

2K CEMENTITIOUS WATERPROOFING

One product, three systems for watertight surfaces.
Formulated and made in South Africa.

LEAKSEAL[®] CEMLASTIC

TANKS • RESERVOIRS • POOLS • UNDER-TILE • BASEMENTS •
FLAT ROOFS • RISING DAMP

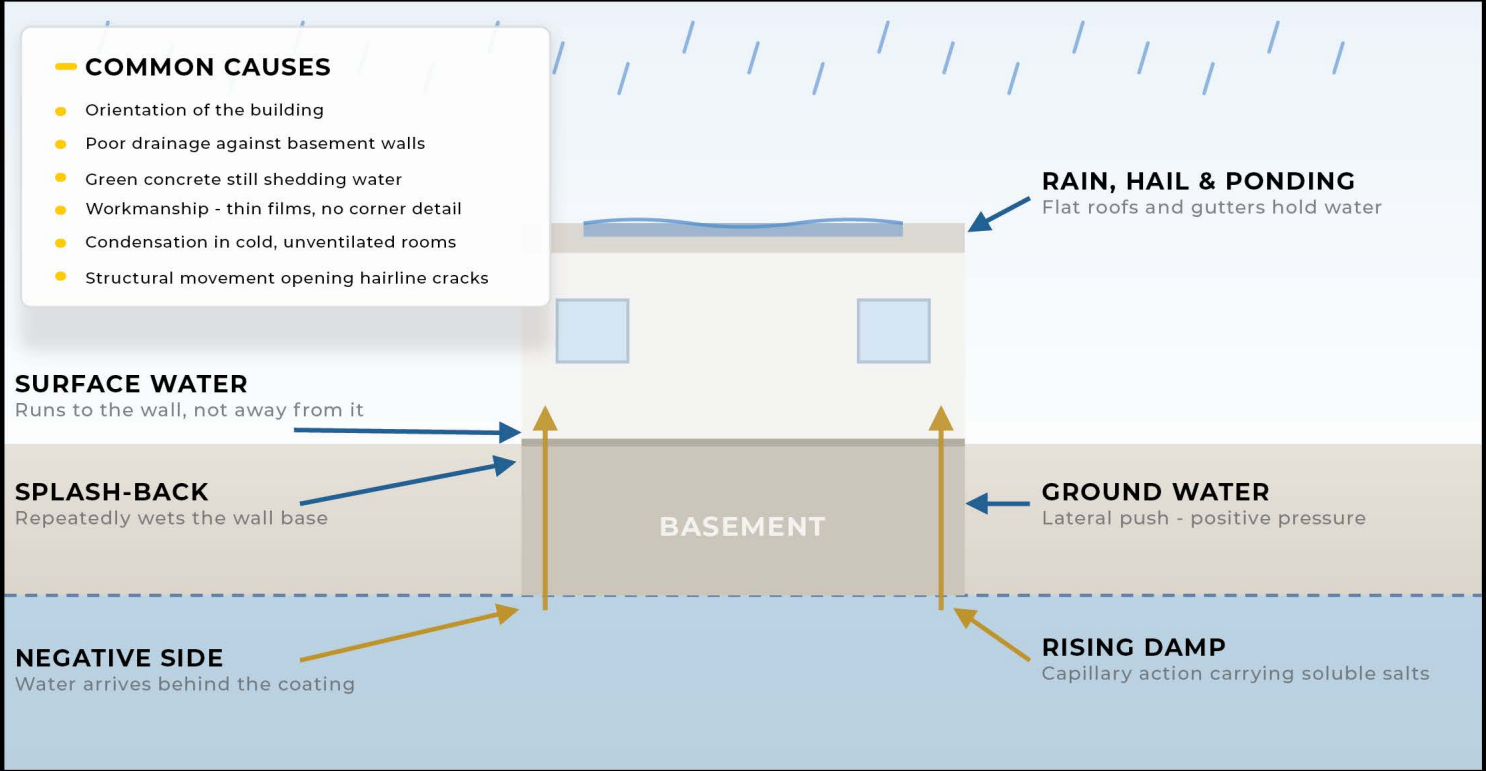



SPECIALIZED
COATING SYSTEMS

THE PROBLEM

WATER ALWAYS FINDS A WAY IN

Water is the single most destructive element acting on concrete and masonry — arriving from above as rain, from the side as ground water and from below by capillary action, carrying dissolved salts that keep attacking long after the surface has dried.



