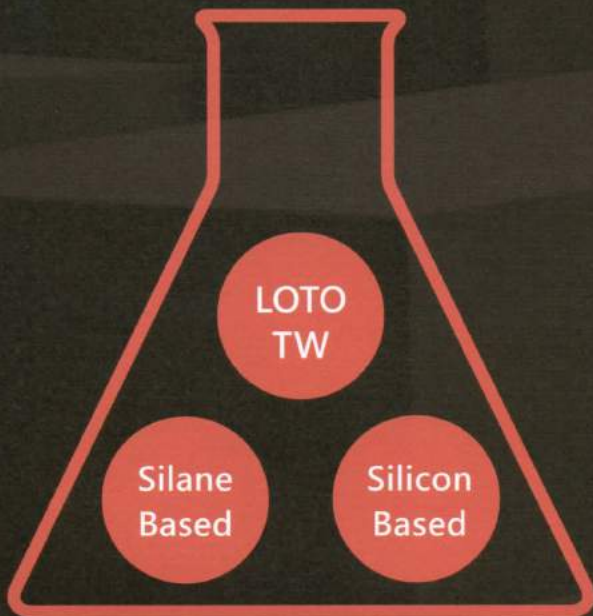


樂士
LOTUS

www.techome.com.tw
TechHome Technology Co., LTD

Our company applies advanced nano-clay technology, clever use of reservoir sludge in Taiwan. Use the remaining soil of construction and river sediments their unique chemical properties to modify as innovation LOTOS Waterproof Powder.



LOTOS Multi-Effect Waterproof Powder

Use LOTOS Multi-Effect Waterproof Powder as the main powder, and combine the characteristics world-wide invention of professional waterproof powders, both breathable and waterproof. It is suitable for hot and humid environment in Taiwan, environmental protection and weathering well, and effectively solve the problem of home renovation.

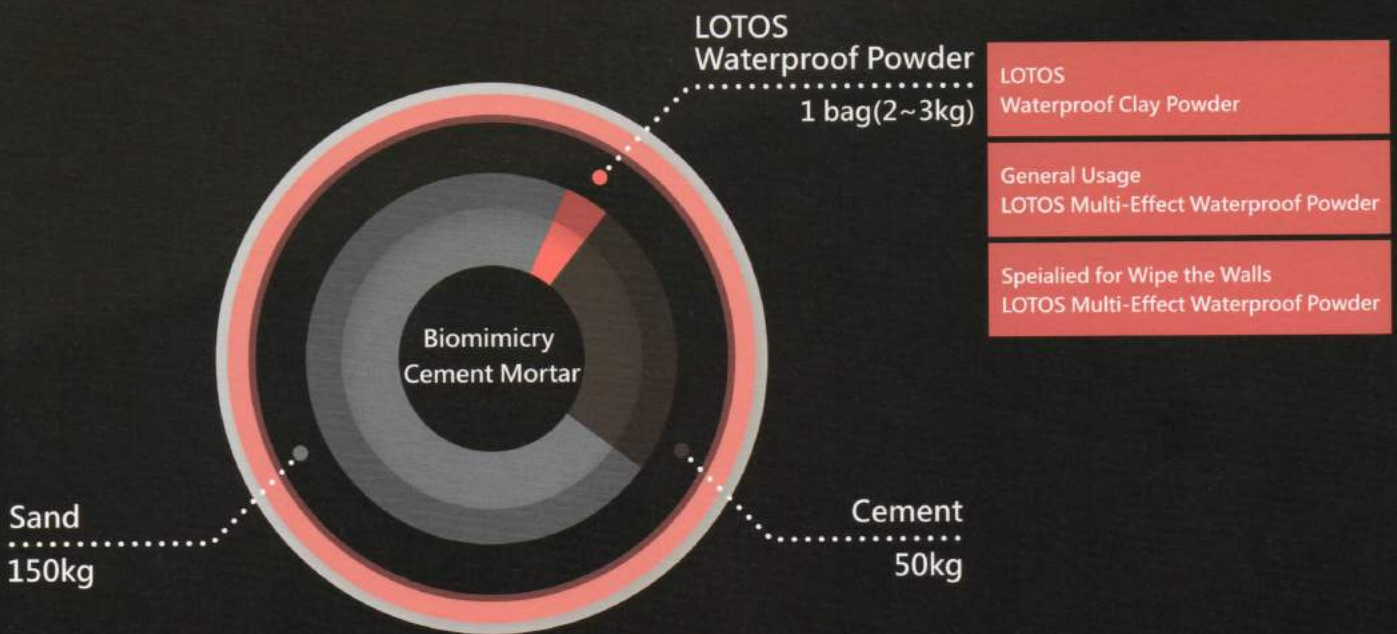
There are currently three kinds of powdery water-resistant powders in the world.

