

MasterSeal 586

Smooth Finish Waterproof Render for rapid return to service applications on internal and external concrete and masonry. Approved under regulation 31 of the Water Supply (Water Quality) regulations 2016

DESCRIPTION

MasterSeal 586 when mixed with clean water or a MasterSeal 600/water blend to a plaster consistency produces a waterproof render/fairing coat. MasterSeal 586 is suitable for trowel application in layers of 1mm - 20mm in thickness.

FIELD OF APPLICATION

MasterSeal 586 is used for interior and exterior waterproofing of concrete and masonry, above and below ground level, where a smooth or textured finish is required. Typical applications include:

- Water reservoirs
- Tunnels
- Walls and floors of basements and showers
- External renders for structures in a harsh-weather environment
- Blow hole/pore filler

FEATURES AND BENEFITS

- 3 day return to service in potable water retaining structures at $\geq 3^{\circ}\text{C}$
- 1 day return to service in potable water retaining structures at $\geq 10^{\circ}\text{C}$
- Can be spray applied
- Totally waterproofs whilst providing a decorative finish
- Cement-based for extreme durability
- Capable of withstanding both positive and negative pressure
- Can be maintained to a high standard by high-pressure water or steam cleaning
- Solvent free

TESTS AND APPROVALS

- Approved by the Secretary of State for Environment under Regulation 31(4) (a) for use in contact with potable water.
- Approved by Energy and Climate Change Directorate Drinking Water Quality Division, under Water Supply (Water Quality) (Scotland) Regulations 2014, 33(3) (a).
- Approved by the Department of Agriculture, Environment and Rural Affairs under the Water Supply (Water Quality) Regulations (Northern Ireland) 2017.
- **Specific instructions for use (IFU) for water industry applications are available upon request.**

APPLICATION METHOD

Substrate quality

Substrates to be treated must be completely clean, structurally sound and mechanically keyed. All surface coatings, defective renders, foreign matter, formwork treatments and other contaminants that may affect the bond adversely should be removed.

Substrate Preparation

Substrates should be prepared by abrasive blasting, high-pressure water treatment or mechanically abrading the surface to achieve the required key

All mortar joints to be flush-pointed.

Repair with a compatible mortar as required.

Mixing

Water/Liquid Demand

MasterSeal 586 can be mixed with water only; or a blend of MasterSeal 600 and water mixed at a ratio of 1:3 by wt/vol, of MasterSeal 600: water.

Water only

4.2 - 5.0 litres per 25 kg bag,
Typically 4.6 litres

MasterSeal 600/water blend 1:3 by wt/vol

*3.6 – 4.0 litres per 25 kg bag
Typically 3.8 litres

*3.6 litres comprises 0.9 litres of MasterSeal 600 blended with 2.7 litres of water.

4.0 litres comprises 1.0 litre of MasterSeal 600 blended with 3.0 litres of water.

In applications where the MasterSeal 586 is expected to be in contact with hydrocarbons (such as diesel oil, petrol, etc.), water only should be used as mixing liquid.

For all other applications contact MBCC UK Ltd technical department for advice on when water only or a water /MasterSeal 600 blend should be used.

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Mechanical Mixing

Gradually blend the powder into the mixing liquid using a suitable mixing paddle in a slow-speed drill (400-600rpm). Mix until a lump-free cohesive mass is obtained. Leave to stand for between 5- 10 minutes to allow full saturation to take place. Re-mix, adding a small quantity of liquid if required, to restore the consistency.

Hand Mixing

Gradually add the liquid consisting to the powder whilst stirring with a trowel or paddle. Mix until a lump-free cohesive mass is obtained. Leave to stand for 5 -10 minutes to allow full saturation to take place. Re-mix, adding a small amount of liquid if required, to restore the consistency.

Spray application

All-in-one mixing and spraying machine or separate spraying machine and all associated ancillary equipment to suit application volumes.

Application

Do not apply to frozen surfaces or if the ambient temperature is below 3°C or expected to fall below 3°C within 24 hours.

Always apply to a pre-dampened substrate. High-suction substrates will require more dampening than dense substrates. Ensure there is no free standing water on the substrate prior to application.

Apply by trowel, using firm pressure to force the material into the substrate; to a minimum depth of 1mm and a maximum depth of 20mm, per layer. *Do not over trowel.* Allow the MasterSeal 586 to stiffen sufficiently before floating to a finish. If further layers are required apply wet on wet when the material has stiffened sufficiently. Alternatively scratch key and allow to set before repeating the application procedure above.

