



a.b.e.[®] Construction Chemicals **METHODOLOGY**

Application of dura.[®]proof krystalkote Cementitious waterproofing system by crystallization

All the relevant product data sheets and MSDS's are to be read for additional information i.e. pot life, mixing instructions, surface preparation, ventilation, temperature and application limitations, etc.

SURFACE PREPARATION

The concrete surface must be clean and free from laitance, oils, grease, curing agents or other foreign matters. If surface is too smooth or highly contaminated with foreign particles, sand blast or acid etch surface before treatments.

Concrete surface must be sound. Rout out visible cracks exceeding 0.4mm wide, honeycombed pockets to depth of about 40mm and width of 25mm. Mix three parts of **dura.[®]proof krystalkote** to one part water by weight, until stiff mortar consistency is achieved. Prime concrete surface with one slurry coat of **dura.[®]proof krystalkote** before applying the mortar mix onto area to patched, tightly sealing cavities.

dura.[®]proof krystalkote must be applied on damp substrates only to ensure maximum chemical penetration.

Pre-wet substrate until damp prior to application of **dura.[®]proof krystalkote**. If concrete surfaces dry out before application, it must be re-wetted.

MIXING

Mechanical mixing using a heavy duty drill and helical mixer the is the recommended mixing method. When using a heavy duty drill/stirrer for single bag mixing (25 kgs) the drill/stirrer should provide a minimum of 1100W input power, 600W output power, torque 45 Nm and variable speed of 0 to 700 rpm, including a heavy duty 2 paddle having a 120 mm diameter and helical stirrer height of 100 mm suitable for mixing cement mortars and grouts. The rotation of the stirrer should be such that the material is lifted from the bottom of the mixing container upward during mixing.

First add approximately 70% of the total water required to a clean mixing vessel, whilst stirring slowly add the powder to the water. Once all the powder is introduced into the water mix the product for 3 minutes ensuring good dispersion. Add the balance of the water and thoroughly mix until a smooth lump free consistency is achieved.

Mix 7.25 to 7.75 litres of clean potable water to 25kg **dura.[®]proof krystalkote**.

APPLICATION

SLURRY COAT

Apply a minimum of 2 coats at 90° angles to the previous coat, at a minimum rate of 0.5 kg/m² per coat using a block brush or roller. The second coat must be applied while the first coat is still green but sufficiently set so that it is not drawn off while applying the second coat.

The mixed material must not be applied at a temperature below 5°C or on a frozen surface. At no instance should the total thickness exceed 5mm in a single application.

DRY SHAKE METHOD

(NEGATIVE WATERPROOFING)

Sprinkle **dura.[®]proof krystalkote** powder directly from the packaging after allowing concrete to achieve initial set.

Sprinkle **dura.[®]proof krystalkote** at the rate of 3 – 3.5 kg/m² evenly and trowel to required finish or power float.

DRY SHAKE METHOD

(POSITIVE WATERPROOFING)

Sprinkle **dura.[®]proof krystalkote** powder directly from the packaging at the rate of 2 kg/m² evenly onto the lean concrete substrate just before the pouring of the main concrete.

CURING

After **dura.[®]proof krystalkote** coat has hardened, cure the treated surface with a light mist of clean water at regular intervals three times a day, for the initial 2 – 3 days. In extremely hot weather curing period may have to be extended to several days.

PROTECTION ON COMPLETION

Protection of **dura.[®]proof krystalkote** is not obligatory.

However, if used on external areas subjected to heavy rain, harsh sunlight or frost, the finished application should be protected for at least 24 hours.

TEMPERATURE AND RELATIVE HUMIDITY

Do not apply if temperature is below 5°C.

HEALTH AND SAFETY

dura.®proof krystalkote is a cement based product and is alkaline which may cause dermatitis.

We recommend that PVC or similar gloves and safety goggles should be worn during handling.

IMPORTANT NOTE

This data sheet is issued as a guide to the use of the product(s) concerned. Whilst **a.b.e.® Construction Chemicals Limited** endeavours to ensure that any advice, recommendation, specification or information is accurate and correct, the company cannot - because **a.b.e.®** has no direct or continuous control over where and how **a.b.e.®** products are applied - accept any liability either directly or indirectly arising from the use of **a.b.e.®** products, whether or not in accordance with any advice, specification, recommendation, or information given by the company.

FURTHER INFORMATION

Where other products are to be used in conjunction with this material, the relevant technical data sheets should be consulted to determine total requirements. **a.b.e.® Construction Chemicals Limited** has a wealth of technical and practical experience built up over years in the company's pursuit of excellence in building and construction technology.



Helical stirrer



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