



Ouminglang water-based penetrating inorganic concrete waterproofing agent

Product introduction

Shenzhen OuMinglang Industry Development Co., Ltd

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I. Product features

Ouminglang water-based penetrating inorganic concrete waterproofing agent is a kind of alkali metal silicate solution as the base material, adding catalyst, additives, through mixed reaction and waterproofing agent. It has high permeability, can be directly used in the cement mortar, concrete structure surface, quickly penetrate into the internal reaction with the base material in the cement mixing content, generate insoluble in water gel, internal pore blocking, closed pore channels, increase the compactness, form a reliable permanent waterproof layer, and can improve the mechanical strength of concrete structures, Make it has sealing waterproof moistureproof, wind erosion carbonization, acid and alkali erosion and other functions, protect steel from corrosion, prolong the service life of concrete.

II. Waterproof principle

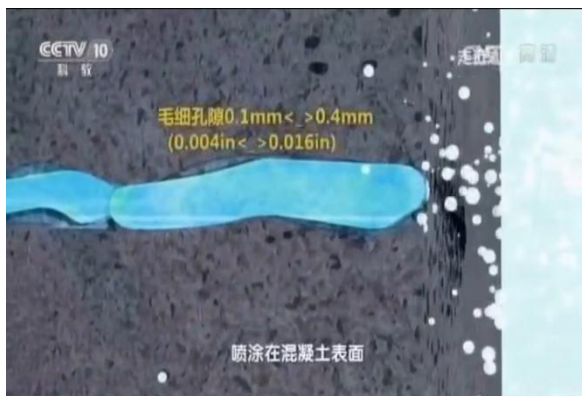
Traditional waterproof materials such as waterproof rolling material, waterproof coating, waterproof mortar, can only cover a layer of cement mortar surface thin, forming a film barrier waterproof, this layer of film wind and sun and rain is easily damaged, resulting in the use of a short time and water leakage, labor and money, can not fundamentally solve the problem of water leakage.

OuMinglang without superplasticizer is touted as a waterproof material, but has fundamental differences with the traditional waterproofing material, material itself does not have waterproof, but with its containing special "active substance" into the concrete substrate, and the calcium in concrete and other ingredients to produce chemical reaction, generate permanent crystals of strength, don't break down. Its single crystal size is about one nanometer, can effectively block the micro pores in

the matrix, can resist water pressure, high strength water resistance effect, at the same time can increase the strength of concrete by 20%-40%.

So that the whole concrete to achieve the density of glass, stone hardness, 360 degrees permanent full waterproof, and cement with the same life, never leak, not aging.

Waterproof principle:



Spray on a surface:

After the concrete surface is sprayed with Ominglang waterproof material, the water will carry the material into the concrete interior.



Crystallize:

The material reacts with calcium ions in the cement to form flexible crystals.



Active substance:

The crystallizer will automatically plug the gaps and holes between the cement and sand, and the cement and sand will completely stick together. Make the whole concrete to achieve the density of glass, the hardness of stone, so

as to achieve 360 degrees permanent waterproof, no dripping seepage anywhere.



Effectively block water intrusion:

When there is no water, the active crystal will hibernate. Once the concrete cracks and water invades, the active crystal will be activated automatically, and the crystal will repair cracks automatically again.

III. Distinguishing features from other waterproof materials

- 1, can play a protective role in concrete: it is acid resistance, alkali resistance, corrosion resistance, resistance to temperature change, resistance to chloride ion erosion of concrete.
- 2, construction does not need a leveling layer, it can be fully permeated into the concrete structure, and do not need a protective layer.
- 3, low construction cost, fast construction progress, no need for late additional regular

maintenance.

- 4, with deep penetration ability, penetration depth can reach 50mm - 500mm above, impermeable grade to achieve a waterproof above.
- 5, can resist the impact of temperature change on concrete, on the basis of the original concrete to increase the firmness of more than 20%, as well as the compressive strength of the surface of the concrete structure.
- 6, osmotic non-mechanical waterproof agent is inorganic properties, will not aging deterioration, the effect is stable, and the same life as concrete structure.
- 7, because it is deep penetration crystallization and water principle, so it will not produce aging, lap is not tight, delamination loosening and other traditional problems exist.
- 8, can play a good protective effect on concrete, steel bar, etc.
- 9, non-toxic environmental protection, can be used in drinking water pool, swimming pool and other related projects.
- 10, the traditional waterproof material is the surface or shallow penetration of water droplets; Osmotic type without mechanical waterproof agent but hydrophilic.

IV. Construction Cases

1. In 2016, the subway tunnel of Beijing Metro Line 13 was leaking. In 2019, a core-pulling experiment was carried out on the construction site.
2. In 2017, Shenzhen Yuehai Water Group carried out water leakage repair work on the old floor of more than 30 years. The original roof cracked and leaked everywhere.
3. In 2018, Shenzhen Metro Line 10 waterproof project construction, underground tunnel project of more than 30 meters, water seepage everywhere, no water leakage after construction.

V. executive standard

DBJ01-01-54-2001 "Standard for quality inspection and evaluation of interface permeable waterproof coating"

JCT1018-2006 TYPE II "Water-based Permeable Crystalline Waterproof material"

VI. standards of acceptance

DBJ01-54-2001 "Standard for quality inspection and evaluation of interface permeable waterproof coating"

JCT1018-2006 TYPE II "Water-based Permeable Crystalline Waterproof material"

GB 50208-2002 "Underground waterproof engineering quality acceptance rules"

CECS 195-2006 "Technical Specification for application of polymer cement and permeable crystalline waterproof materials"

VII. Instructions for use

- 1, clean up the concrete and cement mortar surface sundries, such as floating ash to rinse as far as possible, delamination peeling to remove, obviously empty drum need water injection mud repair.
- 2, there are cracks first repair, 5 mm below the crack irrigation material, irrigation mud water, and then spray material twice; Cracks of more than 5 mm require grooves of 3 cm wide and deep, filled with cement and sand (1:3 ratio), compassed and pressed out of the light.
- 3, there is no crack, the surface of the water first fully wet, water absorption fast place more water wet.

4. Clean up the water, spray the material evenly twice, and increase the amount of spraying where absorption is fast and where cracks are needed.
- 5, to be semi-dry surface, coated with a cement slurry.
6. After drying, spray the material again. Local absorption too fast place, need to add spray material.
- 7, about 12-20 hours after the water can be sprayed for maintenance, so that the residual materials on the surface as far as possible into the base.