

# INTEGRAL WATER PROOFER

Larsen Integral Waterproofer is a standard-setting, 'pore-blocking', permeability-reducing admixture. It inhibits the passage of liquid water through the capillary and pore network in cementitious materials, but does not form a vapour barrier thus allowing the structure to breathe. Larsen Integral Waterproofer is non-retarding, chloride-free and equally compatible with all cements. Larsen Integral Waterproofer can be used to waterproof screeds, renders and concrete, which when treated will resist hydrostatic pressure. It is also suitable for use in render systems used to tank basements or to line water-retaining structures.

**PORE-BLOCKING WATERPROOFER  
WATERPROOF RENDER SYSTEM  
VAPOUR PERMEABLE – ALLOWS STRUCTURE TO  
'BREATHE'  
BS EN 934-2: T9**

## TECHNICAL INFORMATION

**FORM:** Fluid Suspension

**COLOUR:** Pale Yellow

**S.G.:** ~1.1

**pH:** ~9.5

**CHLORIDE CONTENT:** < 0.1% w/w

**FREEZING POINT:** 0°C

**PERMEABILITY INDEX:**  $1\text{m}^3 \times 10^{-7}/\text{min}^{0.5}$   
@ 7L Integral Waterproofer + 2L 100+ per  
 $\text{m}^3$  of concrete

## **DIRECTIONS FOR USE:**

### **GENERAL PURPOSE WATERPROOFING**

Integral Waterproofer can be used in external renders as a general purpose waterproofing admixture. It is suitable for use in all types of mortar to reduce permeability, and therefore reduce risk of damage from frost and efflorescence. Dosage: approx. 3% by weight of cement.

### **WATERPROOFING CONCRETE**

Integral Waterproofer can be used as a concrete waterproofer at a dosage of 7L Larsen Integral Waterproofer plus 2L Chemcrete 100+ per m<sup>3</sup>. For best performance, concrete should contain >350kgs cement per m<sup>3</sup>, with maximum water cement ratio of 0.5.

### **TANKING WITH LARSEN INTEGRAL WATERPROOFER**

#### **PREPARATION**

Mechanical preparation by scabbling, shotblasting or high pressure water to fully key the substrate is essential. All areas to be treated should be saturated completely with clean, fresh water prior to the application of Larsen Integral Waterproofer. Leave no standing water. Do not allow saturated surface to dry prior to the application of Larsen Integral Waterproofer. Any persistent leaks should first be stopped using Larsen Leak Plug. Any fixtures causing a defect in the treatment should first be removed.

#### **APPLICATION**

Shake well before use. The dilution of Larsen Integral Waterproofer and water is constant at 1 part Larsen Integral Waterproofer to 10 parts water by volume.

#### **RENDERING TO RESIST MOISTURE INGRESS ABOVE GROUND LEVEL**

Prepare the surface as above. Apply the first coat of a 1:1 (cement:sand) mortar with Larsen Integral Waterproofer at a minimum thickness of 6mm at any point. Cover the substrate 100%. Mix to a grout consistency and cast on vigorously. Apply a second coat not less than 6mm thick as soon as the previous coat has initially set. The second coat should be 1:2.5 (cement:sand) with a wood float finish.

#### **RENDERING TO RESIST WATER PRESSURE IN TANKING SITUATIONS**

To keep water out - basements; or to keep water in – swimming pools. Prepare the surface as above. **FIRST DAY:** (a) 1st Coat. Mortar 1:1 with Larsen Integral Waterproofer at no less than 6mm thick taking care to cover the entire surface. Mix to a grout consistency and cast on vigorously. (b) 2nd Coat. Mortar 1:1.5 with Larsen Integral Waterproofer at no less than 6mm thick applied as soon as the 1st coat has initially set. On completion, apply a splatter coat of the same mortar, mixed to a grout consistency with plain water, over the whole surface to form a key for the next coat. **SECOND DAY:** 3rd Coat. Mortar 1:2.5 with Larsen Integral Waterproofer at no less than 6mm thick. This coat should be finished with a wood float. **JOINTS:** Each coat should be finished 150mm back from the previous coat thus forming 'lapped' joints rather than butt joints.

#### **WATERPROOF FLOOR SCREED**

**PREPARATORY WORK:** The surface must be mechanically keyed and saturated. Sand must be both clean and sharp. It should be graded 3mm down except for the main floor coat, where it is preferable to use 5mm down. Grout: 1:1 (Cement:Sand) mixed to a grout consistency and scrub on vigorously with a stiff brush. **BONDING COAT:** Mortar 1:1 (Cement:Sand) with Larsen Integral Waterproofer plastic consistency, spread with a trowel, not less than 10mm thick. **MAIN FLOOR COAT:** Mortar 1:3 (Cement:Sand) with Larsen Integral Waterproofer using 5mm sand, laid in a semi-dry state while the bonding coat is still wet, to a thickness of not less than 30mm, i.e. a minimum total thickness of 40mm. The surface to be tamped vigorously until moisture rises to the surface. Complete with a wood float. **JOINTS:** Each coat should be finished 150mm back from the previous coat thus forming 'lapped' joints rather than butt joints. **COVE ANGLE:** The 1st and 2nd coats of the wall rendering are carried down and out onto the floor 250mm and 150mm respectively. Before laying the floor topping these exposed strips should be mechanically keyed, saturated and grouted with the main floor. The cove in the main floor coat, formed with cove trowel helps to strengthen the joint between the wall rendering and the floor topping. Beware of coving over perimeter movement joints. **FINISHING PLASTERS:** Use Thistle or Limelight finishing plasters. **MOVEMENT JOINTS:** Where there are joints of any kind, daywork, movement, etc. then these should be waterproofed using proprietary Seal Strip Jointing System.

## **DIRECTIONS FOR USE (continued):**

### **IMPORTANT CONSIDERATIONS**

Always apply to a sound surface. Do not short cut on preparation. ENSURE MIX RATIOS AND CONSISTENCIES ARE ADHERED TO METICULOUSLY. Follow the instructions carefully. Use fresh OPC or SRC. Do not use lime or mortar plasticisers to aid workability in rendering work - only use Chemcrete C305 @ 0.5% by weight of cement. Always key between coats with a splatter coat. NEVER SCRATCH to form a key. Always LAP coats - never butt joint. Use sharp washed medium sand - NEVER soft sand. Sand should be 3mm down for walls and for the bonding layer in floors; 5mm down for the main floor coat. Any prolonged delay between layers or at lapped joints will require mechanical preparation, wetting and grouting, prior to proceeding.

### **DISPENSING**

Larsen Integral Waterproofer should be dispensed into the mixer with the gauging water. It should never be added to the dry cement.

### **COMPATIBILITY**

Larsen Integral Waterproofer can be used with all types of Portland Cements. It is also compatible with other admixtures. When used in conjunction with other admixtures, each must be dispensed separately into the concrete mix.

### **OVERDOSAGE**

Severe overdosage can cause strength loss.

### **STORAGE**

This product must be stored in closed containers protected from extremes of temperature. If the product has frozen, thaw at temperatures above +4°C and reconstitute by mechanical agitation only, carry out trials to ensure product is suitable for continued use.

### **SHELF LIFE**

12 months in unopened manufacturer's containers.

### **PACKAGING**

Larsen Integral Waterproofer is supplied in 5L, 25L and bulk, if required.