

AQUASTOP T 50

THREE-COMPONENT EPOXY-CEMENT WATERPROOFING COMPOUND UNDER NEGATIVE THRUST FOR DAMP SUBSTRATES

Ideal for waterproofing and smoothing damp substrates before polyurethane coating applications.



AQUASTOP T 50 is a thixotropic three-component epoxy-cement waterproofing compound based on special resins, cementitious binders and selected aggregates, that provide this product with exceptional resistance to negative pressure, to continuous contact with moisture, to water seepage and salts.

AQUASTOP T 50 creates a waterproof coating even if subjected to negative hydraulic thrust, it is ideal for preparing and reconditioning damp substrates. The coatings made with **AQUASTOP T 50** feature an excellent physical-chemical resistance to the freeze-thaw cycles and a good ductility.



FLOORING LINE

CHEMICAL BARRIERS FOR WATERPROOFING IN NEGATIVE THRUST

BENEFITS

AQUASTOP T 50 is an epoxy-cement waterproofing compound for damp substrates. Specific product features:

- ✓ **HIGH WATERPROOF EVEN UNDER COUNTERTHRUST:** AQUASTOP T 50 features an excellent resistance to both positive and negative hydraulic pressure, it also prevents rising damp infiltrations.
- ✓ **HIGH ADHESION TO THE SUBSTRATES, EVEN WHEN DAMP:** AQUASTOP T 50 provides superior adhesion to concrete and cement materials in general, even in the presence of moisture.
- ✓ **WATERPROOF AND BREATHABLE:** AQUASTOP T 50 is impermeable to water and allows the disposal of any residual moisture in the substrate.
- ✓ **ANTI-SALT ACTIVITY:** AQUASTOP T 50 effectively resists saline aggression by acting as a barrier against rising saltpetre.
- ✓ **EASY LAYING:** AQUASTOP T 50 is quick and easy to apply by spatula even at low temperatures thanks to its high setting speed.



ALSO AVAILABLE IN THE VERSIONS:

AQUASTOP T: thickness up to 0.5 mm

AQUASTOP T 100: thickness 1.2+2.5 mm

AREAS OF APPLICATION:

- ✓ Chemical barrier against rising damp and for smoothing damp substrates in DRACOFLOOR systems.
- ✓ Restoration, waterproofing and blockage of infiltrations and counter-thrust moisture in walls against the ground, basements, garages, elevator pits and underground premises.
- ✓ Blockage of humidity in negative pressure.
- ✓ Renovation and protection of damp substrates with rising damp in vertical and horizontal surfaces before any resin cycle.
- ✓ Rigid coating and waterproofing of tanks, canalisations and concrete surfaces in contact with water.
- ✓ Moisture and saltpetre encapsulating treatment in damp walls before the application of dehumidifying plasters.
- ✓ Base coat for in the coating cycle for tanks of biogas plants.



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SUBSTRATE PREPARATION

CLEANING

- ▶ **Remove all loose concrete parts** from the area concerned with the restoration work, including grout laitance and mortars containing lime, by removing them to obtain aggregate or exposed masonry;
- ▶ **Remove stains, efflorescences, residues** of oil, grease, varnish, dust, dirt or any residues that may cause flaking.

PREPARATION

- ▶ **Roughen the substrate** with mechanical means such as bushing hammers, chiselling machines or hydro-demolition (the latter does not cause damages to the substrate and is recommended for large surfaces), by reaching the healthy and mechanically resistant substrate to facilitate adhesion between AQUASTOP T 50 and the substrate.
- ▶ On healthy and compact substrates it is sufficient to dampen the substrate before the application of **AQUASTOP T 50**.
- ▶ If the substrate is particularly incoherent or porous, proceed with a deep-penetrating and consolidating treatment with WEPOX PRIMER applied by brush or roller.

MIX PREPARATION

AQUASTOP T 50 is a three-component product (A+B+C).

Mixing must be carried out carefully by using a low-speed mixer to avoid dragging air bubbles into the mix.

Mix component A to component B by using a mechanical stirrer to obtain a uniform mix. Gradually add component C (powder) and keep on mixing for about 5 minutes, until reaching complete homogenization of the mix.

For a proper use of **AQUASTOP T 50** always comply with the suggested mixing ratio not to affect the polymerization reaction. The product keeps its workability for about 40 minutes (at +20°C).

HOW TO USE

INSTALLATION

Apply **AQUASTOP T 50** on the surface adequately prepared as described above by spatula, taking care to distribute the product evenly. Application temperature shall not be less than +5 °C. Once the first coat of **AQUASTOP T 50** has hardened, apply a second coat of product criss-crossing the coats. Wait about 24 hours (depending on environmental conditions) before walking on the surface or applying another coating.

FINISHING

AQUASTOP T 50 thanks to its high abrasion resistance and to its attractive finish, may be left exposed. Moreover, on the final layer of **AQUASTOP T 50** it is possible to apply a protective coating based on polyurethane or epoxy resins, by previously sandpapering and applying the relevant adhesion promoter.

PRECAUTIONS

Operating temperature range: from +5°C to +35°C. In case of application at low temperatures, it is recommended to store the two resin components (A and B) in heated environment during the 36 hours preceding the application. Indoor applications require adequate ventilation. Do not use on substrates with dynamic fissures. In this case contact our technical-commercial office.

