



HYDROBLOC CRYSTACOAT

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Hybrid Penetrating Crystalline Waterproofing & Reactive CSH Densification System

Product Description:

Hydrobloc Crystacoat is a one-component crystalline waterproofing slurry that penetrates concrete to permanently reduce water permeability and seal capillary pores against hydrostatic pressure.

Key Features & Benefits:

- Penetrating crystalline waterproofing action
- Resistant to positive and negative hydrostatic pressure
- Deep capillary sealing mechanism
- Reactive CSH densification technology
- Permanent integral waterproofing effect
- Breathable waterproofing system
- Excellent adhesion to damp concrete
- Reduces chloride and water ingress
- High abrasion resistance
- Suitable for internal and external applications
- Non-toxic after curing
- Helps reduce carbonation and moisture penetration
- Compatible with concrete and cementitious substrates

Areas Of Application:

- Basements and foundations
- Lift pits
- Water tanks and swimming pools
- Sewage treatment plants
- Retaining walls
- Tunnels and underground structures
- RCC slabs and screeds
- Concrete flooring
- Wet rooms and toilets
- Marine structures
- Precast concrete structures
- Concrete roofs and podiums



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Surface Preparation:

- Substrate must be structurally sound, clean, and open textured
- Remove laitance, dust, grease, paint, curing compounds, and loose particles
- Surface preparation may include grinding, grit blasting, scarifying, or high-pressure water jetting
- Repair cracks, honeycombs, and voids before application
- Stop active water leakages using suitable rapid setting plugging mortar
- Smooth surfaces should be mechanically roughened
- Substrate must be thoroughly pre-wetted to Saturated Surface Dry (SSD) condition before application

Mixing Instructions:

Mix 25 kg powder with 6.5 – 7.0 L clean water

Mixing Procedure:

- Add clean water into mixing container
- Slowly add Hydrobloc Crystacoat powder while mixing continuously
- Mix using low-speed mechanical mixer (400–600 rpm)
- Mix for 3–5 minutes until homogeneous slurry is achieved
- Allow material to stand for 1 minute and remix briefly before application
- Do not add excess water

Application Guidelines:

- Apply using masonry brush, block brush, or spray equipment
- Work slurry thoroughly into substrate for proper penetration
- For general waterproofing: apply 1 coat
- For hydrostatic pressure and water retaining structures: apply 2 coats
- Apply second coat perpendicular to first coat direction
- Second coat should be applied when first coat is hardened but still green
- Recommended application temperature: +5°C to +40°C

Coverage/ Consumption:

Application Area	Approximate Consumption
Horizontal concrete surfaces	0.8 – 1.0 kg/m ²
Vertical concrete surfaces	1.2 – 1.5 kg/m ²
Water tanks & hydrostatic areas	Approx. 1.5 kg/m ²
Severe hydrostatic pressure areas	1.5 – 2.0 kg/m ²

Actual consumption depends on substrate profile and porosity



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Curing & Protection:

- Protect from rapid drying after application
- Maintain damp curing for minimum 72 hours
- Lightly mist surface periodically with clean water
- Protect from direct sunlight, strong wind, and high temperatures
- Do not allow premature drying during curing period

Packaging:

- Available in 25 kg moisture-resistant bags
- Custom packaging available upon request

Storage & Shelf life:

- Store in dry covered conditions
- Keep in original unopened packaging
- Protect from moisture and humidity
- Shelf life: 12 months from date of manufacture

Health & Safety:

Hydrobloc Crystacoat contains cementitious and alkaline materials. Avoid skin and eye contact and avoid inhalation of dust during handling and application. Use appropriate personal protective equipment (PPE) including protective gloves, safety goggles, and dust mask. Refer to the Material Safety Data Sheet (MSDS) for complete health and safety information.



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Technical Data:

Property	Value
Appearance	Grey powder
Binder Type	Cementitious crystalline system
Mixed Density	Approx. 1.85 – 1.95 kg/L
Pot Life	Approx. 30 – 45 min @ 25°C
Application Temperature	+5°C to +40°C
Initial Set	Approx. 2 – 4 hours
Final Set	Approx. 6 – 8 hours
Adhesion to Concrete	Excellent
Water Vapour Transmission	Breathable
Abrasion Resistance	High
Chloride Penetration Resistance	Excellent
Water Permeability	Very low
Hydrostatic Pressure Resistance	Up to 8 – 10 bar*
Toxicity	Non-toxic after curing

Depending on substrate quality, curing conditions, and application methodology