating seawater channels
- Sealing and coating tie bar holes
- Bathroom and wet areas
- As a waterproof coating for roofs
- For fixing tiles in water retaining structures
- Protection against carbonation and chloride attack
- Application in marine areas

### Characteristics

- WRc approved
- A 1mm coating provides anti carbonation cover equivalent to over 80cm of concrete
- Waterproof – resists up to 15 bars (150 metre head) of positive pressure. Resists up to 3 bars (30 metre head) negative pressure.
- Excellent adhesion. Bonds to porous and non-porous surfaces.
- Flexible.
- Non-toxic – ideal for potable water uses.
- Light Trafficable
- Breathable – whilst repelling water, allows substrate to breath.
- High resistance to carbon dioxide and chloride ion diffusion.
- Unlike conventional coatings which require a 7-28 day cure of concrete, CEMPRUFÉ can be applied to 24 hour-old concrete thereby giving immediate protection.
- Sprayable using a hopper gun

### Effects of Water Pressure

CEMPRUFÉ resists water pressure to 15 bars (150 meter head). The degree of resistance of CEMPRUFÉ to water under pressure depends on the coating thickness.

Pressure	Application Rate
3 bar negative	3.6 kg/m <sup>2</sup>
15 bar positive	3.6 kg/m <sup>2</sup>

TECHNICAL DATA - Savvy Cemprufe		
	Part A	Part B
Form	Powder	Liquid
Colour	Grey/White	Milky White
Specific Gravity	-	1.03
Bulk density	1.36	-
Mixing Ratio (A+B)	1.25 - 2.5 to 1 by weight	
Application Temp.	Not less than +4°C	
	(Mixed) 1.8kg/litre	
	Non-Toxic	
Cured Properties		
Adhesion to concrete	> 1.1 N/mm <sup>2</sup>	
Resistance to water pressure (2mm Coating) Taywood Test	15 bar positive (no leakage) 3 bar negative (no leakage)	
Elongation ASTM D 2370%	> 100%	
Tensile Strength ASTM D 2370	11N/mm <sup>2</sup>	

### Chemical Resistance

CEMPRUFÉ has outstanding wear and weather resistance and has good chemical resistance to gasoline, diesel, oil, sodium hydroxide, calcium chloride, de-icing salts and treated sewage. CEMPRUFÉ is clearly illustrated in the following table which compares the performance of CEMPRUFÉ with the accepted criteria for diffusivity. (test work done at 2kg/m<sup>2</sup>).

Accepted Criteria	Cemprufe
R > 50M	357.5 metres

Where R = air diffusion equivalent for carbon dioxide in metres.

### Application Guidelines

- All surfaces must be thoroughly cleaned and free from laitance, loose material, dust, dirt, oil, grease, general grime, all contaminants, etc a fungicidal wash must be used if there is evidence of fungal growth.
- All non-structural cracks above 1mm wide should be filled.
- All structural cracks should be properly repaired or treated.
- Any holes or indentations should be filled with TamCrete 40 mortar. Not CEMPRUFÉ.
- Brick pointing should be made flush.
- All renders, coatings, tiling should be removed back to the structure to be waterproofed.
- Any loose pointing should be raked out and repointed flush with the surface of the bricks or block work.

# ATECH PLUS

## Waterproofing Solutions

- Any loose friable concrete or brickwork should be cut out and properly repaired.
- All old repairs should be inspected and repaired where necessary.
- Newly laid concrete should be smooth and not a tamped down finish.
- Newly laid concrete can be coated after 24 hours or as soon as it can be walked on.
- Leaking construction joints or cracks should be treated and sealed with Ufloor Inject 100 before coating.
- Apply 45° fillets to all internal angles, using Savvy Chemplug or if time permits, sand and cement.

### Mixing

CEMPRUFÉ consists of two components - 2.5 parts powder (Part A) to one part liquid (Part B). Mix using clean containers and a slow speed paddle mixer until the material is homogenous. Keep mixed throughout application. **Do not add water.** Mix only the amount that can be applied in 10-40 minutes (dependent on temperature and ventilation). Mixing the same ratio by weight as above can be used for smaller quantities.

### Surface Application

- Dampen (not wet) all surfaces before applying the first coat of CEMPRUFÉ.
- Particular attention should be made at expansion joints and over movement cracks.

**New Expansion Joints:** CEMPRUFÉ should be taken well into the rebate before the expansion media is applied.

**Old Expansion Joints:** The joints should be inspected and repaired. Mask over media with debonding tape. Apply one coat of CEMPRUFÉ over the joint to 100mm either side. Reinforce by thoroughly wetting-in 30gm glass fibre mat or plasterers polyurethane scrim whilst the CEMPRUFÉ remains wet and uncured. Allow to dry.

**Movement Cracks:** follow guidelines for Old Expansion Joints.

### Application of the main coating system:

- Apply the first coat of CEMPRUFÉ using a brush, roller or trowel at a coverage rate of 1.8kg per m<sup>2</sup> making sure that it is evenly coated. Do not paint-on but coat at 1mm thick. Allow drying before over coating.
- Apply the second coat at right angles to the first coat to ensure proper coverage at a coverage rate of 1.8kg per m<sup>2</sup>.
- Allow the CEMPRUFÉ coating to completely dry before light foot traffic. For heavier usage protect with a floor screed.
- Water bearing structures can be filled with water 24 hours after the CEMPRUFÉ has cured.
- Do not apply to bitumen.
- The total application should not exceed 4mm thick otherwise splitting or cracking may occur.

### Subsequent Finishes

CEMPRUFÉ provides an aesthetically pleasing surface finish, texture dependent on method of application, and does not normally require any further surface finishers. CEMPRUFÉ is however compatible with most forms of subsequent coatings. Please contact Atech Sales Office for further advice.

### Packaging

CEMPRUFÉ is supplied in a 35kg set.

### Colours

Dark grey, white, buff other colours may be produced upon request.

### Storage

CEMPRUFÉ must be stored above 5°C and below 35°C in dry conditions, off the ground and away from direct sunlight. Shelf life is 12 months in original unopened packaging when stored correctly.

### Health & Safety

CEMPRUFÉ is alkaline. Protect hands with rubber gloves. Avoid contact with skin and eyes. Should this occur, flush with water. If irritation persists, contact physician.

#### Field Support

Field support where provided, does not constitute supervisory responsibility. Suggestions made by ATECH either verbally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they and not ATECH are responsible for carrying out procedures appropriate to a specific application.

#### Customer Responsibility

The technical information and application advice given in this publication is based on the best information available at time of print. As the information herein is of a general nature, no assumption can be made as to the products suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by Commonwealth or State Legislation. The owner, his representative or the contractor is responsible for checking the suitability of products for their intended use.

#### Safety Precautions

These products may cause allergic reactions through skin contact, goggles, protective gloves and overalls must be worn. Ensure that there is adequate ventilation and avoid breathing the vapour.

#### Exclusion Clause

1. The information contained in this data sheet is based on many years experience and is correct to the best of our knowledge. ATECH will be under no liability whatsoever whether in:
  - a) Contract or tort (including, without limitation, negligence)
  - b) Breach of statute
  - c) Any other legal or equitable obligation other than the quality of the product at the time of despatch.
2. Any queries about specification use or application should be directed to our technical service department immediately.
3. This exclusion clause does not operate to exclude any warranty that by law may not be excluded.



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