

Drybase® Tanking Slurry

Product Description

Drybase® Tanking Slurry is a cementitious, ready-mixed surface waterproofer. The waterproofing function is achieved by a unique composition of cement, graded quartz sand and selected additives. It can be used against active and passive water pressures.

The initial and final bonding capability of **Drybase® Tanking Slurry** is excellent, making it suitable to be applied to horizontal as well as vertical surfaces. It is durable, resistant to frost and heat after setting, but also permeable to vapour.

Drybase® Tanking Slurry can also be used to improve adhesion to subsequently applied repair and coating mortar. Once applied, it forms a hard coating, is resistant to frost and de-icing salts, allows vapour diffusion and reduces CO₂ penetration.

Accreditation	
 EN 1504-3:2005/ZA.1a	 BBA APPROVAL INSPECTION TESTING CERTIFICATION CERTIFICATE 180549

Areas of Application

- Concrete and masonry substrates
- Basements and below ground structures
- Active or passive waterproofing
- Foundations, slabs, retaining walls

Benefits

- Above and below ground waterproofing
- Efflorescence-free
- Can be spray applied
- Tested for resistance up to 7 bar pressure
- BBA approved

Coverage Rates

Type of water impact	Recommended overall application rate	Total layer thickness (approx.)
Pressureless water	3 – 4 kg/m ²	1.5 – 2 mm
Water under pressure	4 – 6 kg/m ² depending on water pressure	2 – 3 mm



Properties

Appearance	Grey Powder
Packaging	25 kg PE-lined paper bag
Storage	Keep in dry conditions at a temperature of 5 °C to 35 °C. Protect from frost
Shelf Life	12 months
Density of wet mix	approx. 2.0 kg/l
Workability at 20 °C	approx. 45 min
Setting time at 20 °C	approx. 5 – 8 h

CE Mark Data

Compressive strength	Class R3 ≥ 25 MPa	
Chloride ion content	≤ 0.05 %	
Adhesive bond	≥ 2.0 MPa	
Carbonation resistance	passed	
Modulus of elasticity	≥ 20 GPa	
Reaction to fire	class A1	
Capillary absorption	≤ 0.5 kg/m ² ·h ^{0.5}	
Dangerous substances	complies with 5.4	
Thermal compatibility	Part 1: Freeze thaw with de-icing salt immersion	≥ 2.0 MPa
	Part 4: Dry thermal cycling	≥ 2.0 MPa

Application Information

Preparation: Concrete Substrates

The substrate to be treated must be sound and even, open pored, roughened and its surface free from voids, large cracks or ridges. Any adhesion reducing substances like bitumen, oil, grease, remains of paint or laitance must be removed by suitable means, such as sandblasting, scabbling etc.

Construction joints and shrinkage cracks exceeding 0.3 mm should be routed out to a minimum depth of 20 mm. Shutter tie holes should be roughened. Repairs should be made using Drybase® Universal Mortar. Water leaks must be stopped with Drybase® Waterproof Plug. Thoroughly moisten the substrate. It must be damp but not wet at the time of application. Any surface water on horizontal surfaces must be removed.

Preparation: Brick and Blockwork Substrates

Any remaining plaster, render or other substances should be removed by appropriate means, back to the substrate. Loose mortar must be routed out and the substrate cleaned thoroughly. Make localised repairs using Drybase® Universal Mortar.

Unless the substrate is particularly sound, the application of a render is recommended prior to application of **Drybase® Tanking Slurry**. Pre-wet the walls to control suction and apply a nominal 10 mm thick, 3:1 sand:cement render (sharp washed sand). The render should be compacted onto the wall and left with an open textured finish, such as that left by a wood float. Thoroughly moisten the substrate. It must be damp but not wet at the time of application. Any surface water on horizontal surfaces must be removed. Allow the render to cure for at least 24 hours before applying **Drybase® Tanking Slurry**.

Mixing

Mix 25 kg of **Drybase® Tanking Slurry** with 4.5 – 6 litres of tap water in a clean container for at least 3 minutes to a lump-free, homogeneous consistency. Use a mechanical mixer.



Application

Drybase® Tanking Slurry is applied with a brush, trowel or suitable spray equipment. Do not apply at temperatures below +5 °C, or to a frozen substrate.

Brush Application

Drybase® Tanking Slurry can be applied using a suitable brush (e.g. mason's brush). It should be applied from the bottom upwards, with excess material worked sideways. Ensure that all cavities in the substrate are filled in order to exclude any trapped air.



Drybase® Tanking Slurry is applied in two coats. It is recommended that the second layer is applied whilst the first layer is still damp on the surface. The waiting time before applying the second layer is approximately 2 – 4 hours, depending on local climatic conditions such as humidity, temperature, etc.

The first layer must be sufficiently hardened so as not to be damaged during application of the second layer. It is important when applying by brush that the correct thickness of material is applied – the brush should be used as a soft trowel, not as a paint brush.

Trowel Application

Drybase® Tanking Slurry is applied in two coats. A first scrape coat of **Drybase® Tanking Slurry** is applied with a trowel for maximum adhesion to the substrate, working from the bottom up. Ensure that all cavities on the surface are filled to avoid trapped air. This is immediately followed by the first layer applied to the specified thickness. The first layer must be sufficiently hardened so as not to be damaged during application of the second layer.



