



## CRYSTALLINE CONCRETE PATCHING SYSTEM

- Stops active flow of leakages quickly in seconds
- Excellent structural strength
- Non-shrink with high bond strength
- Single component (simply add water)
- Approved for potable water contact
- Non-metallic (won't rust or deteriorate)

<b>CE</b>
In Compliance with European Standard
EN 1504-3:2005
CR-SS-RP
Surface Protection Systems for Concrete

**PRODUCT DESCRIPTION**

SUPERSHIELD CRYSTALPATCH is a single compound grey powder which is a fast-setting, non-shrink, high-bond strength compound for quick concrete patching and repair. It is enhanced with SUPERSHIELD DPC crystalline technology. It is mixed with water to form mortar consistency which can be used to stop flowing water in seconds and to seal cracks, joints and other defects in the concrete.

**AREAS OF APPLICATION**

SUPERSHIELD CRYSTALPATCH is used to make coves, fill construction joints, form tie holes, cold joints and it can also be used to repair honey combing and cracks.

**MATERIAL CONSUMPTION**

	lb/Rn.yd	kg/Rn.m
Filling a 1" Deep (25 mm) X 1" (25 mm) Wide Slot	0.60	0.90
Filling a 1.5" Deep (37 mm) X 1" (25 mm) Wide Slot	0.85	1.40

**TECHNICAL DATA**

Product Code	SCR 102
Colour & Appearance	Grey Powder
Compressive Strength	25 MPa
Tensile Bond Pull of Strength	0.8 MPa
Setting Time	Initial set - 3 minutes ; Final set - 9 minutes
Proposed use of chemical: Repair of concrete substrates before the application of SUPERSHIELD DPC coating materials.	

**Performance characteristics for CE certification according to EN 1504-3:2005, 2+**

Test type	Standards	Performance
Compressive Strength	EN 12190	Class R3
Chloride Ion Content	EN 1015-17	≤ 0.05%
Adhesive Bond	EN 1542	≥ 0.8 MP a
Modulus of Elasticity	EN 13412	Class R1
Thermal Compatibility Part 4: Dry thermal cycling	EN 13687-4	Class R1
Carbonation Resistance	EN 13295	Class R1
Reaction to Fire		Class A1
Dangerous Substances		Complies with 5.4



## APPLICATION GUIDELINES

### PLUGGING INSTRUCTIONS

1) **PREPARATION:** Rout out crack or hole by chiseling or chipping to a minimum depth of 25 mm. Form a square or dovetail shaped space. Flush away all loose materials and dirt from the cavity with water and a stiff brush.

2) **MIXING:** Add 1 part water to 3.5 parts SUPERSHIELD CRYSTALPATCH by volume and mix to a consistency of stiff putty. Mix only the materials that can be used within 3 minutes.

3) **PLUGGING:** Form plug with gloved hand. Place plug (once the mix starts generating heat) into cavity pressing firmly until plug is hard. When sealing cracks, begin at the highest point and work down.

Note: Where there is a high volume of water flow due to extreme hydrostatic pressure, a bleeder hose may be necessary to relieve the water pressure while sealing the repair area. Use the following procedures:

- a) With a concrete chisel and hammer cut open a cavity at the point of greatest water flow.
- b) Place a stiff section of hose or pipe into the cavity and secure in place with SUPERSHIELD CRYSTALPATCH to force water through the hose. This relieves the pressure so that the area can be patched. Allow a minimum of 10 hours for hardening.
- c) The bleeder hose has to be removed and patched only after injection grouting with SUPERSHIELD CRYSTALINJECT (Refer CRYSTALINJECT Datasheet).

### PATCHING INSTRUCTIONS

1) **SURFACE PREPARATION:** Rout out faulty concrete until sound substrate is reached. Remove

all loose materials from area and saturate with clean water. Allow water to be absorbed into the concrete, then remove excess water.

2) **MIXING:** For quick repairs to concrete or masonry, add water to SUPERSHIELD CRYSTALPATCH (1.5 parts water to 4 parts powder by volume). Mix to a workable mortar consistency and trowel as required. For large repairs, mix 1 part SUPERSHIELD CRYSTALPATCH with 2 parts mason sand or small aggregates of required size.

### CURING

A misty fog spray of clean water must be used for curing the SUPERSHIELD CRYSTALPATCH treatment after 18 hours of application. Cure the treated surface for three days (twice a day). Frequent curing is required for hot climates. The freshly applied SUPERSHIELD CRYSTALPATCH should be protected from the direct rain for at least 12 hours after application.

### HEALTH AND SAFETY

SUPERSHIELD CRYSTALPATCH contains chemicals, which may cause skin irritation. For personal precaution, protective gloves and goggles are recommended to be worn during handling of this product. If product gets in contact with the eyes, flush immediately with clean water and seek medical assistance if symptoms prolong.

### STORAGE

When stored in a dry place in unopened, undamaged original packaging, shelf life is 12 months.

### PACKAGING

Available in 25 kg (55.1 lb) Pails and 25 kg (55.1 lb) PE-lined paper bags.