



ARDEX WPS 181

High Efficiency Flexible Waterproof Slurry

Advantages

- Flexible formulation, can bridge fine cracks
- Uniform Coating
- Designed for tiling systems
- Easy to apply
- Eco-friendly



Description

ARDEX WPS 181 is a two-component (powder + latex) polymer-modified cementitious waterproofing slurry. It can be used on most substrates such as concrete and cement-sand mortar, and provides good bonding performance for subsequent works such as tiling. It accommodates surfaces with slight deformation and cracking, is vapor-permeable and provides an overall coating-type waterproof anti-seepage system. Anti-settlement and easy to apply. Especially suitable for large-area waterproof coating on rigid wall and floor surfaces.

Areas of Application

Suitable for long-term damp interior areas such as bathrooms, balconies and kitchens.

Suitable substrates: concrete, mortar screeds/renders, moisture-resistant fiber-cement boards, gypsum boards, etc.

Substrate Preparation

The substrate must be dry, clean and free from oil contamination, putty, laitance and other substances detrimental to adhesion. The substrate shall be free from sharp protrusions (e.g. nails, stones, etc.). The floor shall have sufficient drainage falls and be directed to the outlet. It may be applied on a damp substrate, but there must be no standing water or flowing water. Newly laid cement-sand mortar substrates shall be cured for at least 14 days; newly cast concrete substrates shall be cured for 28 days.

For highly absorbent substrates or in hot weather, it is recommended to prime with ARDEX P 60 first, or pre-dampen the substrate with clean water, but there must be no standing water on the surface.

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Application

Only substrates that have been treated with priming and detail reinforcement may be coated with ARDEX WPS 181 over large areas.

Mixing

The powder-to-liquid weight ratio of this product is 3.3:1. Pour the powder into the liquid and mix evenly to obtain a uniform, lump-free slurry. Let stand for 2 minutes and mix once again. An electric mixer must be used.

Coating

Use a short-nap roller or brush to apply one coat evenly in the horizontal direction, ensuring complete coverage without missed areas or pinholes; the coating must be even. After at least 4 hours for the first coat (drying time may be longer or shorter depending on temperature, humidity and ventilation), apply the second coat in the vertical direction using the same method. After the second coat has cured for 24 hours, subsequent works such as tiling may be carried out. For flood testing, curing for at least 3 days is required before testing.

Tips: To enhance the bonding strength between the substrate and this product, it is recommended to seal/prime the substrate with ARDEX P 60. For aerated concrete or other porous substrates, more ARDEX P 60 may be required.

Notes

During application and after completion, protect the waterproof coating properly. Before the coating is cured, walking is strictly prohibited; exposure to water and contact with wet objects is strictly prohibited; stacking sharp heavy objects and dragging items are not permitted.

Consumption

Approx. 1.8 kg/mm/m² (varies with substrate and application method). To ensure waterproof performance, the recommended dry film thickness is 1.2 mm – 1.5 mm.

Packaging

18 kg/pail, grey, blue, green and orange available

32.6 kg/set, blue and green available

Storage & Shelf Life

Unopened and stored in a cool, dry place, the product has a shelf life of 12 months.

Technical Data

Compressive strength	≥12MPa
Flexural strength	≥4MPa
Bond strength	≥0.7MPa
Flexibility	≥2.0mm
Impermeability pressure	approx.0.5MPa
Alkali resistance	no cracking, no peeling
Heat resistance	no cracking, no peeling
Freeze resistance	no cracking, no peeling

Safety and Health

This product is safe and reliable under normal use. However, it contains Portland cement and quartz sand; prolonged direct contact may damage the skin. Avoid generating and inhaling large amounts of dust. Avoid direct contact with eyes and skin; wear appropriate protective mask, gloves and goggles during application. If it splashes into the eyes, rinse with plenty of clean water for several minutes. If large amounts of dust are inhaled, keep ventilation and rinse mouth with clean water. Seek medical attention if any adverse reactions occur.

For detailed information, please refer to the MSDS.