

MASTERSEAL 525

Cement and acrylic based two components UV resistant flexible waterproofing material.



Description of the Product:

MASTERSEAL 525 is a cement and acrylic based two components waterproofing material that forms an effective barrier against salts carried by water and gases in the atmosphere and is used on concrete and cement based surfaces.

Fields of Application:

- Interior and exterior areas for vertical and horizontal applications,
- Waterproofing of foundations and curtain walls,
- Retaining walls,
- Terraces (can be used without protecting the top in under light weights),
- Wetrooms like WC, bathroom, kitchen, and balcony,
- Swimming pools,
- Drinking and other water tanks,
- Facilities like spa and hamams,
- Sea water channels,
- Against salty water where water impermeability and protection is needed,
- To protect concrete surfaces from carbonation and chlorine attacks,
- Walking ways of marinas.

Features and Benefits:

- 1 mm thick **MASTERSEAL 525** gives protection against carbonizing equivalent to over 80 cm concrete.
- Water impermeable, resistant to 7 bars positive water pressure.
- Perfect adhesion property.
- Easy to prepare and apply.

- Applied by brush or spraying machine.
- Long working time.
- White in color and resistant to UV rays.
- Suitable for pedestrian traffic.
- Water vapor permeable.
- High durability.
- Resistant to freeze-thaw cycle.
- Highly resistant to carbon dioxide and chlorine ions.
- Although traditional waterproofing materials require 7-28 days curing period, **MASTERSEAL 525** can be applied on green concrete.
- Can be safely used in drinking water tanks (has a test report).

Composition:

MASTERSEAL 525 is composed of specially selected cements, silica sand and reactive fillers supplied in powder form together with a liquid component of blended acrylic copolymers and wetting agents.

Application Procedure

Preparation of Substrate:

Application substrate must be dry, sound mainly smooth, clean and fine pored, free from honey combs, voids, cracks, ridges, dust, tar, pitch forming oil, old paint and other bond breaking residues. Wooden or iron wedges must be removed from the surfaces and active water leakages must be prevented with **MASTERSEAL 591**. Voids and hollows must be filled with **MASTERSEAL 591**, **EMACO R 356** or **MASTEREMACO S 488**. On vertical and horizontal corners fillet with min. 4 cm radius must be applied. Substrate must be dampened before application. If the coating loses its water rapidly, this means that substrate is not dampened enough. For the applications in hot and windy environment, only for the first coat, extra mixing water can be added without exceeding 10% of the part B.

Mixing:

Pour liquid Component B (**MASTERSEAL 525**) into a clean mixing container and slowly add powder Component A (**MASTERSEAL 525**) while

mixing with a 400-600 RPM mixer. Continue mixing for at least 3-5 minutes until a homogenous and uniform mixture is obtained. Wait for 3-5 minutes and mix again for approximately 30 seconds and becomes ready to use.

Mixing Ratio:

MASTERSEAL 525	Comp. A	Comp. B
Amount of mixture	25 kg	8 kg
Density of mixture	1.8 kg/litre	

Application Method:

Prepared **MASTERSEAL 525** mixture is applied by Thoro brush or trowel as two or three layers. Brush application direction in each layer must be perpendicular to each other. Waiting period between each layer changes depending on environmental conditions.

Watch Points:

- Wait for the appropriate ambient and substrate temperature if it is less than 5°C or more than 25°C. Also application should not be made in very hot, rainy or windy weathers.
- **MASTERSEAL 525** applied in +23°C gains mechanic strength after 2 days, becomes impermeable to water after 7 days and gains final strength after 14 days.
- In exterior surface applications, the surface must be protected from sun, wind, frost or rain during the first 24 hours.
- Wet film thickness must not pass 1.2 mm in single layer.

Coverage:

First Coat : 1.20 kg/m² mixture
Second Coat : 1.20 kg/m² mixture
Third Coat : 1.00 kg/m² mixture

Packaging:

Component A: 25 kg polyethylene reinforced kraft bag.
Component B: 8 kg tin.

Storage:

Must be stored in unopened original packing, and in cool and dry environment protected from freezing. In short-term storing, maximum 3 palettes can be stowed on top of each other and delivery has to be according to first in first out system. In long-term storing, the palettes must not be stowed on top of each other.

Technical Data:

Density	1.8 kg/l
Water penetration (DIN 1048)	7 bar pressure – 70 m water column
% elongation	>5% (unbonded)
Initial surface absorption	>95% reduction against control
Adhesion strength	1.5 N/mm ² (after 28 days)
CO ₂ diffusion resistance	R>357m, Sc 89 sm (1mm dif.), Sc – equivalent concrete thickness
Chloride ion diffusivity	Zero penetration during 90 days
Chloride ion diffusion co-efficient	1.04x10 ⁻⁷ sm ² /s
Oxygen diffusion co-efficient	DO ₂ 7.6x10 ⁻⁶ sm ² /s
Resistance to bending	4 N/mm ²
Compressive strength	10 N/mm ²
Shear strength	2,5 N/mm ²
Capillary water absorption	0,04 kg/m ²
Water absorption with latex	2%
Service temperature	-20°C - +80°C