

Crystalline Capillary Waterproofing Admixture

RR BARRIER® ADSystem

RR BARRIER® ADSystem is a waterproofing admixture of high performance, design to be use on the mix of the concrete in the moment of its production. Its combination with cement, silica sand and chemical aditives , are highly efficient to react with the fresh concrete creating insoluble crystals in the capilars of the mix , making the concrete sealed against the penetration of water and other compounds.

RR BARRIER® ADSystem was develop with high technology products, protecting and extending the life of the concrete against sea water attacks and atmospheric affluents.

RR BARRIER® ADSystem is not toxic product and does not alter the potability of the water.

TYPICAL APPLICATIONS

- Water and affluent treatment plants
- Reinforced concrete pools
- Reservoirs
- Sub-floor slabs
- Foundations
- Secondary containment structure
- Tunnels etc.

DOSAGE

RR BARRIER® ADSystem : can be use: 1% to 2% of the weight of cement of the mix.
1% for conventional concrete.
2% for shotcrete or concrete expose to chemical attack.

Note 1: For determining the ideal 1%, we recommend performing preliminary test to determine the best range between 1 to 2%.
RR BARRIER® ADSystem can be used up to 4% . :

Note 2: We recommend that the concrete has a minimum cement consumption of 300 kg / m³ and a mortar content of 48 to 52%.

USE

RR BARRIER® ADSystem : must be use in the moment of production of the concrete, by the conventional concrete mixer truck or in the concrete plant production.

RR BARRIER® ADSystem : must be added to water and mixed until it is form a sludge-free solution without lumps, then added to the concrete mixer truck, mixed for 5 to 8 minutes at high speed to obtain a homogeneous distribution.

Example: one drum of Kg of **RR BARRIER® ADSystem** = 29 liters of water.

The operation of the concrete should be done as usual, taking into account only the balance of water consumption that has already been used in the mixer truck.

NOTE 3: do not add **RR BARRIER® ADSystem** in powder form directly to the fresh concrete.

ADDITIONAL INFORMATION

When **RR BARRIER® ADSystem** is added to the mix changes the dry time of the concrete because of its composition, which may delay the time of curing, but will not change the resistance (Fck), even the **RR BARRIER® ADSystem** can raise the resistance. All concrete curing conditions must be maintained. Always that is required, ask for technical support.

LIMITATION: do not apply under 4°C temperatures.

BENEFITS

- Better performance making a concrete monolithic and more durable;
- It is compatible with any type of Portland cement;
- Permanent waterproofing;
- Resistant to aggressive chemicals of the environment;
- Can be used in any climatic situation;
- Protects armor;
- Excellent performance at positive or negative hydrostatic pressures;
- It is not toxic;
- Does not emit volatile gases.

Reis e Reis Indústria e Comércio Ltda
Rua Wilton Reis Costa, 220
Eldorado Centro Industrial e Empresarial
São José dos Campos / SP CEP 12238-574
Phone/Fax: +55 12 3966 9977
e-mail: vendas@reisereis.com.br
www.reisereis.com.br

Our technical advice concerning the application of the product is made verbally, in writing and through demonstration depending on the interest of the customer.

It should be noted that the application of the product is a precision process and when it is not applied by Reis e Reis, the company disclaims any responsibility; therefore, the responsibility is that of the customer. Regarding the storage and use of the product, any resulting change in its properties will be the complete responsibility of the customer. The liability of Reis e Reis will be limited to any damage or loss in value of the goods supplied by the company and used by the customer. We guarantee the unquestionable quality of our products in accordance with our terms of sale and supply.

OTHER BENEFITS

- Reduce of plastic shrinkage;
- Decrease cracks;
- Low chloride attack;
- Increase concrete life;
- Excellent waterproofing
- High healing capacity;
- Increase the compressive strength up to 10%;
- Can seal cracks up to 0.4mm.

WARRANTY

Reis e Reis guarantee the quality of the products manufactured by it, isolation of defects, any occurrence arising, execution of batch substitution. Users must obey the usage quantities, according to a technical sheet under the guidance of their technicians.

According to the NBR 11.905 standard, the product must be used in static structures, that is, free of movement, if cracks occur in the structure, you must consult the designer to make the structural correction.

STRUCTURAL PROBLEMS ARE NOT COVERED BY THIS WARRANTY.

We will not be responsible for applications that did not follow the guidelines in the technical sheet.

The information described here is in good faith and is available on our experience and positive results in projects.

CHARACTERISTICS

Properties	Results
Appearance	Grey powder
Density	1,25 / l
Absorption test NBR 9778 – 1% RR BARRIER® Adsystem	2,0 to 2,6%
Results to sulfates (ASTM 1012-12)	High, without effect
Static fissure self healing ability	< 0,4mm

PACKAGE

Drums of 22 Kg

HEALTH AND SAFETY

Users should use protective glasses and rubber gloves. Direct contact with the skin should be avoided (can cause irritation).

In case of contact with skin or eyes, wash immediately and abundantly with water, consult a doctor and inform the type of product. Keep packages out of the reach of children, animals and sources of heat.

STORAGE

should be stored in a dry and ventilated place in unopened package.

VALIDITY: 12 months.

FOR MORE INFORMATION, SEE FOOTER.

Reis e Reis Indústria e Comércio Ltda

Rua Wilton Reis Costa, 220

Eldorado Centro Industrial e Empresarial
São José dos Campos / SP CEP 12238-574

Phone/Fax: +55 12 3966 9977

e-mail: vendas@reiserreis.com.br

www.reiserreis.com.br

Our technical advice concerning the application of the product is made verbally, in writing and through demonstration depending on the interest of the customer.

It should be noted that the application of the product is a precision process and when it is not applied by Reis e Reis, the company disclaims any responsibility; therefore, the responsibility is that of the customer. Regarding the storage and use of the product, any resulting change in its properties will be the complete responsibility of the customer.

The liability of Reis e Reis will be limited to any damage or loss in value of the goods supplied by the company and used by the customer. We guarantee the unquestionable quality of our products in accordance with our terms of sale and supply.