LEAKSEAL® CemLastic counters the damage that bulk water and water vapour creates

Holds 5 bar either way Positive and negative pressure — reinforced	Bridges cracks to 1.2mm ≥1.2 mm reinforced; ≥0.75 mm at -5 °C and -20 °C	Flexible to -20°C Stays flexible through cold and freeze/thaw	Excellent adhesion ≥0.5 N/mm² dry, wet, heat-aged and freeze/thaw
Drinking-water safe Complies with the WRAS approval; non-toxic to fish when cured	Salt, sulphate & CO² Seawater and de-icing salts; flexible anticarbonation barrier	Goes on damp substrates Damp cementitious substrates in good condition	Cold applied, four ways Trowel, block brush, roller or mortar-spray
Water & weather resistant Immersed or exposed, interior or exterior	Two-component, no added water 2 parts powder : 1 part liquid by weight	Self-priming No primer needed after sound mechanical preparation	Overpaintable Flexible acrylic, polyurethane and polyurea topcoats



The cured film, free of its substrate — folded, flat and stretched by hand. A three-dimensional cellulose fibre network runs through it, which is why it takes that movement without tearing.

THE PRODUCT

ONE SLURRY. TWO COATS. SEALED.

2KPOWDER +
LIQUID**2:1**MIX RATIO BY
WEIGHT**2-4mm**TOTAL FILM
THICKNESS**2.1kg/m²**PER MM
APPLIED**20min**POT LIFE @
25°C**30kg**

KIT • 20 + 10 KG



The cured film — matt, faintly textured, and the same grey whether it is going under a tile bed or lining a reservoir.

LEAKSEAL® CemLastic is a two-component, polymermodified, fibre-reinforced cementitious waterproofing slurry. It balances tensile strength against elongation, so it is firm enough to be tiled onto directly, yet flexible enough to stretch over a hairline crack and stay flexible to **-20 °C**.

It goes onto cementitious substrates, renders, brickwork and blockwork, in both immersion and exposed conditions — and it may be applied to **damp masonry** in good condition. It is self-priming, fast drying, oil resistant and non-corrosive to steel or iron.

Once cured it is **overpaintable** with conventional flexible acrylic, polyurethane and polyurea coatings, and works as a flexible anti-carbonation layer — a CO₂ barrier over the concrete it protects.

— WHAT THE CELLULOSE FIBRE DOES

A three-dimensional natural-fibre network through the cured film:

- Thicker first layers without mud-cracking
- Reduced shrinkage and drying cracks
- Better vertical hold and adhesion
- Improved freeze/ thaw and hot-substrate performance

— COLOUR

Grey. Good airflow around the coated object while curing.

— SHELF LIFE

12 months at 25 °C from manufacture (subject to inspection thereafter); components dry, out of direct sunlight, away from heat or ignition sources.

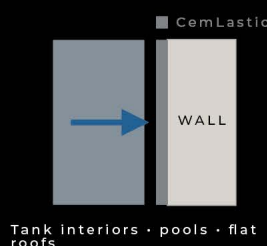
WHY ONE COATING HAS TO DO BOTH JOBS

Water does not always push onto a coating. On a basement or retaining wall it arrives from behind and pushes the film off the substrate — the condition that lifts most waterproofing.

LEAKSEAL® CemLastic is watertight to **5 bar in both directions when reinforced**, so the same product seals a tank from the inside and a basement wall from the dry side. Unreinforced it is rated 1.5 bar.

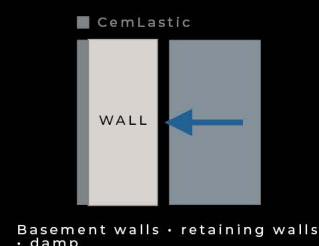
POSITIVE PRESSURE

Water pushes onto coating



NEGATIVE PRESSURE

Water pushes from behind it



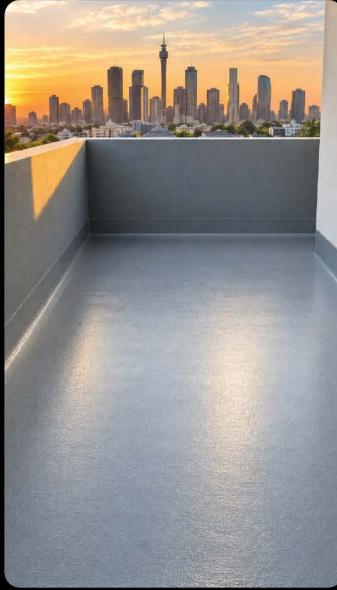
WHERE IT GOES

EIGHT PLACES IT EARN'S ITS KEEP

If the substrate is cementitious, sound and properly prepared, CemLastic will seal it - immersed or exposed, inside or out, above ground or buried.

