Water-based monocomponent for fast waterproofing.

Ready-to-use liquid waterproofing based on elastomeric resins, for outdoors applications even under rigid environmental conditions, such as low temperatures and high relative humidity. Acriflex Rapido is flexible, and after a few hours from the application it is resistant to crack bridging and water stagnations. This product is also suitable for encapsulation of cementasbestos (Eternit) according to current regulations.

#### **BENEFITS**

- Water-repellent. Allows waterproofing with small thicknesses.
- Fast filming (20 minutes), even in conditions of low temperature and high humidity. Applicable with temperatures up to 1°C (+34°F) and relative humidity up to 98%.
- Tiles can be attached directly to Acriflex Rapido, in accordance with EN 14891.
- Flexible at low temperatures.
- Achieves a continuous layer without joints and also adapts to complex support aeometries.
- Resistant to UV rays, atmospheric agents, industrial environments and seaside areas.
- Excellent ability to consolidate and secure asbestos fibres.
- Normal activities inside the building can be carried out during the reclamation phase.
- Solvent free product.
- Ready-to-use, easy and quick to apply.

#### **YIELD**

2.0 kg/m<sup>2</sup> (0.41 lb/ft<sup>2</sup>) in 2 coats if used as waterproofing.

1.0 kg/m<sup>2</sup> (0.21 lb/ft<sup>2</sup>) in 2 coats if used for asbestos encapsulation.

## **COLOUR**

White and grey.

#### **PACKAGING**

available on www.diasen.com

20 kg (44.09 lb) plastic bucket. Pallet: n° 48 buckets (960 kg – 2116.44 lb).

# Waterproofing - Liquids

#### **APPLICATION FIELDS**

Acriflex Rapido is suitable for waterproofing flat or inclined concrete sheds, roofs, terraces, balconies, flashings, eaves, cornices, chimneys, foundation walls, fibrocement slabs, and also for indoor environments such as bathrooms, shower cubicles, kitchens and wet areas.

The product is also suitable for waterproofing and restoration of smooth bituminous or slated membranes in combination with the SBS-bond primer (see technical data sheet) in relation to the condition of the membrane itself.

Acriflex Rapido can be applied on existing floors or metal surfaces in combination with the product Grip Primer (see technical data sheet).

Acriflex Rapido is also suitable for waterproofing wooden surfaces, and for the encapsulation of asbestos according to art. 2 of D.M. 20/08/1999 and s.m.i. and UNI 10686.

Specifically, for the encapsulation of:

- type A outdoor;
- type B visible for indoor use;
- type C not visible.



















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#### **STORAGE**

The product must be stored in its original containers well closed, in well ventilated areas, away from sunlight, water and ice, at temperature between +5°C (41°F) and +35°C (95°F). Storage time: 12 months.

#### PREPARATION OF SUPPORT

The substrate must be completely hardened and have sufficient strength. The surface must be thoroughly cleaned, dry, free of oils, fats, brittle and inconsistent parts or other materials which may affect the adhesion of the product. In cases where the surface is generally friable, it shall be fully discharged until good support is obtained and lesions or degraded parts with suitable mortar restored. Any moisture present in the support and the vapour produced by irradiation may affect the adhesion of the products applied. In case of hydro-cleaning, wait for the complete drying of the support.

#### Concrete

In the case of newly built concrete bottom, it must be sufficiently cured.

If any injury, hole or irregular area is presents, restore it with suitable cement mortar.

For a better adhesion on smooth, non-wet concrete it is recommended the use of *Grip Primer* (see technical data sheet).

On moist supports, in order to avoid blistering or detachment phenomena, use *Vapostop* (see technical data sheet) as a primer. If the support is subject to rising humidity, it is necessary to use *WATstop* (see technical data sheet). *WATstop* can also be used to fill small cracks. On rough concrete use *Vapostop* (see technical data sheet) as primer.

#### Bituminous or slated membrane

Verify that the membrane has been applied at least 6 months earlier, the to avoid detachments caused by the release of oils. Make sure that the overflights are well attached, in case of

detachments, strengthen them with hot systems. Restore any cuts or holes, if present. Carefully clean the sheath by removing any paints or protective layers that are not well adhered. Design the installation of special ventilation chimneys suitably dislocated on the membrane, according to the humidity of the background. This step is essential whenever there is the presence of very absorbent supports retaining moisture, such as screed lightened with polystyrene or expanded clay. The conduits must be primed with the product SBS-bond (see technical data sheet). In case of damaged membrane, restore it with a sandwich-type system (Acriflex Rapido + Polites TNT + Acriflex Rapido) after priming the surface. The sandwich system shall be used at the overflows and points where the membrane is most stressed.

