



# CRYST-O-FLEX

## FLEXIBLE CEMENTITIOUS WATERPROOFING COMPOUND

### Description

Cryst-O-Flex is a two pack, flexible, high performance waterproofing membrane incorporating high performance polymers and selected cements, fillers and aggregates.

Cryst-O-Flex is a versatile membrane exhibiting excellent waterproofing properties under high hydrostatic pressure.

### Principal Uses

Cryst-O-Flex is suitable for waterproofing, particularly if hydrostatic pressure is an issue:

- Concrete, block work, brick and rendered structures.
- Concrete slabs.
- Water retaining structures, eg. Concrete tanks, ponds, fountains and swimming pools.
- Retaining walls.
- Planter boxes.
- Wet areas.
- Sealing of joints in Harditex or Blue Board before applying textured coatings.

### Substrates

Suitable substrates are primed concrete, block work, brick, render, plasterboard, FC Sheeting and timber surfaces.

Surfaces should be clean, dry, sound and stable.

### Benefits And Advantages

- Two pack yet flexible.
- Excellent hydrostatic pressure resistant.
- It has minor elongation properties to allow expansion and contraction.
- Suitable for internal and external applications.

- Easy to apply.
- Can be tiled or topped.
- Compatible with most tile adhesives.
- Does not leach into or stain grout or tiles.

### Surface Preparation

The surface must be clean, dry, free of dust, loose particles, cement laitance, grease, rust, curing compounds or other adhesion detracting substances.

Exposed steel must be treated with a suitable anti-corrosive and anti-rust material (as for concrete spalling). Rough, honeycombed or pitted areas must be treated and filled with a suitable high performance non-shrink repair mortar.

Cracks must be suitably treated and filled.

Prime surfaces with either Duram WB Primer or Cryst-O-Flex liquid diluted with one third clean water and allowed to dry.

Although the primers and product can be applied to damp surfaces (but free of running, standing water or continual dampness) it is not recommended as curing will be prolonged.

### Mixing

Mix with a suitable mechanical mixer. Hand mixing is not sufficient.

Fill approximately 3/4 of the liquid into a plastic pail and whilst stirring slowly add the Cryst-O-Flex powder and balance of the liquid. Mix until homogenous, smooth and lump free.

The product's viscosity should be suitable for both horizontal and vertical surfaces but thickness of product can be increased by adding up to 3% of neat Portland cement.

### Application

Generally apply at least two coats by brush, block brush, roller, rubber squeegee, trowel or spray to a final dry film thickness of between 1.5mm and 3mm depending upon type and nature of waterproofing requirement. Apply subsequent coats at right angles to the preceding coat after it has fully cured.

In swimming pools after priming, apply Cryst-O-Flex directly to the concrete substrate in 3 coats at 1mm thick per coat allowing each coat to dry before applying the next. Allow to thoroughly cure. The membrane should be suitably rendered with a bonding agent incorporated in to the render then tiled using a suitable tile adhesive such as Duram Tilefix Dingo XT, Dingo Off White or Dingo White.

For wet areas, follow the procedure as set out in AS3740 ensuring that all joints, corners and penetrations are first filled and sealed with a flexible, polyurethane joint sealant which must be allowed to cure.

### Application Rate

Product	Rate
Primers	4 m <sup>2</sup> per litre
Cryst-O-Flex	1mm thick per m <sup>2</sup> per coat. Note 1kg provides ± 1mm thick per m <sup>2</sup>

#### IMPORTANT

The product information contained in this data sheet is given in good faith based upon our knowledge and current information and does not imply any warranty. The information contained herein is provided on the basis that the product is applied in a proper manner strictly in accordance with instructions onto correctly prepared surfaces which shall remain sound, stable and free of cracking or movement. Instruction application deviation may diminish or negate the performance of the product. Under no circumstances will the Company be liable for any loss, consequential or otherwise, arising from the use of the product. We reserve the right to amend specification and application techniques without prior notice.

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## Tiling & Topping

After it has fully cured it can be tiled or topped with a suitable tile adhesive such as Duram Tilefix range or sand: cement mix. Tiling must be done in accordance with AS3958.1.

## Precautions Pot Life

Approximate pot life at 20°C is 1 hour. Higher temperatures will decrease pot life.

Protect from water until fully cured. If exposed to the elements, do not apply if rain is imminent.

## Curing

Drying/curing times will vary depending upon dryness of substrate, temperature, humidity and ventilation. Curing conditions must be taken into account particularly in confined and poorly ventilated areas such as

underground tanks, internal tanks and water retaining structures.

Recoatable	12-24 hours
Resistant to mechanical stress	3 days
Full Cure	4 to 7 days

## Water Pressure Resistance After 7 Days

Positive	Negative
± 20 atmospheres (300 psi.)	± 4 atmospheres (300 psi.)

## Cleaning

Wet tools and spills can be cleaned with water.

## Packaging & Shelf Life

Available in 15kg kit, 20lt pail + 40Kg Powderkit soon to be introduced. 6 months in upopened containers.

## Safety

Use in ventilated areas. The use of rubber gloves, safety boots and goggles (against splashes) is recommended.

## Data

Data is typical but does not constitute a full specification. This should be sought from the Company or its agents for specific projects.

## Disclaimer

The company's liability in respect of this product is limited to the replacement of proven faulty product and is not responsible for any loss or damage arising from its use or any consequential damage whatsoever.