



DAMP-SHIELD TANKING COMPOUND



Issue – DSTC-2/0703

**AVAILABLE IN
GREY OR WHITE**

**ALL IN ONE TANKING COMPOUND
WITH EXCELLENT ADHESION**

**HIGHLY WATER REPELLENT
HYDROSTATIC MOISTURE BARRIER**

Description:

DAMP SHIELD is a single-pack blend of special cements; ultra-fine quartz, pore-blocking water repellent crystals and copolymer based adhesion aids, which readily mixes with water to form a pourable brush applied slurry. This free-flowing mix readily penetrates the open surface masonry capillaries and engages in a reaction with any available free-lime within the substrate forming expansive, but insoluble pore blocking micro-crystalline structures, achieving a secure and permanent key within the masonry sufficient to repel and withstand the hydrostatic water pressure exerted even in underground structures such as cellars and basements. DAMP SHIELD has been widely used to provide a permanent barrier against penetrating damp in many application both above and below DPC level such as cellars; retaining walls; lift shafts; swimming pools; vaults; tunnels and has also been used to line water tanks and irrigation channels due to its' suitability for use in contact with potable water.

Surface Preparation:

The success of any DAMP SHIELD tanking application depends greatly upon the preparation of the receiving surface, which must be hard, sound and free from grease, dust and any previous surface coatings, plaster and adhesive residues. The exposed walls and floors must be cleaned back to the base sound masonry, by mechanical means if necessary to ensure the right conditions for DAMP SHIELD to penetrate and form a permanent bond. All worn, friable or damaged mortar joints need to be made good with a REPAIR MORTAR based on a 3 : 1 sand cement mix, incorporating TILERS PRIMER SBR within the gauging liquid as a 1:1 dilution in water.

To ensure a good seal is achieved across any wall to floor joints, the same repair mix can used to form a 25mm angled filled, sealing the joint in with any exposed sub-floor polythene DPC and allowing the tanking coat to over-lap to the floor and form a secure, continuous barrier.

Very uneven and damaged surfaces may require the application of the REPAIR MORTAR as a render coat over the brickwork to yield a level surface, which is allowed to cure before applying the DAMP SHIELD tanking coats.

In many basement application exposed to years of penetrating damp, there is likely to be a continuing problem with surface salt migration. This will require pre-treatment with a wash coat of PALACE SALT INHIBITOR, which reacts with the soluble salts to form insoluble compounds, which remain locked within the wall and restrict further migration. Areas exposed to heavy salt contamination may benefit from the additional application of a TILERS PRIMER SBR slurry coat, prepared by mixing a bonding slurry of one part neat SBR with one part neat OPC and then coating over the salt inhibited wall applied as two consecutive layers to give a sound, even and stable surface ready to receive DAMP SHIELD. All surfaces should be moistened with clean water 24 hours before application to ensure the pores are saturated to permit capillary penetration of the coating.

Application Method:

Add the full contents of the DAMP SHIELD sack (25kg) to about 5 litres of clean water and mix with a slow-speed mechanical agitator to a smooth, creamy, lump-free slurry consistency adding small additional quantities of water as necessary. Apply the first coat of the freshly mixed tanking compound onto the prepared surface using a stiff fibre brush, ensuring the strokes are spread in the same direction to give a consistent even layer of no more than about 2mm depth. (Uneven surfaces may benefit from a trowel-applied application, using DAMP SHIELD mixed to a thicker consistency). DAMP SHIELD has an open time of about 30 minutes and once the paste begins to set DO NOT freshen it up with further water additions, but start again with a fresh mix. Mix only sufficient material that can be applied within it's open time and note that at higher temperatures [$> 25^{\circ}\text{C}$] the slurry will set even quicker.

The second coat should be applied only when the first has set firm, (usually within 24 hours), but should be brushed on with strokes at 90° to the first coat to ensure a consistent and 100% covering is achieved over the base substrate.

Coverage:

A single coat application of DAMP SHIELD on to a level even wall will cover at about 1.5 kg per square metre, thus for a complete two coat finish, one 25kg sack will cover about 8 square metres of wall surface. Allowance should be made for uneven surfaces, where this rate of coverage will be reduced, to a point that trowel application will cover at about 2.0 to 2.5 kg per square metre per coat.

Technical summary:

Mix ratio:	Open Time:	Setting time:	Coverage:
3 parts powder to 1 water	40 - 60 mins	4 - 6 hours	8 sq. metres per 25 kg sack

Storage & Packaging:

DAMP SHIELD is supplied in 25kg moisture resistant bags and has a storage life of not less than 12 months if stored in dry, un-opened conditions. DAMP SHIELD contains Portland cement and is therefore classified as irritating to eyes and skin. Consult the relevant material safety data sheet for advice on handling and safety procedures.

The information provided by this Technical data sheet is given in good faith and is to the best of our current knowledge true and accurate. However it is given without guarantee, as conditions of use and workmanship involved are both beyond our control. All information supplied is subject to the company's terms and conditions of sale, copies of which are available on request.

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