Safety: **AQUASTOP T 50** component A is irritating as it contains epoxy resins; component B is also irritating as it contains polyamines; component C is irritating too as it contains hydraulic binders.

PACKAGING AND STORAGE

AQUASTOP T 50 is packaged in:

1 kg pail + 5 kg pail + 12 kg bag = (A+B+C) 18 kg

If the product is stored properly in its original packaging, indoors in a dry location, it maintains its original features for one year.



PRODUCT FEATURES

APPEARANCE	Liquid (A and B) and Powder (C)
COLOUR	Clear (A), White (B) and Grey (C)
DENSITY - EN ISO 2811	Component A: 1.03 kg/l approx. \pm 0.03 Component B: 1.23 kg/l approx. \pm 0.04
VISCOSITY - EN ISO 3219	Component A: approx. 700 mPa·s Component B: approx. 1000 mPa·s
DRY MATTER CONTENT - EN 480-8	Component A: about 52% Component B: about 37%
MAXIMUM SIZE OF THE AGGREGATE - EN 1015-1	0.4 mm
STORAGE PERIOD	12 months

APPLICATION DATA

COLOUR OF MIX	Grey
MIXING RATIO	A : B : C = 1 : 5 : 12
DENSITY OF MIX	1.76 kg/dm ³ \pm 0.05
APPLICATION TEMPERATURE RANGE	from +5 to +35°C
WORKABILITY TIME	approx. 40 minutes at (+20°C and 50% R.H.)
WAITING TIME BETWEEN COATS	min 6 hours / max 24 hours depending on the substrate temperature and humidity
WALKABILITY	4-6 hours depending on the substrate temperature and humidity
CONSUMPTION	<ul style="list-style-type: none"> • approx. 1.76 kg/m² per mm of thickness • approx. 0.45 ÷ 0.60 kg/m² (per coat) • approx. 1.2 kg/m² (recommended minimum) • approx 1.76 kg/m² (recommended minimum used as waterproofing coating under negative thrust)

Times can vary depending on the substrate temperature and on the thermo-hygrometric environmental conditions.

The above values are indicative and calculated at a temperature of +20°C and relative humidity of 65%.

PERFORMANCE CHARACTERISTICS +20°C - 50% R.H. - thickness 1 mm

FEATURE	TEST METHOD	Minimum requirements EN 1504-2	PERFORMANCE REQUIREMENTS
ADHESION TO CONCRETE substrate MC (0.40) as per UNI EN 1766 – after 28 days at +20°C - 50% R.H.:	UNI EN 1542	≥ 1.5 MPa	2.65 MPa at 20°C
ADHESION ON WET CONCRETE	UNI EN 13578	≥ 1.5 N/mm ²	> 1.5 N/mm ² at 20°C
COMPRESSIVE STRENGTH after 28 days	UNI EN 12190	class I or II	class I 40 MPa
CAPILLARY ABSORPTION AND IMPERMEABILITY TO WATER	UNI EN 1062-3	$w < 0.1 \text{ kg/m}^2 \times \text{h}^{0.5}$	$w < 0.1 \text{ kg/m}^2 \times \text{h}^{0.5}$
PERMEABILITY TO WATER VAPOUR: -equivalent air thickness S_D (m):	UNI EN 1062-3	class	Classe I - $S_D < 5 \text{ m}$ (permeable to water vapor)
THERMAL COMPATIBILITY Freeze-thaw cycles by immersion in de-icing salts	UNI EN 13687-1	no swelling, cracking and delamination	no swelling, cracking and delamination > 1.8 N/mm ²
THERMAL COMPATIBILITY Thunderstorm cycles (thermal shock)	UNI EN 13687-2	Direct tensile strength test:	
THERMAL COMPATIBILITY Thermal cycles without immersion in de-icing salts	UNI EN 13687-3	for rigid systems with traffic: ≥ 1.5 N/mm ²	
REACTION TO FIRE after the application:	UNI EN 13501-1	Euroclass	Classification $B_{fl} S_1$
PERMEABILITY TO CARBON DIOXIDE (CO₂) - diffusion in equivalent air thickness S_D :	EN 1062-6	$S_D > 50 \text{ m}$	> 50 m
RESISTANCE TO POSITIVE HYDRAULIC PRESSURE (500 kPa for 72 hours)	UNI EN 12390-8	-	no permeation
RESISTANCE TO NEGATIVE HYDRAULIC PRESSURE (250 kPa for 72 hours)	UNI 8298-8	-	no permeation

Legal notice - SLCMP version dated 01.03.2017

In the technical specifications herein, Draco Italiana s.p.a. used the indicators therein specified, with the relevant standards.

Please check if this Sheet and the figures therein contained apply to the product batch you are interested in or if they have been overridden by any later release. If in doubt, check whether this Sheet matches the one applicable at the time of finalising the sales agreement, at www.draco-edilizia.it, and/or contact our Engineering Department.

No advice provided by our staff, either verbally or in writing at your request, about the potential applications of the Products shall be binding under the sales agreement or shall be considered an integral part of the agreement. Such advice is based on our experience and on the best available practical and/or scientific knowledge; as such, it shall not be binding or conditional on the buyer or user. Please try our products first to find out whether they are fit for your intended use or application; in any case, you shall be solely responsible for your choice.