The second layer is applied whilst the first layer is still damp on the surface. It is recommended that the first layer is textured slightly using a suitable brush (wallpapering brush) whilst still plastic to ensure maximum adhesion between the layers. The waiting time before applying the second layer is approximately 2 – 4 hours, depending on local climatic conditions such as humidity, temperature, etc.

Spray Application

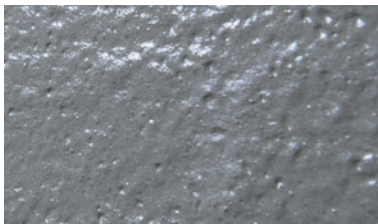
Drybase® Tanking Slurry can be applied with a suitable fine mortar spraying device, capable of at least 5 bar pressure and delivering 500 l/min. The recommended nozzle size is 6 mm diameter. It should be adjustable to ensure that the optimum spray pattern can be achieved.

The first layer is applied using a circular motion with the spray nozzle held at a 90° angle to the substrate. Distance between the spray nozzle and the surface depends on the type of spray gun used. The material is then flattened with a trowel to level the surface and increase adhesion to the substrate.



The second layer is applied whilst the first layer is still damp on the surface. It is recommended that the first layer is textured slightly using a suitable brush (wallpapering brush) whilst still plastic to ensure maximum adhesion between the layers. The waiting time before applying the second layer is approximately 2 – 4 hours, depending on local climatic conditions such as humidity, temperature, etc.

The final layer can be left direct as a spray finish or smoothed with a trowel. The spray finish can provide an “orange peel” type texture which is easy to clean. For further advice refer to the ‘Plastering/Coating’ section.



Curing

Drybase® Tanking Slurry is cement-based and cures and hardens in the same way as ordinary concrete. Setting and hardening will depend on the surrounding temperature and humidity.

The coating should be kept damp for at least 5 days and protected against evaporation by sun and wind if outside. Post-watering should be carried out at intervals, starting the day following the application.

Alternatively, the surfaces can be covered with plastic sheeting, wet mats or moist sand. Use of curing compounds is not recommended as it may cause problems with the bonding of subsequent coats. Newly applied surfaces should be protected from rain for a minimum period of 24 hours. They should also be protected from frost for at least 5 days. If necessary, cover with insulation mats. Air conditioning, heating or dehumidification should not be introduced for at least 28 days after application.



Drybase® Tanking Slurry can sometimes appear to ‘sweat’, just after application. Water vapour in the air can condense onto the surface, giving the impression of water penetration. High moisture vapour levels can be created by application and curing of the coatings, as well as subsequent screeds etc. and will normally reduce once heating and ventilation have been introduced.

Plastering and Coating

All surfaces treated with **Drybase® Tanking Slurry** that are to be coated or painted must be left to cure for at least 4 weeks. When a plaster or render finish is required on top of the applied **Drybase® Tanking Slurry**, apply a thin rough cast of sand and cement onto the final **Drybase® Tanking Slurry** layer, when it has reached the initial set, usually between 2 – 4 hours depending on local climatic conditions such as humidity, temperature, etc.

If this is not practical, carefully clean the hardened **Drybase® Tanking Slurry** surface and apply an appropriate bonding agent (e.g. SBR or acrylic) prior to rendering.

Condensation may form on the cold surface of **Drybase® Tanking Slurry**. Steps should be taken to ensure that condensation issues have been resolved to avoid a reaction of surface moisture and gypsum-based plaster. Cement-based renovation plasters such as Dryzone® Damp-Resistant Fast-Set Plaster are recommended.

Cementitious tanking systems are vapour permeable. Vapour movement tends to move from within the basement, out towards the ground. Occasionally in some conditions it can be reversed, and move from the ground into the basement. Decorative coverings should be sufficiently vapour permeable to prevent a build-up of moisture vapour under the coating, resulting in ‘bubbling and peeling’. It is recommended to use vapour permeable paints in order to prevent this from happening. Trade matt emulsion and mineral paints have a lower binder/pigment ratio and a high vapour permeability, meaning that residual moisture in new plaster can escape. Either of these paint types is recommended for use in basements. If in doubt, the paint manufacturer should be contacted.

Ventilation, dehumidification and air conditioning should also be provided, appropriate to the intended use of the area, to avoid issues with condensation forming.

Backfilling

Backfilling can be carried out 3 days after completion of the **Drybase® Tanking Slurry** application. If there is a risk the coating will be damaged during back-filling (sharp-edged material), then it must be protected by suitable means.

Storage

Drybase® Tanking Slurry: When stored in a dry place in unopened, undamaged original packaging, shelf life is 12 months.

Other Information

For health and safety information see the Safety Datasheet (available upon request).

Drybase® Tanking Slurry is produced in accordance with ISO 9001 and ISO 14001 quality and environmental management systems.

Drybase® Tanking Slurry has been tested in accordance with EN 1504-3:2005/ZA.1a CC fine mortar for structural repair (based on hydraulic cement).

Suggested coverage rates are averages and allowances should be made dependent on the substrate.

The product user should test for suitability for the intended application and purpose.

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