ILIA

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Acroseal

Description

Acroseal is a multifunctional waterproofing system with nanotechnology and consisting of 100% active monomeric organosilane compounds and soluble in water. Due to its very small particle size (in the range of a few nanometers), this is able to penetrate into building materials (old and new) and protect them against water absorption and penetration, weathering, salinity, mold growth, and other to protect the subsequent destructive reactions. This material is resistant to ultraviolet rays (UV) and due to its special chemical and mineral properties, it lasts as long as the life of the structure. This compound reacts quickly and after drying, the above hydrophobic effect It leaves excellent, breathable properties on the surfaces. Acroseal is free of any volatile organic compound and completely biocompatible. The special application of this material is to protect the structure against water penetration with a capillary mechanism.

- This material can be evaluated based on the following standard:

EN 15042

properties

- Preventing absorption and capillary penetration of water in structures
- Penetration in the depth of the structure and rapid waterproofing of the surface
- A water-based system free of volatile organic compounds (VOC Free)
- Convenient to use a brush, roller or spray
- Very high and affordable coverage
- No change in the color or appearance of the structure
- Fast response
- Protects against the effects of concrete carbonation.
- Resistance to ultraviolet rays (UV)
- Surface protection against the growth of moss, fungus, and algae
- Prevention of surface pollution, salt petering

Application

- Bridges
- old newly built buildings
- cultural and ancient monuments
- coastal areas
- cement and concrete surfaces
- prefabricated concrete and cement parts
- brick, clay and ceramic pieces
- stones

Surface preparation

Surface preparation has a great influence on coating performance. The surfaces must be dry, clean and free of loose particles, any oily substances and other defects before implementation and should be dimensionally stable. Concrete surfaces must be at least 28 days old and fully cured before implementation. The brick surface bonding mortar must be at least 3 days old. Acroseal should be applied on surfaces with temperatures above 10°C. The surfaces must be completely dry.

Procedure

This material is applied by spray, brush and roller. After opening the packaging lid, it is recommended to use Acroseal solution within 24 hours at most.

Technical points

- The drying time depends on environmental conditions such as air temperature and relative humidity. Therefore, the stated duration can only be used as a guide.
- The suitable temperature for the implementation of this material is between 10 and 35 degrees Celsius. In order to control the evaporation of the water solution of this material when applying it on the surfaces, avoid applying Acroseal at the time of intense evaporation.

ILIA will not bear any responsibility in the case of failure to properly implement the executive instructions of its products, and any losses will be borne by the contractor.

Technical Specifications

The mixture ratio (weight) product	**ready-to-use**
The Temperature during use (°C)	10-35
The amount of coverage (m^2/kg)	3-5
Spraying equipment	brush, roller
drying time	24 hours
Particle size	3-60 nm
Mechanism of water repellency	penetration, reaction in Nano dimensions
Water thinner	
Penetration depth up to 5 mm	
Total protection against fungus and algae	
protective corrosion and wear protection	

Considerations

- Packaging → 20-liter bucket
- Storage period → 12 months in original packaging
- Maintenance conditions Sensitive to moisture
- Store in a dry place away from direct sunlight, water, and rain. At temperatures below 10 degrees Celsius, it tends to freeze and is destroyed
- The best storage temperature is +15 to +35 degrees Celsius

Protection and safety

- This material is not in the range of dangerous and harmful substances for health and the environment, however, it should not be swallowed or come into contact with the eyes.
- Acroseal is not toxic, but use gloves, glasses, and work clothes during application.
- In case of accidental skin or eye contact, wash immediately with plenty of water.
- In case of swallowing, consult a doctor immediately.
- MSDS (Safety Data Sheet) is available for more information.
- This substance is not flammable.