**Showers, under tile**

Ceramic, mosaic and natural stone — tile directly onto the second coat

**Balconies & terraces**

Sealed before tiling, with fillets to every upstand

**Swimming pools**

Overcoat with AquaSport Epoxy or AquaSport Chlor Rubber

**Tanks & reservoirs**

WRAS-compliant raw materials for drinking-water storage

**Fishponds & dams**

Non-toxic to fish once fully cured — rinse and condition before stocking

**Basements & retaining walls**

Holds negative pressure — works from the dry side, buried or not

**Flat roofs & gutters**

Weather-exposed, with a flexible anti-carbonation CO₂ barrier

**Rising damp**

Interior and exterior walls, positive and negative pressure

— ALSO SPECIFIED FOR

- Concrete piping, bridges and canals
- Tunnels and concrete floors
- Plasterboard, drywall and lightweight cement blocks
- Marine-grade plywood
- Over well-bonded existing coverings
- Sealing fine hairline cracks not subject to movement

— AGGRESSIVE ENVIRONMENTS

Specified for concrete exposed to seawater, deicing salts (sodium and calcium chloride) and sulphates — and formulated for long service life in coastal saline atmospheres and polluted industrial air.

THE SYSTEM

THREE BUILD-UPS, ONE PRODUCT

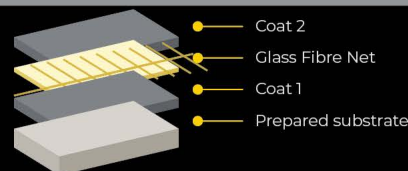
Two coats of the same product every time. What changes is what goes into the second coat, and over it.

SYSTEM 01 Standard

2.0 - 4.0mm • immersion after 2 days

Left exposed - tanks, reservoirs, basements, retaining walls, flat roofs

- 1 **Prepare** - sound, clean, corners covered
- 2 **CemLastic** coat 1 - max 4mm
- 3 **Glass Fibre Net** into the wet first coat at stressed areas
- 4 **CemLastic** coat 2 - after 4 - 5 h

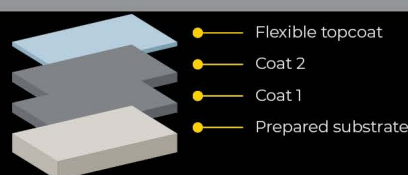


SYSTEM 02 Topcoated

2.0 - 4.0mm • + topcoat after 48 h

Painted or lined over - seen surfaces, and chlorinated pools

- 1 **Prepare** - sound, clean, corners covered
- 2 **CemLastic** coat 1 - max 4mm
- 3 **CemLastic** coat 2 - after 4 - 5 h
- 4 **CemLastic** after 48 h — or AquaSport Epoxy / Chlor Rubber over chlorinated pools

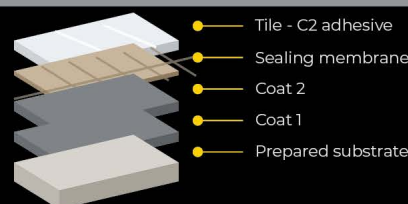


SYSTEM 03 Under Tile

2.0mm typical • tile after 5 days

Tiled over — showers, balconies, terraces, pool surrounds

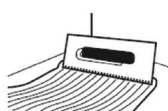
- 1 **Prepare** - sound, clean, corners covered
- 2 **CemLastic** coat 1 - max 4mm
- 3 **CemLastic** coat 2 after 4 - 5 h — combed, 6 x 6 mm notched trowel
- 4 **Sealing Membrane** bedded into that wet coat, edge to edge
- 5 **Tile** directly — C2 adhesive, CG2 grout, elastic joints



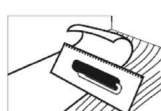
— LAYING THE SEALING MEMBRANE - SYSTEM 03



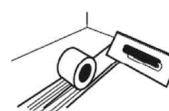
Cut to size
Utility knife, measured to the area



Comb the mortar
Coat 2, 6 x 6mm notched trowel



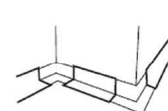
Bed it in
Face up, edge to edge, 100% contact



