LIQUID WATERPROOFING SYSTEMS

# ACRIFLEX ANTI-ROOT

*Fiber-reinforced elastic liquid waterproofing membrane anti-root*

1939236

**Fiber-reinforced liquid, two-component waterproofing membrane, antiroot. Its special formulation rejects any type of root without causing damage to plants. It does not require an additional anti-root protection and ensures a more profitable application. High resistant to wear, low and high temperatures and continuous freeze-thaw cycles and does not require periodic maintenance. The product is elastic and long lasting, it applies cold without seams or overlaps.**

## BENEFITS

- Easy and quick application.
- It allows to waterproof applying low thickness layers.
- High tensile strength.
- Excellent elasticity.
- Effective over damaged surfaces.
- It can be applied even during winter season (from +5°C).
- Once completely dry (from 30 to 180 minutes), it becomes rainproof.

## APPLICATION FIELDS

Waterproofing with remarkable anti-root properties of:

• green roofs;
• roof gardens;
• flower boxes;
• terraces;
• flat or scope roof;
• flashings, foundations and tanks;
• restoration of old bituminous or slated membranes in good condition;
• vertical jets of foundation in the presence of underground water (see *Bentotelo* and *Bentonitic Systems Diasen*).

Suitable for indoor and outdoor.

CE

**Diasen srl**
**Zona Industriale Berbentina, 5 Sassoferrato**
**ANCONA**
**14**
**UNI EN 1504-2**
**Products and systems for the protection and restoration of concrete structures – Part 2 : Concrete surface's protection system**

| | |
|---|---|
| Water vapor permeability | μ = 1736 |

## YIELD

2.00 kg/m$^2$ for 2 mm of thickness.
0.41 lb/ft$^2$ for 0.079 inch of thickness.

## COLOUR

Grey.

## PACKAGING

25 kg (55.11 lb) plastic buckets bucket, containing two (A+B) separated components.
Pallet: 48 buckets (1200 kg) (2645.28 lb).

## STORAGE

Store the product in well ventilated areas, away from sunlight and ice, at temperatures between +5°C and +35°C (+41°F and +95°F).
Storage time: 24 months.

## PREPARATION OF SUPPORT

The substrate must be completely hardened and resistant enough. The surface must be carefully clean, dry, well consolidated, without oils, greases, debris, detaching parts or any other material that might compromise the product adhesion.
When the surface is friable, scarify totally until the obtainment a good support, correct lesions or deteriorated areas with proper mortar.
The humidity on the support and the steam that creates the irradiation may compromise the adherence of the applied products.
In case of water cleaning, wait that the support is completely dry.

Per i video applicativi, la pagina del prodotto, la scheda di sicurezza ed altre informazioni.

# ACRIFLEX ANTI-ROOT

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## Technical Data

| Features | | Units |
|---|---|---|
| **Yield** | 2.00<br>0.41<br>for 2 mm (0.079 inch) of thickness | kg/m$^2$<br>lb/ft$^2$ |
| Aspect | Semidense | - |
| Colour | Grey | - |
| Mixture consistency | liquid | - |
| Pot life at 20°C, R.H. 40% | 24 - 30 | min |
| Waiting time between 1a and 2a coat (T=20°C; R.H. 40%) | 4 | hours |
| Application temperature | +5 /+35<br>+41/+95 | °C<br>°F |
| Maximum humidity | 70% | - |
| Drying time (T=20°C; U.R. 40%) | 4 | hours |
| Storage | 24 months in original container and in dry places | months |
| Packaging | 25 kg plastic bucket | kg |

| Final performances | | Units | Regulations | Results |
|---|---|---|---|---|
| Waterproofing | 9.5 | atm | UNI EN 12390-8 | waterproofing |
| Break Elongation | 336% | - | ISO EN 527-3; ETAG 005 part 8 | elastic |
| Elongation after 1000 hours of weathering test | 210% | - | - | elastic |
| Crack Bridging Ability | 3,2 | mm | - | resistant |
| Tensile Strenght | 2.37 | MPas | ASTM D2370 | resistant |
| Weathering Test | 1000 | hours | UNI 11507:2007 | resistant |
| UV rays resistance (direct exposure) | 1000 hours without remarkable changes | hours | UNI EN ISO 11507:2007 | resistant |
| After 50 freeze-thaw cycles (-15°C/+15°C) | unchanged | - | UNI EN 202 | unchanged |
| Flexibility at low temperatures | - 34 | °C | - | flexible |
| Punching resistance | kg 7 = 68.7 N | kg – N | ASTM D4833 | resistant |
| Water vapour permeability | μ = 1736 | - | UNI EN ISO 7783 | - |

* 1680 of weathering test are 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.
The above data, even if carried out according to regulated tests are indicative and they may change when specific site conditions vary.

