## **TECHNICAL DATASHEET**



# OWL FORCE 10

FORCE 10 is a cementitous waterproofing system which creates a monolithic bond using crystalline chemicals when applied to concrete and masonry structures.





When mixed with clean water and applied correctly, **FORCE 10** forms a permanent waterproof coating to the concrete and masonry and is easily applied by brush, roller or spray.

Force 10 waterproofs against positive and negative hydrostatic heads of water and is suitable for use, internally, externally, above and below ground. Force 10 is ideal for use as part of a damp-proofing course (DPC).

## **ADVANTAGES**

- Permanent waterproofing for concrete and masonry.
- Resists positive and negative water pressure.
- Superior bond strength.
- Resists salt contamination in masonry.
- Suitable for use above and below ground level, for internal and external use.
- Safe to use in contact with potable water.
- Easy to use, brush, roller or spray applied.



## **TYPICAL USES**

A permanent damp-proof course, particularly on rubble filled walls where a chemical damp-proofing cream, such as Ultracure, cannot be used.

Waterproofing of: Basements, cellars, swimming pools, brickwork, block work structures, concrete and renders.

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### SUBSTRATE PREPARATION

All active water leaks must be stopped using Waterstop (rapid setting plugging compound) before continuing to the next stage of application.

#### **Uneven surfaces:**

Remove by suitable means, all loose pointing, any remaining render or plaster, wood, dust, grease, oil, organic growth or other foreign materials that may cause contamination or adversely affect adhesion properties. To create a level surface, Universal Mortar should be applied in line with the relevant data sheet, which is available upon request or can be downloaded from our website. Follow the Universal Mortar priming requirements before application.

#### **Level Surfaces:**

If there is any exposed steel present, apply two coats of suitable corrosion inhibitor to the exposed steel, by brush. Remove all loose material and surface latencies, i.e. dust, oil, grease, corrosion and organic growth, preferably by using wet grit or water blasting techniques. The strength of the concrete subbase must be a minimum of 25 N/mm².

**Note:** Special precautions may be necessary to ensure a continuous waterproof barrier at the wall to floor joints and corner joints. This is to avoid sharp changes of angle in the tanking membrane. The joints should be thoroughly raked out and cleaned prior to an application of Universal Mortar as a fillet seal.

#### Priming

- Using a brush, roller or spray, apply SBR Latex, mixed 1:1 (by volume) with water.
- Allow to become tacky to the touch. This will take approx. 30 mins to 2 hours.

## **MIXING**

Force 10 consistency can be varied to suit the application method.

#### **Required Water Additions**

Pack Size	Brush Applied	Trowel Applied	Spray Applied
20Kg	3.2 - 4 litres	3.2 - 3.6 litres	3.5 - 4.2 litres

When mixing Force 10, use ONLY CLEAN WATER, a clean mixing vessel and a mechanical mixer.

1. Pour minimum required addition of clean water in to the mixing vessel.

- 2. Using an electric paddle, gradually start to add the powder whilst mixing under low shear to reduce dust generation.
- 3. Add all powder and increase mixing shear.
- 4. Mix for approx. 1 3 mins to achieve a uniform, lump free slurry.
- 5. If necessary, gradually add water and mix until desired consistency is achieved. Do not exceed maximum required water additions as this will result in the product becoming ineffective as a waterproof barrier.

**Note:** Excessive mechanical mixing should be avoided. Mechanical mixing time must not exceed 5 minutes.

## **APPLICATION**

Force 10 is a minimum 2 coat application, with each layer applied at a uniform thickness of at least 1 mm per coat.

#### Brush and trowel applied:

Apply in even layers using a stiff bristled brush or broom/ trowel on vertical surfaces and a rubber squeegee or stiff bristled brush/ trowel for horizontal surfaces. It is essential the first coat is well brushed or trowelled into the surface to ensure a good bond with the substrate.

Allow the first coat to harden (approx. 2 - 5 hours). Apply a second coat of **Force 10** as soon as the first coat has hardened, but not fully set.

Apply the second coat at 90° angle to the first, ensuring a minimum overall thickness of 2 mm.

### Spray applied:

Use traditional wet mortar spraying equipment and processes, ensuring final coat provides a uniform thickness of at least 2 mm.

## **CONDITIONS & LIMITATIONS**

The product should not be applied in temperatures under 5°C and falling, or if temperatures are expected to fall below 5°C within 24 hours. Ensure the substrate temperature is not below 5°C before commencing application.

Avoid application in direct sunlight to prevent rapid drying out. If Force 10 dries out too rapidly between coats, repeat priming process.

When applying to environments that will contain aquatic life, such as ponds, always finish with Technoseal DPM, and refer to the relevant data sheet, which is available upon request or can be downloaded from our website.

**Note:** Gypsum plaster must not be used in direct contact with **Force 10**.