Seal the joints
Overlap, the embed Joint Tape



Corners next
Preformed, into a 75mm band



Close it up
Fold tape in, smooth, remove excess

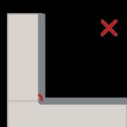
— KEEP IN MIND The four things that decide whether the system holds

— CORNERS DECIDE IT

A membrane taken into a sharp 90° junction thins at the angle. Cove it first and the film turns the corner at full thickness - **mandatory** in tanks, pools, ponds and roofs



COVED FILLET
Membrane turns the corner unstressed



SHARP CORNER
Membrane thins and splits at the angle

— REINFORCE WHAT IS STRESSED

- **Glass Fibre Net** (150 - 160 g/m²) into coat 1 at pools, terraces, tanks - required for the 5 bar and ≥1.2 mm figures
- **Sealing Membrane** for tiled work, bedded into the wet **second** coat
- **REPAIR Cement Mortar** or **Flexi** to make the substrate good first

— MIX IT THE SAME WAY

Shake the liquid, add the powder at **±500 rpm for 4 - 5 min** to a lump-free mix. **No added water. Never by hand.**

— GIVE IT THE TIME IT NEEDS

Coat 2	4 - 5 h
Other coatings	48 h
Immersion	2 days
Tiling	5 days

At 25 °C - cooler or damper is slower; tiling at 24 h on dry substrates in good conditions. **Rinse at high pressure before filling** to remove surface alkalinity.

ON SITE

GETTING IT RIGHT ON SITE

- HOW MUCH DO I NEED?

COVERAGE	THEORETICAL, PER 30KG KIT - 20KG POWDER + 10KG LIQUID		
BUILD	TYPICAL APPLICATION	KG/M ²	M ² PER KIT
2.0 mm	Under tile - showers, balconies, terraces	4.2	7.1
2.5 mm	Exposed and buried walls	5.3	5.7
3.0 mm	Tank, reservoir and pool linings	6.3	4.8
4.0 mm	Maximum total build	8.4	3.6

Based on **2.1 kg/m² per mm** of applied thickness. Theoretical coverage - excludes wastage, substrate profile and absorption. Maximum 4 mm per coat, applied in two coats. Mix only what can be applied within the 20-minute pot life at 25 °C.

- SUBSTRATE PREPARATION

SUBSTRATE	ACCEPTANCE CRITERIA
Concrete & precast	High-pressure water blast, abrasive blast or grind to remove weak layers and existing coatings - avoid destructive impact. Repair, then fill shrinkage cracks. No powder, grease, oil or release agents. Generally no primer needed after mechanical preparation.
Cementitious renders	Properly cured - 7 days per mm in good weather - well bonded, dust and paint-free. Pre-dampen absorbent surfaces with water.
Existing tiled floors	Confirm the coverings are well bonded. Degrease with 30% caustic soda solution and rinse thoroughly. Grind or abrade the tiles for a mechanical key.
All internal corners	Cove horizontal-to-vertical junctions with fillets before application - tanks, pools, ponds and roofs.

- CLEAN-UP

Water, immediately after use. Dried material must be removed mechanically. Flush spray equipment periodically during the day.

STAGE	TIME
Touch dry	2 h
Overcoat - coat 2	4 - 5 h (once coat 1 has hardened)
Hard dry	24 h
Minimum overcoating with other coatings	48 h
Cure before immersion	2 days
Cure before tiling	5 days*

*24 h on dry substrates in favourable conditions. Higher temperatures reduce sag resistance and speed cure.

- SITE CONDITIONS

5 - 35°C

Surface & ambient. Do not apply below +8 °C.

≤85% RH

No lower humidity limit.

20 min

Pot life at 25 °C.

60 / 55°C

Temperature resistance, dry / wet continuous.

- SUBSTRATE PREPARATION

- Apply below +8 °C, in direct sunlight or strong wind
- Expose to rain within 48 h - cover against rapid evaporation in hot, dry or windy weather
- Add water to the mix, or mix by hand
- Allow direct contact with chlorinated pool water - overcoat with AquaSport Epoxy or AquaSport Chlor Rubber lining
- Treat it as a vapour barrier - it may transmit vapour tension to coatings applied over it
- Omit corner fillets in tanks, pools and roof applications

Wet cement is highly alkaline. Component A contains cement and can cause irritant or allergic reactions and eye damage in contact with sweat or body fluids. Wear gloves and goggles; wash immediately with plenty of water on contact and seek medical attention. Refer to the Safety Data Sheet before use - it takes precedence over this document.

