



PROTECTION AGAINST WATER



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BIOTECTA[®], thanks to its composition, protects the organic fibers from water.

Water versus Fibers

Fiber based materials are sensitive to moisture, changing the fiber volume and increasing its size.

Water and moisture do not penetrate the fibers of materials, but they favor the conditions for mold and insects (biological attacks). The material in contact with water will rot if it is consistently humid. When wooden elements are outdoors, they need an effective protection against moisture.

Possible problems due to water permeability and lack of insulation:

- **Distortions:** Increase of volume due to water absorption
- **Fissures appearance:** Increased water volume in fibers may lead to fissures
- **Microbial growth:** The continued presence of the water inside the material facilitates the microbial growth and its esthetical consequences.
- **Reduction of the insulating capacity:** Water, as a good conductor, can reduce the efficiency of the insulating material.

BIOTECTA[®] versus Water:

After the product has been applied and is silicificated, the protection effect is unlimited. If Biotecta has been applied in a superficial way and water continues to flow over the material, it may wear out slowly. In case of impregnation with vacuum pressure, the protection is permanent.

Once **Biotecta**[®] is silicificated, it prevents water from penetrating into the material and provides an excellent protection against moisture.

Biotecta[®] guarantees a **water repellent effect** by improving the water tightness and the impermeability, up to its maximum level. Pearl effects can be seen on the whole surface.



Biotecta[®] avoids the **distortion and the fissures appearance** in the treated material after its silicification.



Biotecta[®] avoids the **appearance and the microbial growth**, for example mold and mushrooms, like blue spot (blue stain).



SUITABILITY

BIOTECTA® - WATER REPELLENT: Resistance against moisture

The imparted quality is very important if used on materials in construction as insulation:

- Floors in direct contact with the soil
- Facades, in order to prevent condensation
- Interior, as a vapor barrier

BIOTECTA® - WATER IMPERMEABLE: Resistance against penetration of water

The imparted quality is very important if used on materials in construction as coating:

- Wood floors inside and outside
- Ventilated facade cladding

STANDARDS

The norm **EN 927** includes components such as paint, lacquer and other wood coatings.

UNE-EN 927-4

UNE-EN 927-4:2000

This test is actually in process (March 2016). Tested is the observance of the norms: paint, lacquer and other materials and systems for coating wood for exterior use.

Part 4: Assessment of permeability of water vapor.

UNE-EN 927-5

UNE-EN 927-5:2006

This test is actually in process (March 2016). Tested is the observance of the norms: paint, lacquer and other materials and systems for coating wood for exterior use.

Part 5: Assessment of permeability of running water.

ASTM D2898

ASTM D2898-10

Standard test method for accelerated weathering of water retardant treated wood.

In-house testing of **BIOTECTA®** showed an excellent resistance against water and vapor after silicification.