The time between application and finishing will vary dependent upon substrate absorption and ambient drying conditions.

Leave the placed material until it is sufficiently stiff to allow finishing with a wood, plastic or sponge float. Dependent upon which type of float is used, a variety of finishes can be obtained. Do not use water. MasterSeal 586 must be used within 90 minutes of mixing or sooner in hot conditions. Clean all equipment immediately with water.

FINISHING AND CLEANING

Wash all equipment with clean water before hardening occurs.

CURING

Fog-spray all applications with clean water after the initial set has taken place for as long as practicable.

In cold, humid or unventilated areas it may be necessary to leave the application for a longer curing period or to introduce forced air movement.

Never use dehumidifiers during curing periods or within 28 days of completion.

Protect from rain until the product has set.

Overcoat at 3mm thickness

MasterSeal cementitious coatings - 1 day
MasterSeal resin coatings (PU and Epoxy) - 3 days

These times will vary dependant on ambient temperature, humidity and layer thickness.

PACKAGING

MasterSeal 586 is supplied in 25kg bags.
MasterSeal 600 is available in 20 litre plastic containers.

COVERAGE

5.5kg of powder/ m² at 3mm thickness.
4.5m² per bag at 3 mm thickness.

STORAGE

All materials should be stored under cover, clear of the ground and stacked not more than 6 bags high. Protect the materials from all sources of moisture and frost.

SHELF LIFE

Rotate the stock in order not to exceed the shelf life of 12 months for MasterSeal 586 and MasterSeal 600.

WATCH POINTS

If MasterSeal 586 is used to waterproof fish tanks or swimming pools, it should be washed down after curing is complete with salt water and rinsed with clean water. Repeat the rinsing until the required pH conditions are obtained. Failure to do this and to monitor the pH of the water until stable can lead to the death of fish.

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HANDLING AND TRANSPORT

Usual preventive measures for the handling of chemical products should be observed when using this product, for example do not eat, smoke or drink while working and wash hands when taking a break or when the job is completed.

Specific safety information referring the handling and transport of this product can be found in the Material Safety Data Sheet. For full information on Health and Safety matters regarding this product the relevant Health and Safety Data Sheet should be consulted.

Disposal of product and its container should be carried out according to the local legislation in force. Responsibility for this lies with the final owner of the product.

CONTACT DETAILS

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| Product Data | | |
|--------------------------------|-------------------|--------------|
| Property | Unit | Data |
| Wet Density | kg/m ³ | approx. 2170 |
| Pot life | minutes | 90 |
| Final setting time | minutes | 345 |
| Water vapour permeability | μ | 80-120 |
| Compressive strength (28 days) | N/mm ² | 27 |
| Tensile strength (28 days) | N/mm ² | 3.5 |
| Flexural strength (28 days) | N/mm ² | 6.5 |
| Adhesive strength (28 days) | N/mm ² | 2.0 |

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MasterSeal 586 – MBCC Construction Chemical Ltd Version 2

Health and Safety

*For full information on Health and Safety matters regarding this product the relevant Health and Safety Data Sheet should be consulted.

The following general comments apply to all products.

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs, (which may also be tainted with vapour until the product is fully cured and dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Keep away from children and animals. Reseal containers after use.

Solvent Based Products

Use in well ventilated areas; avoid inhaling. Suitable respiratory equipment may be needed, e.g. when spraying. Can cause skin, eye irritation. Wear protective eye shields and gloves during use. Do not smoke or allow sparks or naked lights when stored or in use.

Resin Products

Can cause irritation, dermatitis or allergic reaction. Use protective equipment particularly for skin and eyes. Use only in well ventilated areas.

Spillage

Chemical products can cause damage; clean spillage immediately.

DISCLAIMER

"MBCC Construction Chemicals Ltd" (the Company) endeavours to ensure that advice and information given in Product Data Sheets, Method Statements and Material Safety Data Sheets (all known as Product Literature) is accurate and correct. However, the Company has no control over the selection of its products for particular applications. It is important that any prospective customer, user or specifier, satisfies him/her-self that the product is suitable for the specific application. In this process, due regard should be taken of the nature and composition of the background/base and the ambient conditions both at the time of laying/applying/installing the material and when the completed work is to be brought into use.

Accordingly, no liability will be accepted by the Company for the selection, by others, of a product, which is inappropriate to a particular application.

Products are sold subject to the Company's standard conditions of sale and all customers, users and specifiers, should ensure that they examine the Company's latest Product Literature.