



# CONCRESEAL® PLASTERING

## WATERPROOF LEVELLING MORTAR WITH DECORATIVE TEXTURE FOR FINISH AND PROTECTION OF CONCRETE AND MASONRY FROM WATER AND MARINE ENVIRONMENT

### DESCRIPTION

**CONCRESEAL® PLASTERING** is a mixture of cements, carefully controlled silica aggregates and special additives, designed for waterproofing, levelling, protection and decoration of concrete and masonry in one single layer with thickness between 3 and 5 mm.

### APPLICATION FIELDS

- Decorative and protective coating with minimum thickness on façades, pre-cast elements, concrete, brick walls, etc, exposed to weathering and freeze-thaw cycles.
- On concrete block partitions, it fulfils three functions: levelling joints, waterproofing and decorative finish in a single layer application.
- Protection and decorative finish on waterproofing coatings such as **MAXSEAL®** and **MAXSEAL® FLEX** (Technical Bulletin n° 1 and n° 29 respectively) subject to impacts, damages and abrasion by water flow, such as water treatments plants, dams, swimming pools, water channels, tunnel lining, etc.
- Levelling, finish and protection of structural repairs in façades and residential buildings, exposed to marine environment.
- Finish and protective layer on below grade waterproofing works subject to negative water pressure, such as garages, basements, tunnels, galleries, sub-ways, etc.

### ADVANTAGES

- Adds aesthetic uniformity maintaining architectural details of fluting, vertical lines, decorative mouldings, etc.
- It fills and seals holes, voids and honeycombs. Once sets, it becomes part of the substrate.
- Avoid deterioration of the substrate due to the penetration of water and aggressive particles.
- Suitable for contact with drinking water.
- Very good adhesion on substrate.
- High abrasion resistance.
- Long lasting, maintenance-free. Provides a durable waterproofing finish.
- Easy to apply, it can be even sprayed.

### APPLICATION INSTRUCTIONS

#### Surface preparation

Remove damaged areas, low strength renders, unsound mortars or any loose particles to expose a structurally resistant substrate. Surface must be clean and free of paint, efflorescence, greases, oil, foreign materials, dust, de-moulding agents, curing agents or any particle which could affect the adhesion. Clean surface by scrubbing with a wire brush, sandblasting or water blasting.

All cracks and fissures must be opened up at least 2 cm in depth and filled with a structural repair mortar such as **MAXREST®** (Technical Bulletin n° 02). Honeycombs, voids or gravel pocket should be patched with **MAXREST®** too. If superficial non-structural steel elements are present, concrete around them must be removed and the steel elements cut to a depth of 2 cm. Finally, patch the opened area with **MAXREST®**.

Expose all structural reinforcement affected by corrosion, removing all concrete around

them at a depth of 2 cm. Clean reinforcements of rust or scale and then, coat them with the oxide converter and anti-corrosion protection **MAXREST® PASSIVE** (Technical Bulletin n° 12).

### Mixing

*Trowel application.* A 25 kg bag of **CONCRESEAL® PLASTERING** requires 1 litre of **MAXCRYL®** and 3,5 – 4 l of water, depending on the consistency required and application temperature. Mixing is best done by mechanical means such as a slow speed mixing drill (400-600 rpm). Small quantities can be mixed by hand. Mix until a workable mortar free of lumps is achieved.

*Spray application.* A 25 kg bag of **CONCRESEAL® PLASTERING** requires 2 litres of **MAXCRYL®** and 4,5 litres of water. This quantity is indicative and can be slightly modified depending on consistency required, application temperature and type of pump. Use a mechanical mean for mixing as above mentioned.

### Application

*Trowel application:* Once repaired, the entire surface to be coated should be thoroughly saturated but do not leave free-standing water before application. Then, using a trowel make sure **CONCRESEAL® PLASTERING** is firmly pressed into all voids and applied in layers of thickness between 3 to 5 mm. When **CONCRESEAL® PLASTERING** starts to set (from 20 to 30 min, depending on ambient conditions), surface can be finished with a sponge, wood, plastic float or trowel, depending on the desired texture. A solution of one part of **MAXCRYL®** and three parts of clean water must be used to wet the sponge in the final process of finishing. Do not use only water.

*Spray application:* Previously, dampen completely the surface but do not leave free standing water and proceed to fill with **CONCRESEAL® PLASTERING** by trowel the voids, holes or big honeycombs deeper than 5 mm. Then, spray one layer of **CONCRESEAL® PLASTERING** with thickness between 3 to 5 mm and covering areas from 6 to 8 m<sup>2</sup>. Once it sets, additional layers can be sprayed as needed to achieve a desired higher thickness or provide a uniform texture, maintaining the same distance from the surface.

If a colour finish is required, coat with **MAXSHEEN** (Technical bulletin n° 17) or **MAXSHEEN® ELASTIC** (Technical Bulletin n° 142) with either smooth or texture finish.

For negative water pressure or water immersion conditions, **MAXSEAL®** or **MAXSEAL® FLEX** should be used previously as waterproof coatings and after 7 days of curing time, apply **CONCRESEAL® PLASTERING** as finish. In order to achieve the suitable adhesion on a close porous surface as **MAXSEAL® FLEX**, a dilution of 2 parts of **MAXCRYL®** and 1 part of water must be used to mix **CONCRESEAL® PLASTERING**.

