



打造中国建材值得信赖品牌  
CREATE A TRUSTWORTHY BRAND OF CHINA  
BUILDING MATERIALS



**X-MT**

**水泥基渗透结晶防水涂料**

Permeable Crystalline Waterproof Coating

适用于混凝土建筑设施等砼结构弊病的维修堵漏

Applicable to concrete building facilities and other concrete structure defects in the repair of leakage plugging



Cement-based osmotic crystalline waterproof coating is a gray powdery material formulated with silicate cement as the base material mixed with active chemical ingredients. Cementitious osmosis crystalline series waterproof coating, its waterproofing mechanism is mainly in the role of water, waterproof coating contains active chemicals, water as a carrier, with the penetration of water on the structure of the pores, the active chemicals with the water infiltration to the interior, and the reaction to generate calcium alumina crystals and other insoluble crystals, the active chemicals and the cement particles without hydration of hydration reaction, and to promote the hydration of cement to form a cement hydration crystal, generating a large number of crystals filled with, and the formation of cement hydration crystal, to generate a large number of crystals filled with, and the formation of cement hydration crystal, and the cement is not hydrated. The active chemicals react with the unhydrated cement particles and promote the hydration of cement to form cement hydration crystals, which generate a large number of crystals to fill and block the pores, so that water can not enter the concrete, thus achieving the purpose of waterproofing.

## I.Scope of application

Widely used in tunnels, dams, reservoirs, power stations, nuclear power plants, cooling towers, underground railroads, overpasses, bridges, diaphragm walls, airport runways, pile head piling, wastewater treatment ponds, cisterns, industrial and civil buildings, basements, roofs, toilets and bathrooms waterproofing construction, as well as all structural defects in the maintenance of concrete construction facilities leakage.



## II.Product features

1. Super penetration ability, can gradually penetrate into the concrete with the passage of time. The depth of penetration can reach 30cm.
2. Excellent anti-penetration performance, can resist the pressure of more than 120 meters of water head.
3. Long-lasting waterproofing effect, can withstand a certain degree of external collision without affecting its waterproof function.
4. It can be safely used in drinking water and food industry concrete projects.
5. Unique self-repairing ability, the formation of crystals will not be aging, even after many years for less than 0.4mm cracks and holes in contact with water can still produce crystal closure.
6. It can directly accept paint, epoxy resin, cement mortar, lime plaster, mortar and other materials.
7. The construction method is simple and easy to operate.

## III.Performance index

Indicator based on: GB18445-2012 "cement-based osmosis crystallization waterproof coating" .

Test item	Technical index
Appearance	Homogeneous, no lumps
Water content/%	≤1.5
Fineness, 0.63mm sieve residue / %	≤5

Chloride ion content/%		≤1.5
Constructability	Add water and mix	Scratch-free
	20min	Scratch-free
Flexural strength/MPa	28d	≥2.8
Compressive strength/MPa	28d	≥15.0
Wet substrate bonding strength/MPa	28d	≥1.0

## IV. Construction process

### I. Scraping method

Clean up debris and floating mud slurry on the base surface of waterproof coating, and repair the serious unevenness of the concrete base surface. Waterproofing of concrete infrastructure on the surface of the oil, debris shoveling and cleaning, and then flushed with water, in the wet base surface for the construction of waterproofing materials. If there is serious leakage on the base surface, the material should be used to plug the leakage first, and then use this material to ensure the quality of the project. Water-cement ratio of 0.3-0.4:1, dosage of 1.4-1.7kg/m<sup>2</sup>, thickness of 1.0mm (± 0.05mm) as a standard.

### II. Roller coating method

Roll the material evenly on the treated substrate with a roller brush at a dosage of 1.4-1.7kg/m<sup>2</sup>.

### III. Dry spreading method

1. Immediately after the concrete is poured and compacted.
2. Spread it evenly on the concrete surface according to the specified dosage and compact it in time.
3. Check whether there is any bad construction place and repair it in time after finalization; in the case of sun exposure, it should be maintained in water. Pay attention to the uniformity of spraying, do not cut corners.

## V. Packaging and storage

### The material is available in two sizes:

Barrel weight 20kg/barrel, must be stored in cool and ventilated room, storage period of 6 months.

Powder is packed in composite moisture-proof bag with net weight of 50kg/bag or in tons.

The product is calculated from the date of production, the storage period is 6 months under the conditions of packaging, transportation and storage in accordance with the standard, and it should be re-examined after the expiration date, and can be used only after it passes the test. It should be handled gently to prevent breakage, and avoid moisture during transportation and storage.