WATERPROOFING – liquid

ACRIFLEX FYBRO

Elastic fibre-reinforced cementitious liquid waterproofing

Two-component, water-based liquid and fibre-reinforced waterproofing membrane, formulated with acrylic resin and cement, to be used even in case of low temperature (+5°C/ 41°F). Suitable to waterproof terraces, flat coverings, walkable surfaces, parking lots, swimming pools, tanks, foundations, flashings, expansion joints and to restore old bituminous or slated membranes. Thanks to polypropylene fibres, it can be applied without the use of a reinforcement mesh.

BENEFITS

- High resistance to traction.
- Excellent elasticity.
- It can be applied on existing floor together *Grip Primer* (see technical data sheet).
- Tiles can be directly glued on *Acriflex Fybro*, in accordance with EN 14891.
- It can be made walkable by using *Floorgum Paint* (see technical data sheet) or suitable for vehicles transit by using *Floorgum Tyre Mono* (see technical data sheet).
- It does not need a reinforcement mesh.
- Solvent free product.
- Ready to use, easy and quick to apply.

YIELD

2.00 kg/m^2 (0.41 lb/ft^2) for 2 mm thickness.

COLOUR

Grey.

PACKAGING

25 kg (55.11 lb) plastic bucket.
Each bucket contains 2 components (A+B) already dosed, to be mixed.
- Part A = 16.75 kg (36.93 lb)
- Part B = 8.25 kg (18.18 lb)

Pallet: 48 buckets (1200 kg).

APPLICATION FIELDS

Product designed to waterproof flat or sloped coverings, terraces, balconies, eaves, flashings, cornices, foundation walls, vertical walls andtanks. *Acriflex Fybro* is also suitable to restore old bituminous or slated membranes in good conditions and to waterproof tiled surfaces. The product can be used to waterproof both outdoor (bathrooms, kitchens, shower).

STORAGE

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

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PREPARATION OF SUPPORT

The support must be completely hardened and resistant enough. The surface must be thoroughly clean, dry, well consolidated, without debris or detaching parts and perfectly levelled. Before the product application, it is recommended to cover each element that must not be coated. Potential lesions or damaged parts of the support must be restored before the application of the product. If applied on terraces or balconies, the support must have the adequate slope to allow the down flow of the water.

Concrete

In case of new realized cement substrate, this must be completely cured. Restore damaged or crumbly concrete with the ideal cement mortar. To obtain a better adhesion on non-wet smooth concrete, it is possible to use *Grip Primer* (see technical data sheet). On damp support, in order to avoid blistering or detachment phenomena, use *Vapostop* (see technical data sheet) as primer. *Vapostop* can be used on rough concrete as well. In case of rising humidity, it is necessary to use *WATstop* (see technical data sheet). *WATstop* can also be used to fill small cracks or loopholes.

Bituminous or slated membrane

Verify that the sheath has been applied at least 6 months beforehand to avoid detachments caused by the release of oils. Make sure that the overlapped parts are well attracted, and in case of detachments strengthen them with hot systems. Restore any cuts or holes, if any. Thoroughly clean the sheath by removing any paints or protective layers that are not well adhered. Depending upon the humidity of the background, provide for the installation of suitably dislocated special ventilation chimneys on the sheath. These devices are essential when dealing with very absorbent supports that retain moisture, such as screed lightened with polystyrene or expanded clay. *SBS-bond* has to be used as primer on the existing sheath (see technical data sheet) before applying *Acriflex Fybro*. In case of damaged sheath, restore it with a “sandwich system” (*Acriflex Fybro* + *Polites TNT* + *Acriflex Fybro*) after having used the ideal primer on the surface. The sandwich system shall be used at the overlapped parts and at the points where the sheath is most stressed

Smooth or tiled surfaces

Ensure that all the tiles are well attached to the support, otherwise remove and restore them with suitable cement mortar. The tiled surface must not contain traces of releasing 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 the product *WATstop* (see technical data sheet). *WATstop* should also be used if the support is damp 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.

Treatment of Expansion Joints

The joints can be treated before or after the application of the waterproofing agent. Be careful not to fill the joint with the *Acriflex Fybro* waterproofing agent. The joints must be filled with the polyurethane sealant *Diaseal Strong* (see technical data sheet).

MIXING

Using a professional mixer, carefully mix the two components (**A** + **B**) of *Acriflex Fybro* to obtain a homogeneous dough, without lumps.
In extremely hot weather conditions, a maximum of 10% of clean water can be added. Never add foreign components to the mixture.

