



# CONCRESEAL® PLASTERING-M

**WATERPROOF ONE-COMPONENT MORTAR FOR LEVELLING,  
PROTECTION AND DECORATIVE FINISH OF CONCRETE  
AND MASONRY**



## DESCRIPTION

**CONCRESEAL® PLASTERING-M** is a mono-component mortar composed 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. It is also available with smaller aggregate size the version **CONCRESEAL® PLASTERING-M REGULAR**, for a smoother cosmetic finish.

## APPLICATION FIELDS

- Levelling, waterproof protection and decorative layer with minimum thickness on façades and

masonry units: pre-cast elements, bricks, rendered walls, etc.

- Protection of **MAXSEAL**, **MAXSEAL SUPER** and **MAXSEAL FLEX** against abrasion, impacts and wearing in water channels, pipelines, settlement tanks in waste water treatment plants, etc.
- Protection of concrete to weathering and freeze-thaw cycles.
- Protection for concrete exposed to abrasion and high flowing water in wastewater treatment plants, dams, waterfalls, channels, pipelines, etc..
- Levelling, finishing and protection on façades and partition walls in new buildings, residential buildings or restoration works in areas subject to marine environment.

- Levelling, finish and protection of waterproofing coatings **MAXSEAL**, **MAXSEAL SUPER** and **MAXSEAL FLEX** in underground works exposed to negative water pressure: garages, parking areas, basements, tunnels, galleries, sub-ways, etc.

## ADVANTAGES

- Avoid the substrate damage due to the water ingress and other aggressive chemicals.
- Serves three functions: waterproofing, protection and decoration in a single application.
- High impact resistance, abrasion and wearing exposed to water flows.
- Adds aesthetic uniformity, maintaining architectural details of fluting, vertical lines, decorative mouldings, etc.
- Permeable to water vapour, allows the substrate to breath, and allows finishing on **MAXSEAL**, **MAXSEAL FLEX**, **MAXSEAL SUPER** in negative waterproofing works.
- Suitable for use in contact with drinking water. Non toxic and does not contain chloride.
- Very good adhesion to substrate. It fills and seals all porous of the surface and becomes part of the structure of the substrate. No primer/bonding agent is required.
- Resistant to UV rays and aggressive environments: seacoasts, zones with air pollution, etc. Long-lasting solution, no maintenance required.
- Fully compatible with cement-based coatings **MAXSEAL**, **MAXSEAL FLEX**, **MAXSEAL SUPER**, etc.
- Easy to apply by trowel, roller or spay methods.
- Environmentally friendly: non-toxic, cement-based and solvent-free product.

## APPLICATION INSTRUCTIONS

### Surface preparation

Substrate must be structurally sound, firm, without cement laitance and as uniform as possible, and preferably with a slight roughness, i.e. open textured surface. For applications on old renders, tensile strength should be at least 1,0 N/mm<sup>2</sup>. Surface must be clean and free of paints, coatings, efflorescence, loose particles, grease, oils, curing agents, form release agents, dust, gypsum plasters, organic growth or any other contaminants that may affect to adhesion.

For cleaning and preparing the substrate, preferably in case of smooth and/or poorly absorbent substrates, use wire brush, sand blasting or high pressure water cleaning methods, not being desirable aggressive mechanical means.

Surface defects, voids and static cracks without movement, once opened and routed to a minimum depth of 2 cm, must be repaired previously with **MAXREST®** (Technical Bulletin No. 2) to provide a sound and even surface.

Rebars and other metal elements exposed during the substrate preparation should be cleaned and passivated with **MAXREST® PASSIVE** (Technical Bulletin No. 12), while non-structural and surface iron elements must be cut to a depth of at least 2 cm and then covered with **MAXREST®**.

Substrates affected by internal salt crystallization, should be treated previously with the anti-salt treatment **MAXCLEAR® SULFALT** (Technical Bulletin No. 163).

Once substrate has been repaired and cleaned, it must be saturated thoroughly with water but do not leave free standing water before application. If it gets dry, proceed to saturate with water again.

### Mixing

A 25 kg bag of **CONCRESEAL® PLASTERING-M** requires from 4,0 to 4,5 litres (17±1%) of water for trowel or roller applications.

For spay applications, a 25 kg bag of **CONCRESEAL® PLASTERING-M** requires from 5,0 to 6,0 litres of water, according to application temperature and desired finish.

Pour the required amount of mixing water in a clean container followed by **CONCRESEAL® PLASTERING-M**, and mix by slow speed electric drill (400-600 rpm) fitted with a disc mixer for about 2-3 minutes until achieving a lump-free and homogeneous mortar. Do not mix for prolonged period nor use high-speed mixer, which may introduce air bubbles. Allow the mixture to rest for 3 to 5 minutes to fully wet out all the powder, and remix briefly before applying.

### Application

#### Trowel application:

Apply the mortar onto surface by trowel in an even and thick layer with a recommended consumption of 1,7 kg/m<sup>2</sup> per mm thickness. Make sure **CONCRESEAL® PLASTERING-M** is firmly pressed into all voids and apply in layers between 3 to 5 mm thickness.

When mortar starts to set, i.e. 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.



#### *Spray application:*

Fill previously any honeycombs or non-structural void deeper than 5 mm with **CONCRESEAL® PLASTERING-M** by using a trowel, and then spray one layer of **CONCRESEAL® PLASTERING** with 3 to 5 mm thickness 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) with either smooth or texture finish, after a curing time of at least 3 days. For negative water pressure or water immersion conditions, use previously **MAXSEAL**, **MAXSEAL SUPER** or **MAXSEAL FLEX** as waterproof coating. After 7 days of curing time, then apply **CONCRESEAL® PLASTERING-M** as finish.