To prevent shadowing on deep masonry joints or areas with unequal absorption, apply one coat of **MAXSEAL®** with **MAXCRYL®** in order to obtain a more regular and homogeneous surface, wait for 7 days of curing and proceed to apply **CONCRESEAL® PLASTERING**.

### Application conditions

Do not apply **CONCRESEAL® PLASTERING** below 5 °C or if such temperatures or rainfall is expected within 24 hours after application. Do not apply on frozen or frosted surfaces.

For applications with hot temperatures (> 25 °C) and wind, i.e. summer time, the surface must be dampening with plenty of water.

### Curing

For a better curing with hot temperatures (> 25 °C), apply a fine mist water spray at least the first hours after placing **CONCRESEAL® PLASTERING**. Allow the coating to cure at least for 7 days at 20 °C and 50% R.H. before water immersion. Lower temperatures and higher relative humidity increase the curing time.

### Cleaning

All tools and equipments should be cleaned immediately with water after use. Once it hardens, product can only be removed by mechanical means.

### CONSUMPTION

Approximate consumption is 1,7 kg/m<sup>2</sup> per mm. thickness. This estimated consumption varies depending on roughness, substrate porosity and application method. A preliminary test on-site will determine consumption exactly.

## IMPORTANT INDICATIONS

- When coating over existing renders, compatibility, soundness and adhesion testing on the substrate must be done.
- Do not use leftovers from previous mixes.
- Do not add cement, aggregates or other compound to **CONCRESEAL<sup>®</sup> PLASTERING**.
- Do not exceed the mixing ratio recommended.
- Do not use a high speed mixing drill or over-mix.
- For further information, consult our Technical Department.

## PACKAGING

**CONCRESEAL<sup>®</sup> PLASTERING** is supplied in 25 kg bags. It is available in white and pearl grey colour.

## STORAGE

Twelve months in its original unopened packaging. It must be stored in a dry and covered place, protected from humidity and freezing, at temperatures above 5 °C.

## SAFETY AND HEALTH

**CONCRESEAL<sup>®</sup> PLASTERING** is an abrasive product, so both rubber gloves and safety goggles must be used to prepare and apply the mixture. In case of eye contact, rinse thoroughly with abundant clean water, but do not rub. In case of skin contact, wash affected areas with soap and water. If irritation persists, seek medical attention.

For further information, Safety Data Sheet of **CONCRESEAL<sup>®</sup> PLASTERING** is available by request.

Disposal of the product and its empty packaging must be made by the final user and according to official regulations.

## TECHNICAL DATA

Density hardened material (Kg/dm <sup>3</sup> )	2,02±0,05		
Maximum size of aggregate (mm)	0,8		
Capillarity coefficient, C (g/dm <sup>2</sup> .min 1/ 2)	0,10		
Capillarity water absorption (%)	0,55		
Dynamic modulus of elasticity (Kp/cm <sup>2</sup> ) ASTM C-215	245.000		
Mechanical resistance (Kp/cm <sup>2</sup> ) 7 days 28 days	Flexural	Compression	
	53 64	242 310	
Abrasion resistance Test conducted on dry material using silica sand as an abrasive agent	<b>LENGTH / METERS</b>	<b>WEIGHT APPLIED Kg /cm<sup>2</sup></b>	<b>WEAR in mm</b>
	500	0,51	9,4 ± 0,5
	500	0,21	4,5 ± 0,5
	1000	0,21	10,0 ± 0,5
Adhesion (Kp /cm <sup>2</sup> )  7 days 28 days	<b>Pull-off</b>		<b>Splitting</b>
	<b>Rough Concrete</b>	<b>Rough concrete /Maxseal</b>	<b>Smooth concrete</b>
	8,4	--	--
	9,4	8,1	8,0
Accelerated aging test.	After the test, the product did not crack, come away or show any noticeable changes in colour.		
Suitability for contact with drinking water	Approved		
Impact resistance 1 kg steel ball	<b>Height (m)</b>	<b>Impact Energy (Julios)</b>	<b>Diameter of damage (cm)</b>
	1,0	9,8	1,33
	1,5	14,7	1,41
	1,8	17,6	1,60

## GUARANTEE

The information contained in this leaflet is based on our experience and technical knowledge, obtained through laboratory testing and from bibliographic material. **DRIZORO®**, **S.A.** reserves the right to introduce changes without prior notice. Any use of this data beyond the purposes expressly specified in the leaflet will not be the Company's responsibility unless authorised by us. We shall not accept responsibility exceeding the value of the purchased product. The data shown on consumptions, measurement and yields are for guidance only and based on our experience. These data are subject to variation due to the specific atmospheric and jobsite conditions so reasonable variations from the data may be experienced. In order to know the real data, a test on the jobsite must be done, and it will be carried out under the client responsibility. We shall not accept responsibility exceeding the value of the purchased product. For any other doubt, consult our Technical Department. This version of bulletin replaces the previous one.



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