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APPLICATION

1. Waterproof structural joints with *Safety Joint Roll* (see technical data sheet) impregnated with *Acriflex Fybro*, applied by brush, creating a tank effect.
2. Apply a first layer of *Acriflex Fybro* with either short-haired roll, squeegee, airless or brush with a thickness of about 1 mm (yield 1.00 kg/m^2 or 0.20 lb/ft^2). In case of rain over not perfectly dry product, carefully verify the suitability of the next covering.
3. When the first layer is dry, apply a second layer with a thickness of about 1 mm (yield 1.00 kg/m^2 or 0.20 lb/ft^2) avoiding to leave holes on the surface. The minimum total thickness to guarantee the waterproofing is equal to 2 mm. After it has dried, *Acriflex Fybro* can be covered with tiles. Glue the tiles onto *Acriflex Fybro* with an improved performance class C2 or higher cement adhesive. Before laying the tiles wait about 48 hours (at 23 ° C and 50% relative humidity)

Acriflex Fybro can be applied with **Graco TexSpray Mark V** airless machine. Dilute the product with 10 percent clean water, set the machine pressure to 150 bar and use nozzles 427 or 527.

DRYING TIME

At a temperature of 23°C (73 °F) and 50% relative humidity, the product dries in about 4 hours.

- Drying time is influenced by temperature and environmental relative humidity conditions and may also significantly change.
- Once *Acriflex Fybro* is dry, it can be made walkable by using *Floorgum Paint* (see technical data sheet), coated with other Diasen coating products or it can be tiled.

SUGGESTIONS

- Do not apply at environmental temperature or at support temperature lower than +5°C (41°F) and higher than +35°C (95°F).
- During summer season, apply the product in the cooler hours of the day, away from sunlight.
- Do not apply with imminent threat of rain or frost, in conditions of strong fog or with relative humidity higher than 70%.
- Wait for at least 12 – 24 hours from the application before using the product, and during this time protect it from water contact.
- Once dry, *Acriflex Fybro* must be coated or made walkable or vehicles accessible with coatings (see Diasen *Coatings)*.
- It is very important to make regular expansion joints on the screed to prevent cracks on the coating.

CLEANING

Wash tools with water before the product hardens.

SAFETY

While handling, always use personal protective equipment (PPE) and respect the instructions described in product safety data sheet

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Technical data

Features		Unit
Yield	2.00 kg/m^2 for 2 mm thickness	kg/m^2
	0.41 lb/ft^2 for 2 mm thickness	lb/ft^2
Aspect	Semi-solid	-
Colour	grey	-
Minimum thickness	2.0	mm
	0.078	in
Dilution	If necessary, max 10% of water	-
Pot life (T=23°C – 73 °F, R. H. 50%)	24 - 30	hours
Waiting time 1st and 2nd coat (T=23°C – 73 °F, R. H. 50%)	4 - 8	hours
Application temperature	+5 /+35 41/95	°C °F
Drying time (T=23°C – 73 °F, R. H. 50%)	4	hours
Storage	12 months in original packaging and dry places	months
Packaging	25 kg (55.11 lb) plastic bucket	kg

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

** 1680 hours of weathering tests correspond to about 10 years. This correspondence is merely indicative and it may change according to the weather conditions where the product will be used.

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Indoor Air Quality (AIQ) Certification		
Evaluation of the results		
Regulation 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+ A B C)
French CMR components	Regulation of April and May 2009 (DEVP0908633A and DEVP0910046A)	Pass
Italian CAM 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 Regulation	Royal decree of May 2014 (C-2014/24239)	Pass
EMICODE	April 2020	EC 1 PLUS
Indoor Air Comfort®	Indoor Air Comfort 7.0 of May 2020	Pass
Indoor Air Comfort GOLD®	Indoor Air Comfort GOLD 7.0 of May 2020	Pass
Blue Angel (DE-UZ 113)	DE-UZ 113 for "Low-Emission Floor Covering Adhesives and other Installation Materials" (Version January 2019)	Pass
BREEAM International	BREEAM International New Construction v2.0 (2016)	Exemplary Level
BREEAM® NOR	BREEAM-NOR New Construction v1.2 (2019)	Pass
LEED®	"Low-Emitting Materials" according to the requirements of LEED v4.1	Pass
CDPH – Classroom scenario	CDPH/EHLB/Standard Method V1.2. (January 2017)	Pass
CDPH – Office scenario	CDPH/EHLB/Standard Method V1.2. (January 2017)	Pass

Crack Bridging Ability		3,2	mm	ISO 5 27-1	-
Weathering Test**		1680	hours	EN ISO	-
Bend test to cold		- 26 -14.8	°C °F	ISO 1519	Resistant up to a diameter of 10 mm.
Punching resistance		68.7 7.0	N kgf	UNI 8202 ASTM D4833	-
Tensile Strength		2.37	MPa	-	-
Fire reaction		class C – s2, d0	-	EN 13501-1	-
Adhesion test for direct traction on concrete		1.089	N/mm²	UNI EN 1542	Break type A/B between support and product
Adhesion on slightly wear bituminous membrane	Adhesion Test pull – off	2.50	MPa = N/mm²	EN ISO 4624 ASTM D4541	Break type A of the support

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