## Concrete

For new concrete floors, it must be sufficiently dry.
In case of damaged or crumbly concrete, restore it with suitable cement mortar.
For a better adhesion on smooth concrete, on not moist supports, it is possible to use *Grip Primer* (see technical data sheet).
On moist supports, in order to prevent blistering or detaching phenomena, use *Vapostop* (see technical data sheet) as primer.
If the support is subjected to rising damp, it is strictly necessary the use of *WATstop* (see technical data sheet). *WATstop* can also be used to fill small cracks.
On raw concrete is recommended to use *Vapostop* (see technical data sheets) primer.

## Bituminous or slated membrane

Verify that the membrane has been applied for at least 6 months to avoid detachments caused by the release of oils.
Verify the membrane sheet are well attached one to the other, if not paste them with flame system.
Restore eventual cuts and holes, if present.
Clean carefully the membrane by removing paints and no properly attached protective coats.
Consider anyway the installation of appropriate ventilation chimneys, placed according to the humidity of the substrate. This measure is necessary in case of highly absorbent supports that hold moisture, such as lighten screeds with polystyrene or expanded clay.
*SBS-bond* must be used as primer for membranes (see technical data sheet).
In case of damaged membrane, restore it with the sandwich systems (*Acriflex Antiroot* + Polites T.N.T. + *Acriflex Antiroot*)) after the use of *SBS-bond* primer. Sandwich system has to be used on joints between membrane sheets and where the membrane is more stressed.

## Metal

Clean carefully dirt and eventual non adhered paints.
Before the application of *Acriflex Antiroot*, treat the metal surface with *Grip Primer* (see technical data sheet).
If the metal surface is painted, it is recommended to perform an adhesion test to verify the suitability of the application.

For supports not mentioned in technical data sheet, please contact Diasen technical department.

## Treatment of expansion joints

Before proceeding with the waterproofing intervention, it's necessary to predispose, at regular intervals, appropriate expansion joints.
This type of joints divides the screed surface in smaller areas such that it allows the differential movements (generated by variation in the environmental conditions or concrete maturation phenomena) among these latter. Expansion joints must be done carefully in order to avoid water infiltrations. The designer must evaluate the size of the areas and its realization modality according to the substrate conditions.
Joints must be filled with the polyurethane sealant Diaseal *Strong* (see technical data sheet).
Realize a shell in the wall-to-floor corner with the same *Diaseal Strong* product. Once the sealant has completely dried, the corners must be waterproofed with *Safety Joint Roll* (see technical data sheet) impregnated with *Acriflex Antiroot*, applied by brush creating a continuous surface.

## MIXING

Dilute the first coat of product with 5-10% of water. Add water directly on part A before mixing with part B, to allow the product to penetrate well into the screed. Mix well the two components (A+B) to obtain a homogeneous mixture, without clots. Use a high speed professional mixing drill. The water indicated on the package is an indicative value. It is possible to obtain a more or less fluid mixture depending on the needed application. Do not add anything else to the mixture. Do not dilute further the product to apply the second coat.

## APPLICATION

1. Wait until primer used is completely dry and apply a first coat of *Acriflex Antiroot*.
2. When the first coat is dry, apply a second one, crossing the coats and taking care to completely cover the entire surface. In case of rain, please verify the effective drying of the product before moving to the next coat.
3. Continue the application in subsequent coats until reaching the expected yield and a total thickness of 2.0 mm to guarantee the waterproofing properties.

## DRYING TIME

At 20°C (+68°F) and 40% of relative humidity level, the product drying time is 4 hours.
• Drying time is influenced by relative humidity level and by temperature and may change significantly.

## SUGGESTIONS

- Do not apply at temperatures lower than +5°C (+41°F) or higher than +35°C (+95°F).
- During summer season apply the product in the cooler hours of the day, away from sun.
- Do not apply with imminent threat of rainwater or ice, with strong fog or with relative humidity level higher than 70%.
- To protect waterproofing is recommended to apply a geotextile cloth in TNT.
- For the treatment of critical points as ventilation chimneys, chimneys, curved surfaces and fittings it is advised to apply *Acriflex Antiroot* in combination with *Polites TNT* (see data sheet).
- It is very important to made regular expansion joints on the screed to avoid cracks in the coating.

## CLEANING

Wash tools with water before product hardening.

## SAFETY

While handling use means of protection. See product safety data sheet



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