1. Reactive Waterproof (Silane-based)
2. Crystalline Waterproof (Silicon-based)
3. LED Type Waterproof (LOTOS)

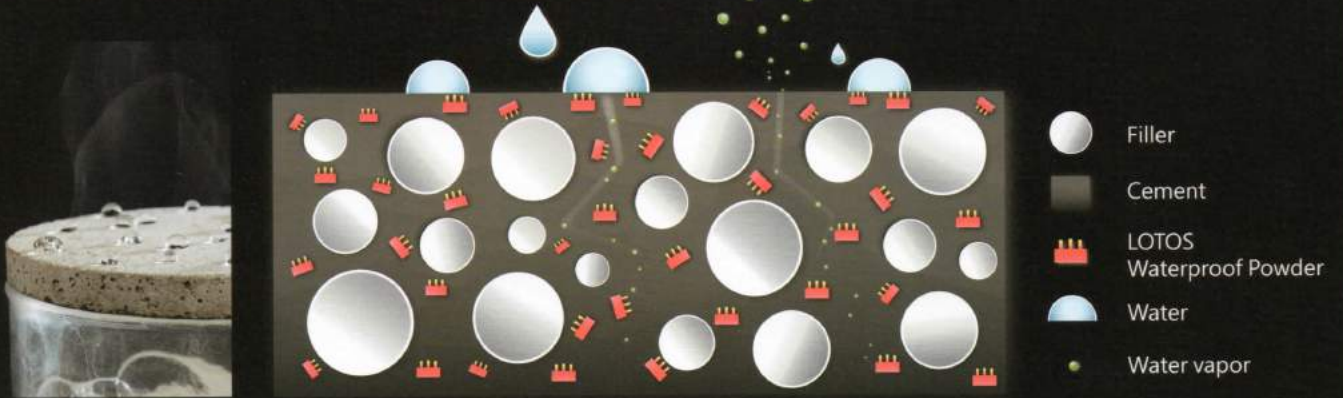
LOTOS Multi-Effect Waterproof Powder is a combination of the above three.

Designed for the construction site in Taiwan professional engineers used cement mortar waterproof additives. Using LOTOS Waterproof Powder cement mortar is slippery and good for construction, and with waterproof breathable performance, which is suitable for both sides of the wall .