#### Smooth or tiled surfaces

Ensure that the tiles are well attached to the support otherwise remove them and restore them with suitable cement mortar. The tiled surface must not contain traces of release substances such as fats, waxes, oils, chemicals, etc.

After thoroughly cleaning the support, the surface must be treated with *Grip Primer* (see technical data sheet). To fill the joints between the tiles and create a perfectly levelled surface, apply *WATstop* (see technical data sheet). *WATstop* should also be used if the support is moist or affected by rising humidity. Given the wide variety of tiles on the market, it is recommended to perform a test to verify the perfect adhesion of the system.

#### **Metallo**

Thoroughly clean the surface eliminating dirt, and any paints not well adhered. Before proceeding with the application of *Acriflex Rapido*, prime the metal surfaces with *Grip Primer* (see technical data sheet). If the metal surface is painted, it is recommended to perform a test to verify the perfect adhesion of the system.

For media not present in the technical sheet contact the technical office Diasen.

## **WATERPROOFING** - liquids

technical sheet available on www.diasen.com





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## **Treatment of expansion joints**

Before proceeding with the waterproofing operation, it is necessary to predispose special expansion joints at regular intervals.

This type of joints subdivides the screed surface into smaller dimensions surfaces of that allow differential movements caused by variations in environmental conditions and by phenomena related to the maturation of concrete. The joints must be executed to rule of art to avoid water infiltration. It will be the responsibility of the designer to evaluate the size of the areas, and the methods of realization of the joints according to the conditions of the support. The joints must be filled with the polyurethane sealant Diaseal Strong (see technical data sheet). In the corner wall-floor, use Diaseal Strong to create a continuous curved surface. After the complete drying of the sealant, the conjunctions shall be waterproofed with Safety Joint Roll (see technical data sheet) impregnated with Acriflex Rapido, applied with a brush creating a rounded angle. All those points of contact with the thresholds of doors and windows should also be treated with Diaseal Strong sealant.

## **MIXING**

Acriflex Rapido is ready to use. Before application it is recommended to mix it to make the product homogeneous. In extremely hot weather conditions, it is possible to add 5% clean water and continue mixing. Do not add other substances to the product.

# **APPLICATION**

- Wait for the complete drying of the primer used, then apply a first layer of Acriflex Rapido with short-haired roller, smooth steel spatula, water squeegee, airless or brush.
- Once the first layer has dried, apply a second one to cross covering the surface. In case of rain on product not perfectly dry, carefully check the suitability for the next coating.

- **3.** Proceed with the application in successive layers until the expected yield and a minimum total thickness of 1.5 mm is reached, thus ensuring waterproofing.
- 4. After drying, Acriflex Rapido can be covered with tiles. Attach the tiles to Acriflex Rapido with a C2 class cement adhesive or one at superior class, with improved performance. Before laying the tiles wait about 48 hours (at 23 °C / +73.4°F and 50% relative humidity).

## Asbestos encapsulating system

All operations of the encapsulating cycle must be carried out in compliance with current regulations.

- **1.** To impregnate the surface, apply an *Acriflex Primer* coat, by short-haired roll or airless (see technical data sheet).
- **2.** Once the primer is completely dry, apply a first coat of *Acriflex Rapido* by roll, airless, brush or water squeegee. In case of rain, please verify the effective drying of the product before moving to the next coat.
- 3. Apply a second coat with the same method, crossing the coats and taking care to completely cover the entire surface. In order to ensure a total coverage of the support, apply two layers of contrastingcoloured paints.

Depending upon to the type of intervention, thicknesses required by current legislation must be achieved:

- Type A average total thickness = 0.3 mm; minimum thickness = 0.25 mm (0.0098 in).
- Type B average total thickness = 0.25 mm; minimum thickness = 0.20 mm (0.0078 in).
- Type C average total thickness = 0.20 mm; minimum thickness = 0.20 mm (0.0078 in).

## **DRYING TIME**

At 23°C / +73.4°F and 50% relative humidity, the product completely dries in about 4 hours.

## **WATERPROOFING** - liquids



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- After 20 minutes from application, the product resists superficial bleaching and wrinkling phenomena caused by high relative humidity, fog and dew.
- The drying times are influenced by the relative humidity of the environment, the temperature and may vary also in a significant way.
- If applied in higher yields than expected, the drying time could significantly increase.

When *Acriflex Rapido* is dry, it can be left exposed, or can be made for pedestrians or nonslip by applying *Floorgum Paint* (see technical data sheet).

