

TechCrete 2500 Watertite System is an enzyme modified subsurface membrane waterproofing system designed for concrete and masonry structures. Unlike traditional sealant and coating methods, TechCrete 2500 penetrates the surface to create a subsurface membrane barrier against water, chemical, and environmental contaminants. TechCrete's technology uses an enzyme-based formula that reacts with calcium inside the concrete to form a flexible, vapor-permeable gel, which fills cracks and pores. This gel can seal existing cracks up to 2.0 mm and future cracks up to 1.5 mm.

TechCrete's formula is autogenous, protecting new hairline cracks as they happen. With its ability to seal cracks, resist damage, and offer long-term protection, the TechCrete 2500 System can replace traditional coatings and membranes.

KEY BENEFITS

- Trafficable once dry
- Seals existing cracks up to 2.0 mm
- Seals future cracks up to 1.5 mm
- Non-hazardous and NSF / ANSI 61 Certified
- Does not change aesthetic appearance
- Long-term performance without reapplication
- No Maintenance Required for Most Applications

SYSTEM COMPATIBILITY

TechCrete 2500's Watertite System is designed to be complemented with enDuratite and ACRtec Products only. Only Alchemco Branded products and accessories are to be used within a TechCrete Watertite System. TechCrete Watertite systems may require the use of the following products for proper waterproofing and warranty recognition:

TechCrete Waterproofing Admix	ACRtec Emulsifying Cleaner
ACRtec Surface Accelerating Agent	ACRtec Rust Converter & Inhibitor
ACRtec NC100 Surface Accelerating Agent	enDuratite Plug
ACRtec Crack Accelerating Agent	enDuratite Foundation
ACRtec L43 Crack Filler	enDuratite Repair Grout
ACRtec Polyseal Sealant S+	enDuratite Mlastic
ACRtec PU24 Elastomeric Sealant	enDuratite CemCoat
ACRtec PolyMembrane Flashing	enDuratite E-Series Waterstops
ACRtec PU44 Liquid Flashing	enDuratite Bentonite Waterstops
ACRtec Concrete & Masonry Cleaner	enDuratite M35 Seal Tape
ACRtec Concrete & Masonry Etch	enDuratite Expansion Joint Systems

PRODUCT PROPERTIES

- Colorless, clear to slightly opaque, odorless, soapy feel
- Non-toxic & Biodegradable
- Percent non volatile solids 26.55%
- Specific gravity at 77°F (25°C) : 1.21
- Flash point - no true flash - boils at 214°F (101°C)
- Auto-ignition temperature - N/A Non-explosive
- pH 11.51

PERFORMANCE CHARACTERISTICS

- Non Volatile Content (26.55%-27.7%) **ASTM D1644**
- Density - Specific Gravity 1.21 **ASTM D1475**
- Scaling Resistance - Light to Moderate **ASTM C672**
- Water Penetration - Passed **TAS 112**
- Chloride Ion Penetration - Passed **AASHTO T 259**
- Drinking Water System Components **NSF/ANSI 61**
- Flash Point - >1400°F **ASTM D93**
- Fire Resistance Class A: 0ft **ASTM E108**
- Wind Uplift - -858.0 psf (-40.0kPa) **TAS 114**
- Viscosity - Sp Gr. 20 centipoise **ASTM D2196**
- Freeze/Thaw 23% durability increase **ASTM C666**
- Chloride Content 0.21% **ASTM C1218**
- Vapor Permeance 3.46 perms **ASTM E96**
- Chemical Resistance **ASTM D1308-20**

Hydrochloric Acid 31%	No discoloring
Sulfuric Acid 15%	No discoloring
Sodium Hydroxide 34%	Unaffected
Ammonia Hydroxide	Unaffected
Orange Dye	No Permanent Stain
Blue Dye	No Permanent Stain
Gasoline	No reaction, No stain
Grease	No reaction, No stain
Motor Oil	No reaction, No stain
Penetrating Oil	No reaction, No stain
Carbon Tetrachloride	No reaction, No stain
Varsol	No reaction, No stain

- SLIP RESISTANCE **CAN2-75.1-M77**

	Untreated	Treated
Rubber (dry)	.70	.73
Rubber (wet)	.76	.80
Leather (dry)	.63	.51
Leather (wet)	.66	.81



TECHNICAL DATA SHEET

APPLICATION

Performance Timeline

TechCrete 2500 utilizes a enzyme modified, gel-forming technology to stop water penetration. The chemical reaction creating this barrier is catalytic in nature and may require 3-5 days to reach full water stopping capabilities; yet it is still trafficable once dry. Full waterproofing should not be expected until complete gel formation has been achieved.

NOTE: Any Alchemco System products should only be applied when the surface temperature is +50°F (+10°C) and rising or +100°F (+38°C) and falling.