To prevent shadowing on deep masonry joints or areas with extreme unequal absorption, apply previously one coat of **MAXSEAL®** in order to obtain a more regular and homogeneous surface.

#### **Application conditions**

Do not apply when rain is expected within 24 h after application.

The optimum temperature range for application is from 10 °C to 30 °C. Do not apply with substrate and/or ambient temperature is at or below 5°C, or when temperatures are expected to fall below 4 °C within 24 h after application. Do not apply to frozen or frost-covered surfaces.

For applications at cold temperatures, do not wet the surface excessively.

For applications at hot temperatures (> 30 °C), low relative humidity and/or windy conditions, i.e. summer time, surface must be wet thoroughly with

plenty of water prior to application. Avoid direct exposure to sunlight with extreme heat.

#### **Curing**

Prevent a quick drying of **CONCRESEAL® PLASTERING-M** and protect from extreme heat (> 30 °C) with direct sunlight to maintain its moisture for at least 24 hours after the application, spraying a fine mist of water without washing out the surface, or by using polyethylene sheeting or damp burlaps. Do not apply curing agents.

Allow **CONCRESEAL® PLASTERING-M** to cure for at least 7 days (20 °C and 50% R.H.) before water immersion. Lower temperatures and/or higher H.R. values increase the curing time.

#### **Cleaning**

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

#### **CONSUMPTION**

Estimated consumption of **CONCRESEAL® PLASTERING-M** is 1,7 kg/m<sup>2</sup>.mm.

This figure is for guidance only and may vary depending on porosity, texture, substrate conditions and application method. Perform a preliminary test on job-site to ascertain the total consumption exactly.

#### **IMPORTANT INDICATIONS**

- Do not add cement, additives, aggregates or other compounds.
- Use the recommended mixing ratios for both mortar and mixing liquid.
- Do not use leftovers from previous mixes.
- To restore the workability, remix the mortar but never add more water. Mix and use. Do not mix more material than can be applied in 20-30 minutes.
- Observe the recommended consumption and thickness per layer.
- Allow new concrete and mortars a curing time of 28 days before application.
- Do not apply on vitrified or enamelled substrates, or with water repellents. Do not apply on bituminous materials, wood or paints.
- When coating over existing renders, compatibility, strength and adhesion testing of the substrate must be ensured.
- Do not use in contact with very soft water, acid water and/or carbonic water.
- For other uses not specified in this Technical Bulletin or further information consult the Technical Department

## PACKAGING

**CONCRESEAL® PLASTERING-M** and **CONCRESEAL® PLASTERING-M** are supplied in 25 kg bags or drum. It is available in grey and white colour.

## STORAGE

Twelve months in its unopened and undamaged original packaging. Store in a cool, dry and covered place, protected from moisture, freezing and direct sunlight at temperatures above 5 °C.

## SAFETY AND HEALTH

**CONCRESEAL® PLASTERING-M** is not a toxic product but is an abrasive composition. Avoid direct contact with skin and eyes, and breathing dust. Use rubber gloves and safety goggles when handling, mixing and applying the product. In case of contact with skin, wash affected area with soap and water. In case of contact with eyes, rinse immediately thoroughly with clean water but do not rub. If the irritation persists, seek medical assistance.

Consult the Material Safety Data Sheet for **CONCRESEAL® PLASTERING-M**.

Disposal of the product and its packaging should be carried out according to the current official regulations and it is the responsibility of the final user of the product.

## TECHNICAL DATA

Product characteristics		
General appearance and colour	White / Grey powder	
Maximum aggregate size, (mm)	<b>CONCRESEAL PLASTERING-M</b>	<b>CONCRESEAL PLASTERING-M REGULAR</b>
	<0,8	<0,4
Density for powder, (g/cm <sup>3</sup> )	1,35 ± 0,10	
Mixing ratio, (% by weight)	17 ± 1	
Application and curing conditions		
Minimum application temperature for substrate and ambient, (°C)	> 5	
Minimum/Maximum waiting time for finishing at 20 °C and 50 % R.H., (min)	20 / 30	
Total curing time at 20 °C and 50 % R.H., (d)	7	
Cured product characteristics		
Density fresh mortar, EN 1015-10 (g/cm <sup>3</sup> )	2,05 ± 0,10	
Density cured and dried mortar, EN 1015-10 (g/cm <sup>3</sup> )	1,95 ± 0,10	
Compression strength at 1/ 7/28 days, EN 1015-11 (N/mm <sup>2</sup> )	9,9 / 32,3 / 34,8	
Flexural strength at 1/7/ 28 days, (EN 1015-11 (N/mm <sup>2</sup> ))	3,8 / 4,8 / 6,8	
Adhesion on concrete, EN 1015-12 (N/mm <sup>2</sup> )	>1,5	
Reaction to fire, EN 13501-1 (Euroclass)	A1	
Thickness / Consumption*		
Thickness per application, (mm)	3,0 – 5,0	
Consumption per application, (kg/m <sup>2</sup> per mm thickness)	1,7	

\* This figure is for guidance only and may vary depending on porosity, texture, substrate conditions and application method. Perform a preliminary test on job-site to ascertain the total consumption exactly.

## GUARANTEE

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