#### **SUGGESTIONS**

- Over time, the appearance of the first layer tint indicates the need to restore the encapsulating cycle.
- Do not apply with environmental temperatures or support temperatures lower than +1°C (+34°F) and higher than +35°C (+95°F).

- During summer season apply the product in the cooler hours of the day.
- Do not apply with imminent threat of rain or frost, with dense fog condition or relative humidity of 70% or more.
- Protect the product from pouring rain until it is completely dry.
- Before applying the product, is recommended to cover every element that must not be treated.

## **CLEANING**

The equipment used can be washed with water before curing the product.

#### **SAFETY**

During handling, always use personal protective equipment and follow the product safety data sheet.





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\* The above data, even if carried out according to regulated tests are indicative and they may change when specific site conditions vary.

# **Technical data\***

100mmour adda					
Features					Unit
Yield	in 2 coats for waterproofing				
	2.0	kg/m²	0.41	lb/ft²	kg/m²
	in 2 coats for asbestos encapsulation				lb/ft <sup>2</sup>
	1.0	kg/m²	0.21	lb/ft²	
Aspect	semi - dense				-
Colour	white and grey				-
Minimum thickness of fresh product	1.5				mm
		in			
Waiting time between $1^{st}$ and $2^{nd}$ coat $(T = +23^{\circ}C / +73.4^{\circ}F; R.H. 50\%)$	4				hours
Application temperature	+1 / +35				°C
		°F			
Drying time (T=+23°C / +73.4°F; R.H. 50%)	4				hours
Storage	12				months
Packaging	20 kg (44.09 lb) plastic bucket				kg

<sup>\*\* 1680</sup> of weathering test is equal to about 10 years. This equivalence is merely indicative and it may change according to climate conditions of the place where the product will be applied.

Final performances**		Unit	Regulation	Result	
Water impermeability	Test passed	-	EOTA TR 003 EN14891	waterproof	
Wash-out resistance (up to 1 °C with 98% di R.H.%)	20	min	Internal method	-	
Break Elongation	160 + 10	%	ISO 527-1	-	
Load resistance	1.4 + 0.5	MPa	ISO 527-1	-	
Adhesion test – direct traction on concrete	0.536	N/mm2	UNI EN 1542	Break type A/B	
	77.74	lbf/in2	ASTM D4541		
Weathering Test	1680 hours (10 years*)	hours	UNI EN ISO 11507	-	
Viscosity at 23°C / 73.4°F	20000 + 5000	cPs	UNI EN ISO 2555	-	
Dry extract	74 <u>+</u> 2	%	UNI EN ISO 3251	-	

## **WATERPROOFING** - liquids



Indoor Air Quality (AIQ) Certification					
Evaluation of the results					
Regulat	tion or protocol	Version of regulation or protocol	Conclusion		
French '	VOC Regulation	Decree of March 2011 (DEVL1101903D) and Arrêté of April 2011 (DEVL1104875A) modified in February 2012 DEVL1133129A)	ÉMISSIONS DANS L'AIR INTÉRIEUR'  A+ A B C		
French (	CMR components	Regulation of April and May 2009 (DEVP0908633A and DEVP0910046A)	Pass		
Italian C	AM Edilizia	Decree 11 October 2017 (GU n.259 del 6-11-2017)	Pass		
AgBB/ABG		Anforderungen an bauliche Anlagen bezüglich des Gesundheitsschutzes, ABG May 2019, AgBB August 2018	Pass		
Belgian	Belgian Regulation Royal decree of May 2014 (C-2014/24239)		Pass		
EMICO	EMICODE April 2020		EC 1 PLUS		
Indoor A	Indoor Air Comfort® Indoor Air Comfort 7.0 of May 2020		Pass		
Indoor A	Indoor Air Comfort GOLD® Indoor Air Comfort GOLD 7.0 of May 2020		Pass		
		DE-UZ 113 for "Low-Emission Floor Covering Adhesives and other Installation Materials" (Version January 2019)	Pass		
BREEA	BREEAM International BREEAM International New Construction v2.0 (2016)		Exemplary Level		
BREEA	BREEAM® NOR BREEAM-NOR New Construction v1.2 (2019)		Pass		
LEED® "Low-Emitting Material" according to the requirements of LEED v4.1		Pass			
CDPH	Classroom scenario	CDPH/EHLB/Standard Method V1.2. (January 2017)	Pass		
SDITI	Office scenario	CDPH/EHLB/Standard Method V1.2. (January 2017)	Pass		













**WATERPROOFING** - liquids

