

CRYSTALLIZATION ADMIXTURE WATERPROOFING

PRODUCT DESCRIPTION

Obaproof WP-502 Crystallization Admixture Waterproofing is kind of powdered form is ready to be mixed with the cement. When concrete is added the Obaproof WP-502, it can form a crystalline structure with which can take compressive stresses very effectively and can bear infinite hydrostatic pressure, self-repair hair line crack up to 0.4mm.

ADVANTAGES

- Provides significant cost saving
- Integral protection for the whole concrete
- Permanent surface protection
- Time saving
- Cures internally
- Self-heal of surface crack

PACKAGING STORAGE

Plastic bucket or valve pocket.

When storing and transporting, different types of products should be stacked separately and should not be mixed. Avoid sun and rain, to prevent damp.

In normal transportation, storage conditions, the shelf life is 12 months.

PREPARATION

Trial mix shall be conducted minimum 28 days before the waterproofing is ready to caste. The maximum water and cement ration is not greater than 0.45 (free water-fine aggregate moisture + admixture). The quantity of concrete that to be treated with Obaproof WP-502. Dosage rate: Obaproof WP-502 - 0.8% by weight of cementitious content.

PERFORMANCE FEATURE

- Maximize the compactness of the cement concrete itself. Through the material catalytic crystalline materials can fulfil the cement concrete with well-defined pores, also other defects. To maximize the impermeability of concrete, pouring and waterproofing once it completed.
- Have excellent self-healing function, the concrete cracks have automatic repair function, in the water when the automatic repair function is re-activated.
- Have alkaline system to perform an excellent and enhanced function, can fully improve the workability of concrete and the strength of concrete increased by 20- 30%
- Reduce shrinkage and cracking of the concrete itself.
- Prevents the corrosion of harmful chemical aggressive media (such as chloride ions and improves the durability of concrete)

CONSTRUCTION POINTS

Mixing process in the concrete according to a certain proportion added to the mixer, mixer (or other mixing container), the mixture continued to stir more than 5 minutes. Blending amount of blending will be determined in accordance with engineering practice. The material has some water reducing function, it can re-place some or all the concrete pumping agent. The use of the product need to do experiment before used.

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TECHNICAL SPECIFICATION

ITEM	DATA	-
Appearance	Uniform, non-caking	-
Water content /%, <	1.5	-
Fineness, 0.63mm residue on sieve /%, <	5	-
Chlorine ion content /%	0.1	-
Total Alkali content /%	Measured value	-
Water-reducing rate /% <	8	-
Air content /%, <	3	-
Different in setting time	Initial setting time / min, >	-90
	final setting time/h	100
Ratio of compressive strength /%	7d, >	100
	28d, >	
ration of shrinkage /%, 28d, <		125
permeability in concrete	mixed waterproofing agent the impermeability of concrete stress a/,Pa, 28d	measured value
	ratio of penetration pressure /%, 28d, >	200
	mixed waterproofing agent the impermeability of concrete stress a/,Pa, 56d	measured value
	the second permeability pressure ratio /%, 56d, >	150
Benchmark concrete of 28 d permeability pressure should be 0.4 + 0.0 0.1MPa, and listed in the product quality inspection report		

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INGREDIENT AND STIRRING

Obaproof WP-502 to be added in the concrete ingredients, the order of joining should be based on the concrete mixing plant operating procedures and equipment types vary. Make sure that Obaproof WP-502 is added to the concrete and mixed. There are two ways to mix. Concrete Mixing Station - Wet mixing calculate the Obaproof WP-502 first with the applied amount water 10% -20% of the water to form a thin mortar, then cement, gravel, sand and application of water 80% to 90%. Into the mixer, and then prepared Obaproof WP-502 dilute mortar into the mixer for mixing. The mixer is agitated for a minimum of 5 minutes to ensure that the Obaproof WP-502 is evenly distributed throughout the concrete.

CONCRETE MIXING PLANT-DRY MIX

First, the required stones, sand into the mixer, the calculated Obaproof WP-502 by adding stones, sand, stirring 2 -3 minutes. Subsequently, adding cement, water and other required raw materials for mixing.

VIBRATING AND CURING

The mixing of fresh concrete to pour and according to the specific circumstances of vibration, to ensure that the hardened concrete compact. Fresh concrete after the initial setting, must be properly maintained, you can take water and film cover the way to prevent the concrete loss of water too fast cracking.

THE KEY OF MONITOR WORK OPERATIONS AND STEP TO APPLY:

STEP	DESCRIPTION	PRODUCT
1.	Preparing and Measuring	WP-502
2.	Mixing and pouring admixture to mixer truck	WP-502
3.	Concrete casting	-

NOTE

1. Obaproof WP-502 has a certain water-reducing performance, the concrete reinforcement effect is higher than ordinary water-reducing agent, it can replace some or all of concrete pumping agent. The use of the product before the need to do the concrete mix ratio test with the test to determine whether the addition of concrete pumping agent.
2. The Obaproof WP-502 must be mixed evenly with the cementitious material during use.
3. When the temperature is lower than 5 °C , should be in the fresh concrete by adding a certain amount of antifreeze, and concrete to take appropriate insulation measures.