

Crocodile Perfect Shield

Waterproofing Cement



Crystalline Penetrate Waterproofing Cement

Jorakay Perfect Shield is a cement-based waterproofing system containing graded sand and specialized chemicals. It is designed for effective waterproofing on both new and existing concrete surfaces. The product is easy to use—simply mix with water, then apply or spray the mixture onto the concrete surface. After mixing with water and applying to concrete, the active components penetrate and form crystals within the substrate (5–50 mm deep), blocking water pathways and providing strong waterproofing performance—even under high water pressure (Integral Capillary Concrete Waterproofing System).

Product Features

- Penetrates deeply into the concrete and becomes part of the structure, providing durable and permanent waterproofing.
- Effective against water penetration from both positive and negative sides.
- Resistant to chemical attack from groundwater, seawater, sulfates, chlorides, and carbonates.
- Performs reliably under high water pressure exceeding 16 bar.
- Can be applied over hairline cracks up to 0.4 mm without prior repair.
- Non-toxic and safe for use in potable water tanks.
- Enhances the concrete's abrasion resistance.
- Cures even on damp surfaces.
- Increases the compressive strength of concrete.
- Non toxic

Application

Suitable for waterproofing concrete floors and walls, basements, bathrooms, swimming pools, wastewater treatment tanks, ground-floor slabs, and structural concrete applications.

Standard : BS 1881

Color : Grey



Application Instruction

Substrate Preparation

- Clean the concrete surface thoroughly, removing dust, laitance, oil, and any contaminants.
- For smooth, polished, or sealed concrete surfaces, mechanically roughen the surface to create sufficient porosity.
- If cracks are present, repair them first with appropriate repair materials. For construction joints, chase the joint to a width and depth of approximately 20–30 mm before treatment.
- Pre-wet the surface until fully saturated, then allow it to reach a saturated-surface-dry (SSD) condition before application.

Mixing ratios

Vertical surfaces: Crocodile Perfect Shield 2.5 parts : water 1 part

Horizontal surfaces: Crocodile Perfect Shield 2 parts : water 1 part

Mixing

- Pour Jorakay Perfect Shield into water and mix according to the specified ratio using a low-speed drill mixer at approximately 150 rpm until uniform.
- Use the mixture within 20 minutes. Once it begins to set, do not add water to reuse it—discard and prepare a fresh batch.
- Stir the mixture periodically during application.

Application

- Apply Crocodile Perfect Shield in one or two coats according to specification by masonry brush.
- Horizontal flatwork: applied in one slurry coat to hardened concrete.
- Vertical surfaces: applied in two coats. When two coats are specified, apply the second coat while the first coat 20 minutes.

After Jorakay Perfect Shield has cured for 24 hours, the surface should be water-cured for at least 3 days to enhance product performance. Apply water curing three times per day to ensure proper penetration of the product into the concrete's capillary pores.

Estimated Coverage

Vertical Concrete or Block Surface: 1.4-1.6 kg / sq.m with 2 coats

Horizontal Concrete Surface: 1 kg / sq.m with 1 coat

Filling cavities / cavity-fill method

The product reacts with moisture to form permanent crystalline structures that block capillary pores within the concrete, preventing water penetration from all directions. Its performance improves over time as the crystals continue to grow deeper and become denser. To treat damp spots, drill an access hole and remove all trapped water using suction equipment, air pressure, vent pipes, or pumps. Pour a slightly fluid mixture of Jorakay Perfect Shield into the emptied cavity and use a rod or stick to gently compact and ensure full penetration. Seal the opening with Jorakay Protecrete Mortar. Drill holes with a 2–2.5 cm diameter, at 40–80° angles, spaced 15–20 cm apart, to a depth of three-quarters of the wall thickness.



Technical Data

Test Method	Standard	Evaluation
Bulk Density	-	~1.4 kg/L
Chemical Resistance	ASTM C-627-77	pH range 3-11 constant contact
Chloride Content	AASHTO T-260	Perfect Shield effects are NOT related to chlorides
Nontoxic	-	Pass
Depth Penetrated by Microscope	-	30 cm
Water Absorption (ml/sq.m/sec.)	BS 1881	0.24
Chemical Resistance HCl Immersion NaOH Immersion	ASTM C267	23.26% 4.94%

Limitation

Do not apply the product on a completely dry surface. The substrate must be premoistened, as the product reacts with moisture. If a topcoat is required, clean the surface with a water-vinegar solution, then rinse thoroughly with clean water before applying paint.

Caution

- This product contains Portland cement and other additives; appropriate protective equipment such as gloves, dust masks, and safety goggles should be worn.
- If the product gets into the eyes, rinse immediately with clean water several times and seek medical attention promptly.
- Keep out of reach of children.

Storage

- Store in a shaded, well-ventilated area.
- Shelf life is 1 year from the manufacturing date when unopened. If the bag is partially used, seal it tightly after each use to maintain product quality.

Packing

Net weight : 20 kg/bucket, 5 kg/bucket

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