Application Rates

Coverage rate:

900 - 1,000 ft² / 5 gallon pail

84 - 93 m² / 20 liter pail

9,900 - 11,000 ft² / 55 gal drum

920 - 1,022 m² / 208 liter drum

TechCrete 2500 must be applied to a clean, dry, dust-free concrete surface. A minimum of 14 days for new concrete application. If concrete requires cleaning, ACRtec concrete cleaning products must be used.

NOTE: All ACRtec cleaning products have been thoroughly tested to ensure that they will not contaminant or cause issues with the application of the waterproofing system. If cleaning is required then Alchemco ACRtec cleaning products should be used to ensure proper issuance of applicable warranty.

Waterproofing should be applied using a low-pressure pump style sprayer, backpack sprayer, drum style sprayer, a roller or a standard paint brush. A fan or cone style sprayer tip is best for the application of the product. It is highly recommended that separate spray units, brushes, and rollers be used for the waterproofing agent application, Crack Accelerating Agent, and Surface Accelerating Agent. **DO NOT MIX THESE PRODUCTS TOGETHER** this will induce the products reactive properties and will cause problems with application equipment.

1. Treat any cracks that may have occurred. Cracks are to be flooded with TechCrete 2500 Waterproofing Agent. If working on split slabs, through cracks and metal pan decks, apply Crack Accelerator to the cracks in approximately 8 to 10 minutes.

Cracks greater than 5/64" (2.0mm) may be flooded twice.

2. Once all cracks have been properly flooded, begin applying TechCrete 2500 Concrete Waterproofing Agent to the entire concrete surface area. Product shall be sprayed onto the concrete surface to the point of saturation but not to the point of pooling. Spraying must constantly be watched to ensure proper amount of material is being applied. Absorption rates vary on the concrete within the same project. (See Application Rates).

3. Once all surfaces have been sprayed, allow to absorb into the concrete, up to one (1) hour, but not more than two (2) hours.

4. When touch dry (After 1 to 2 hrs), apply water to the entire working surface at the same rate as TechCrete 2500. Water will assist the waterproofing agent to penetrate the surface. Allow to absorb overnight.

5. Application of the ACRtec Surface Accelerating Agent or ACRtec NC100 Accelerating Agent can begin the next day. Both accelerating products are designed to expedite the reactive process within the concrete.

6. Applying the ACRtec Surface Accelerator Agent or ACRtec NC100 Accelerating Agent shall be applied at the same rate as the TechCrete 2500.

7. After applying the accelerating product, allow to absorb for approximately 1 to 2 hrs. Once touch dry, apply water to the working area at the same rate as the accelerating agent and allow to absorb until dry.

8. All detailing work may begin once the watering process has been completed. Please visit Alchemco.com to download the complete installation guideline, and maintenance manual if required or email technical@alchemco.com

NOTE: For vertical application two (2) passes of TechCrete 2500 SHALL be applied

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APPLICATION WARNING

None of the system products should be applied when the surface has a temperature 50°F (+4°C) or lower and 100°F (+38°C) or higher!

CONTACT THE TECHNICAL DEPARTMENT FOR:

Special instructions and supervision for application of products when the surface temperature is lower than 50°F (+4°C)! Application should NEVER occur when surface temperature is greater than 100°F (+38°C)!

Surface temperature should be confirmed with use of a infrared handheld thermometer. Temperature should be verified regularly through out the application process.

PACKAGING

The following product is available in the following sizes;

TechCrete 2500

- 5 gallon pails (20 liters)
- 55 gallon drums (208 liters)
- 275 gallon Tote (1041 liters)

Warranty

Labor and Material Warranties are available for TechCrete Watertite Systems. For additional information about the Alchemco system specifications or available warranties, either contact your local

Alchemco distributor or Alchemco's Technical Department at technical@alchemco.com or call 800-610-2895.



SHELF LIFE & STORAGE

TechCrete 2500 Waterproofing Agent has no known limit to shelf life. Keep container sealed and avoid prolonged exposure to direct sunlight. Always agitate drum or container before use. See Technical Documents for all products used within the system for storage and shelf life.

LIMITATIONS

TechCrete 2500 not suitable for sealing cracks in concrete in excess of 5/64" in width, expansion joints or control joints. All cracks greater than 5/64" in width and control joints must be sealed with one of the ACRtec elastomeric sealants.

Safety

For Safety precautions please refer to the Safety Data Sheet(SDS) for this product. More information can be found at www.alchemco.com/data-sheets or by calling Alchemco's Technical Team at +1.800.610.2895

WARNINGS



IF SWALLOWED: Call a doctor if you feel unwell. Rinse mouth.
KEEP OUT OF REACH OF CHILDREN.
CHEMTREC 1.800.424.9300
Poison Control 1.800.222.1222



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