



Techmoseal 531

Impermeable, single-component mortar, suitable for drinking water contact

Fields of Application

- Applicable indoors and outdoors. On concrete and cement mortars.
- Waterproofing of foundations, slabs and walls.
- Waterproofing against filtration or phreatic water.
- Waterproofing of basements, swimming pools and drinking water tanks, etc.

Contact the Technical Service of your local TECHMO office regarding any application required not mentioned here.

Features and benefits

- Pre-mixed mortar, ready for mixing with water.
- Plastic, ductile consistency. Easy to apply.
- Excellent adhesion.
- Crack-free hardening.
- Impermeable to water up to 1,5 atm pressure.
- Applicable in thicknesses up to 5 mm.
- Sprayable.
- Suitable for contact with drinking water.

Base of the material

Mixture of special cements, selected aggregates, and waterproofing resins.

Application method

(a) Support: The support must be sound (minimum tensile strength of 1 N/mm²) clean and free from grease, old paint, soot, dust, moss, etc.

The support can be humid but not wet (maximum humidity 8%). The temperature of the support should be at least +5°C and at most +30°C. Try to keep the temperatures uniform during application and hardening.

(b) Crack treatment: In areas of cracking with possible movements, insert a minimum 20 cm mesh strip between the two layers.

(c) Joint treatment: Horizontal or vertical connection joints should be treated with mortar in order to smoothen the application angle for TECHMOSEAL 531. For this purpose, the application of a 5 x 5 cm coving of TECHMONOTOP 695 FAST or similar product is recommended.

(d) Mixing: The mortar should be slowly added to a clean container holding the necessary amount of water, and then thoroughly mixed until a lump-free homogeneous paste is obtained. An electric drill, at low speed (maximum 400 rpm), may be employed, fitted with a type M17 or M34 stirrer, or a COLLOMIX mixer.

Application of the product by brush requires an additional litre of water per bag.

A maturing time of five minutes should be allowed, followed by brief stirring.

(e) Application: Apply at least two coats. First coat has to be more liquid to ensure support saturation and contact. Second coat can be applied using a trowel while the first is still fresh. Three coats should be applied for thicknesses exceeding 4 mm. The previous coat should not be allowed to dry before the following one is applied.

TECHMOSEAL 531 can also be spray-applied with a pump (e.g. PUTZMEISTER S5). The surface may be smoothened using a damp sponge before product hardening.

(f) Curing: Avoid extreme temperatures, air currents, rain and freezing during the hardening process. It is recommended humid curing during the first twenty-four hours to avoid desiccation.

Curing for drinking water tanks must be carried out using only water.



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Cleaning of tools

While still wet with water. Once cured it can only be removed mechanically.

Consumption

	Minimum total thickness	Minimum applied amount
Dampness	2 mm	3.0 kg/m ² approx.
Non-pressure water	2 mm	3.0 kg/m ² approx.
Water at a pressure up to 1,5 atm.	3 mm	4.5 kg/m ² approx.

These consumptions are theoretical and can vary according to the absorption and roughness of the support. It is essential to carry out representative trials on site to evaluate the exact consumption.

Packaging

TECHMOSEAL 531 is available in 25 kg bags. In white or grey colour.

Storage

Store in cool and dry warehouse conditions. Shelf life in these conditions is 12 months in unopened original bags.

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.

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.

For best performance

- The product must not be applied when the temperature is below +5°C or above 30°C.
- Do not mix solvents, sand or other products that could affect the products properties.
- It is recommended to apply the product on the positive water pressure face.
- Risk of debonding exists in applications on the negative water pressure face if pressure exceeds adhesion.
- More water should not be added to mortar that has lost consistency, nor should it be re-mixed.
- It is recommended that only enough material is mixed that can be applied during its workability time.
- It should not be employed in contact with acidic water or those with a high salt content, such as sulphates.



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Technical data

Properties	Units	TECHMOSEAL 531 Grey	TECHMOSEAL 531 White
Density:	g/cm ³	approx. 1,9	approx. 2,0
Mixing water:	liters/bag	approx. 5	approx. 5
Mixing time:	minutes	approx. 3	approx. 3
Workability:	hours	approx. 2	approx. 2
Thickness:	mm	from 2 to 5	from 2 to 5
Application temperature (support and material):	°C	from +5 to +30	from +5 to +30
Withstand mechanical loads after:	days	approx. 3	approx. 3
Withstand water pressure after:	days	approx. 7	approx. 7
Compressive strength:			
- after 1 day	N/mm ²	approx. 20	approx. 30
- after 2 days		approx. 30	approx. 45
- after 28 days		approx. 40	approx. 52
Flexural strength:			
- after 1 day	N/mm ²	approx. 4	approx. 4
- after 2 days		approx. 6	approx. 5
- after 28 days		approx. 9	approx. 10
Positive side waterproofing:	atm	≤1,5	≤1,5
Negative side waterproofing:	atm.	≤1	≤1

Hardening times are measured at 22°C and 65% R.H. Higher temperatures and/or higher R.H. can shorten these times, and vice versa. The technical data provided are the outcome of statistical results and do not represent guaranteed minima. If control data are needed, please request the "Sales Specifications" for the product through our Technical Department.