PERFORMANCE & COMPLIANCE

TESTED, NOT CLAIMED

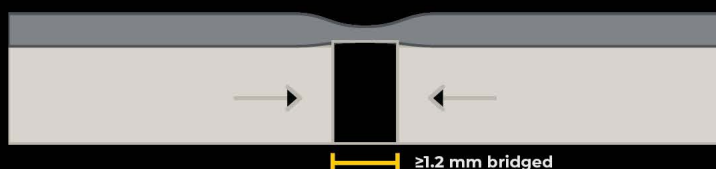
EN 14891 LIQUID-APPLIED WATERPROOFING UNDER CERAMIC TILING - 2007

CHARACTERISTICS	RESULTS	BASIS
Water tightness	Watertight	5 bar reinforced · 1.5 bar unreinforced
Crack bridging, standard conditions	≥1.2 mm	Reinforced, ≥0.75 mm unreinforced
Crack bridging at -5 °C	≥0.75 mm	Reinforced
Crack bridging at -20 °C	≥0.75 mm	Reinforced
Initial (dry) tensile adhesion	≥0.5 N/mm²	
Wet adhesion	≥0.5 N/mm²	
Heat-ageing adhesion	≥0.5 N/mm²	
Freeze / thaw adhesion	≥0.5 N/mm²	
Adhesion after contact with lime water	≥0.5 N/mm²	
Adhesion after contact with chlorine water	≥0.5 N/mm²	Reinforced
Temperature resistance	60 °C / 55 °C	Dry / wet continuous

Reinforced results are achieved with LEAKSEAL® Glass Fibre Net (150 - 160 g/m²) embedded into the first coat.

- THE MEMBRANE NECKS DOWN, BUT STAY CONTINUOUS

Reinforced, to EN 14891 - and ≥0.75 mm still held at -5 °C and -20 °C


 PERFORMANCE IN POTABLE WATER

The raw materials have been WRAS-tested at 55 °C and passed the approval for drinking water. CemLastic is non-toxic to fish when fully cured.

- Appearance of the test water - colour and turbidity
- Cytotoxicity - extraction of substances harmful to health
- Microbial growth - growth of aquatic micro-organisms
- Extraction of metals - leaching of metal particles
- Odour and flavour - does it taint drinking water?

Condition the water before introducing fish. Immersion after 48 h cure plus a high-pressure rinse to remove surface alkalinity.

- COMPOSITION & PHYSICAL DATA

Composition	Polymer-modified, natural-cellulose-fibre-reinforced cementitious slurry - 2K
Mass/ volume solids	85.4% / 73.1%
Density - powder	2.675 kg/L
Density - liquid	0.986 kg/L
Density - mixed	2.050 kg/L
Mixing ratio by weight	2 powder : 1 liquid
Application	Trowel, block brush, roller or mortar-spray (min 2 mm per sprayed layer)

- SPECIFYING THE REINFORCEMENT

Rows marked Reinforced are achieved with LEAKSEAL® Glass Fibre Net embedded in the first coat. Specify the net wherever the 5 bar or ≥1.2 mm figures are being relied on.

- ARCHITECT'S SPECIFICATION - COPY & PASTE

To water-retaining structures and under-tile decks, apply **LEAKSEAL® CemLastic** polymer-modified fibre-reinforced cementitious waterproofing slurry in two coats to the specified thickness (under-tile 2.0 mm; tank linings 3.0 mm with glass fibre mesh embedment and coved fillets to all internal corners), as manufactured by Specialized Coating Systems (Pty) Ltd www.speccoats.co.za · +27 11 552 0300. Tested to EN 14891:2007 - watertight to 5 bar reinforced, crack bridging ≥1.2 mm; complies with the WRAS approval for drinking water. For tiled decks, bed LEAKSEAL® Sealing Membrane into the second wet coat and tile directly with a C2-class adhesive and CG2 grout; movement joints sealed elastically.

2K CEMENTITIOUS WATERPROOFING

LEAKSEAL® CEMLASTIC

GET IN TOUCH

NATIONAL CALL CENTRE

086 137 2468

EMAIL

enquiries@speccoats.co.za

INTERNATIONAL TO SOUTH AFRICA

+27 11 552 0300

WEBSITE

www.speccoats.co.za



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INFO

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All products shall be applied according to the instructions and within the application parameters given on the Speccoats™ Technical Data Sheet for each product — the TDS governs in any conflict. Expected durability is the time to first major maintenance per ISO 12944-1:2017 and is not a guarantee.