LOTOS Waterproof Powder

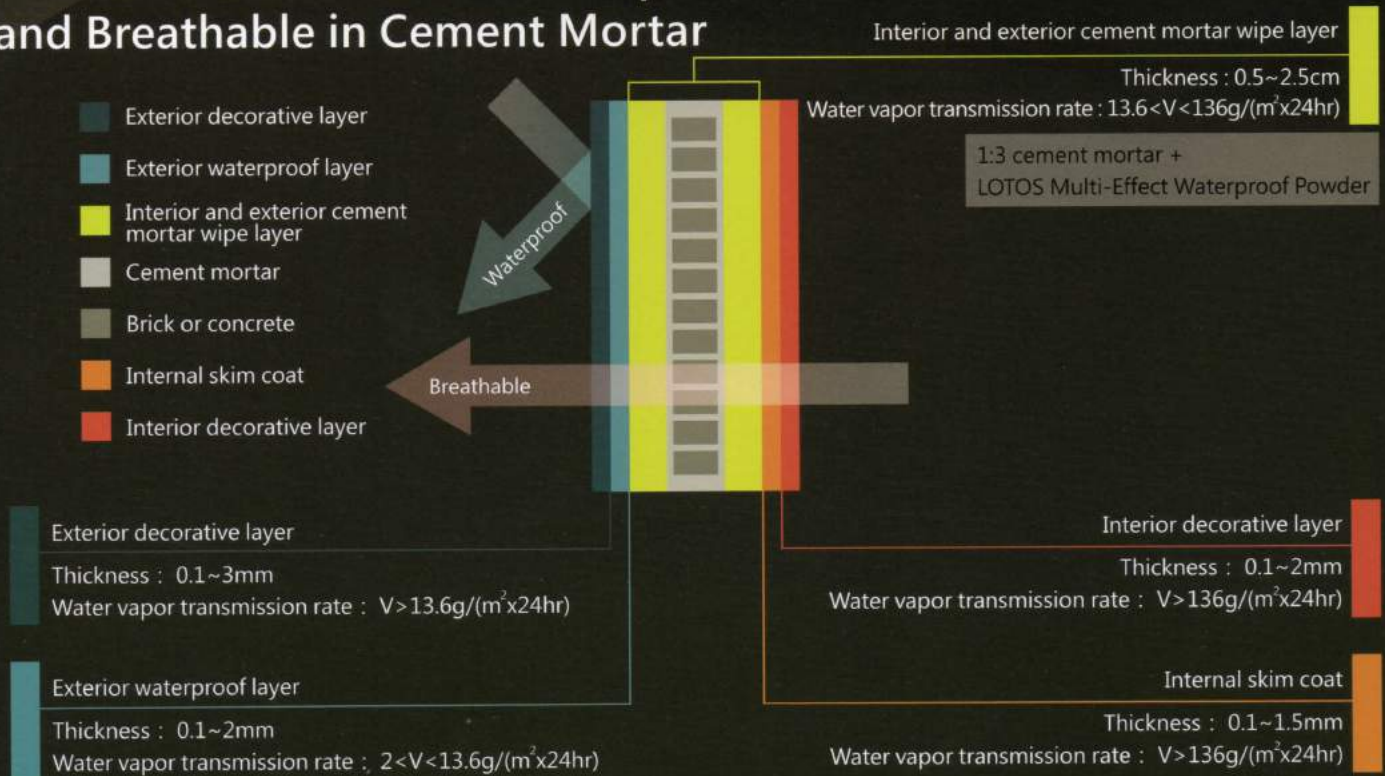


LOTOS Waterproof Powder Principle Diagram



LOTOS Waterproof Powder dispersed among the cement materials. Each powder is independent to others to maintain the original permeability of cement materials and form a unique LED waterproof breathable microstructure.

The Functions of LOTOS Waterproof and Breathable in Cement Mortar



Feature of Product

Specialized waterproof additive for cement material, integrated three types of LED type Waterproof, Reactive type Waterproof and Crystal type Waterproof functions, taking into account the waterproof breathable and on-site construction, waterproof, moisture-proof, anti- efflorescence and prevent wall mold, especially for Taiwan's high temperature and humid climate environment.

The Scope of Application

- Building interior and exterior wall cement mortar layers, basement, bathroom tiles and window frames stitching and other waterproof protective layer project.
- Can be used to configure the requirements of dry mix mortar, plaster mortar, and tile sealant and scallion soil and so on.

Instructions for Use

1. As a cement mortar project, it is recommended to use a proportion of cement (50 kg) + sand (150 kg) +1 LOTOS soil series waterproof powder (2 to 3kg). LOTOS Multi-effect Waterproof Powder mix with cement and half of the sand dry stirring first, then add a barrel of 5 gallons of water and the remaining sand, let the blender stir for 3 to 5 minutes. The cement mortar will suddenly become soft, then add water to fine-tune (all the water does not exceed two barrels of 5 gallons of water).
2. As a cementitious material used as a waterproof additive, it is recommended that the basic amount of the total weight of the powder 1% to 2%, that is, a significant effect, and its water resistance is proportional to the amount added.

Precautions

1. LOTOS Multi-effect Waterproof Powder must be mixed with the powder dry before adding water and stirring, can not directly add water to use.
2. Use LOTOS Multi-effect Waterproof Powder cement mortar, with slippery and water retention properties, please do not add an additional lubricant.
3. Mixing too much water will lead to the loss of cementitious material viscosity, strength and delay the flattening time, please carefully control the water.
4. When cement mortar is applied to a thickness greater than 2.5cm, the cement mortar ratio should increase the amount of cement to enhance the adhesion to avoid mortar weight is too large, causing gravity slip delamination.

CNS3763 Cement Waterproofing Agent

Test Items	Test Results			CNS3763(2009) Specifications
Compressive strength ratio	0.9			$\frac{\text{Compressive strength of test specimen with waterproof agent}}{\text{Compressive strength of test specimen without waterproof agent}} = \text{above } 0.85$
Water absorption ratio	1hr	5hr	24hr	$\frac{\text{Water absorption of test specimen with waterproof agent}}{\text{Water absorption of test specimen without waterproof agent}} = \text{below } 0.5$
	0.25	0.3	0.45	
Water permeability ratio	0.32			$\frac{\text{Water permeability of test specimen with waterproof agent}}{\text{Water permeability of test specimen without waterproof agent}} = \text{below } 0.5$
Setting time (min)	Initial	Final		Starting coagulation time is greater than 1 hour, stop coagulation time should less than 10 hours.
	225	345		
Stability	Compliance with the specification			Expansion of cracks or deformation shall not occur

ASTM E96 - 05 Standard Test Methods for Water Vapor Transmission of Materials Procedure B - Water Method

Test Items	Test Results	
Water vapor transmission rate (g/m ² X 24hrs)	General cement mortar Average Thickness of test specimen 115mm	Cement mortar with LOTOS waterproof powder Average Thickness of test specimen 115mm
	43	53