

SpECTite WS

CEMENTITIOUS WATERPROOFING SYSTEM

DESCRIPTION

SpECTite WS is a sophisticated formulation consisting of special cements, quartz sands and active chemical constituents, which are capable of migrating deep into structures. The product has the appearance of a fine grey powder, which requires the simple addition of water to form a slurry. **SpECTite WS** is a migratory crystalline waterproofing coating, which requires the presence of moisture in the substrate in order to carry out its functions.

The active chemicals within the mix penetrate into the structure and react with the free lime forming long chain complexes, which crystallise in the capillaries. The migratory crystallisation process is continuous in damp structures and will effect great penetration achieving complete resistance to the passage of water whilst still allowing the fabric to breathe.

TYPICAL USES

SpECTite WS can be applied to new or old structurally sound surfaces. It can be applied either to the negative or the positive side and will negate dampness and ground water permeation even under hydrostatic pressure. It can be used for the following application:

- Retaining walls and columns in underground reservoirs.
- Swimming pools prior to tiling or painting.
- Drinking water tanks - concrete.
- Water treatment and sewage plants
- Support walls and columns.
- Foundation slabs.
- Underground cellars, basement car parks, garages etc.
- Pre-stressed and pre-cast concrete units.
- Tunnels, silos, irrigation channels.
- Bathrooms, kitchens etc.
- Sand-cement rendering.
- Lift shafts.

TECHNICAL DATA

| | |
|---------------|------------------|
| Nature | Non toxic powder |
| Colour | Grey or white |

APPLICATION

Surface preparation

SpECTite WS is only fully effective if the capillaries in the brickwork, concrete or mortar are sufficiently absorbent to allow penetration of the crystalline chemicals. Therefore, it is essential that adequate preparation is carried out prior to the application of **SpECTite WS**.

All surfaces should be clean and free from paint systems, oil, grease, loose dust, shuttering oils, curing compounds, surface hardeners and other contaminants.

Surface preparation can best be carried out using a high pressure water jet, grit blasting or mechanical scabbling. Water jetting has the advantage that complete saturation of the structure is achieved but lack of drainage facilities may in some cases preclude their use.

Large cracks and other surface defects should be repaired using one of the **SpECbuild** repair mortars. Repaired areas can be coated with **SpECTite WS** 24 hours later but large areas of the new brickwork, poured concrete or cement renders should be allowed to cure for at least 3 days before application of **SpECTite WS** is considered.

Fillets

It is recommended that fillets be formed between the bottom of all walls and floor slab before application of the **SpECTite WS**. Fillets should be formed using **SpECTite WS** mixed to a mortar consistency with a bench fillet is preferred to a triangular type.

If it is impractical to provide a fillet between a wall and floor then a saw cut should be made in the concrete floor slab as close to the wall as possible and the subsequent application of **SpECTite WS** should be allowed to flow into the saw cut.

It must be re-stressed that **SpECTite WS** performs better on thoroughly dampened surfaces, only then is maximum penetration achieved. Dry surfaces should be saturated with clean water, preferably 24 hours before application of the **SpECTite WS** and re-wetted with a mist spray if drying out occurs.

Mixing

SpECTite WS is supplied as a one-component bag.

It is important not to mix more material than can be applied to the surface within 30 minutes at 20°C. The recommended mixing ratio approximately 2.5 to 3 parts **SpECTite WS** to one part clean water by volume.

Place the water in a suitable open top container and with the use of a slow speed drill and paddle add the powder to the water slowly. Mix until a homogeneous, lump free slurry is obtained. If the material becomes stiff due to an extended storage time do not re-mix with water but discard and mix a smaller portion.

Application

The problems which exist in the waterproofing of underground areas are many and various and all cannot be solved with a simple specification - if in doubt consult our technical department. However, for normal problems of damp or wet walls a two coat application of **SpECTite WS** over the whole area will eliminate any further ingress of water. The second coat should be applied at right angles to the first to ensure that complete coverage is

achieved and the second coat may be applied as soon as the first becomes 'touch dry'. In all cases the second coat must be applied within 24 hours of the first. In hot dry climates a fine water mist should be sprayed onto the surface of the **SpECTite WS** before the second coat is applied.

It is critical that all surfaces should be treated with **SpECTite WS** and it is necessary that all timber battens be removed before treatment.

Provision for re-fixing battens etc., should be made in the wall prior to the application of **SpECTite WS**. Drilling for fixtures should not be carried out after tanking with **SpECTite WS** as they would provide for release of pressure with resultant leakage of water.

When applying by brush use a medium hard, short bristle type. Trowelling of the second coat can be carried out to provide a dense polished finish.

For large areas spray application is obviously more economical - our technical department would be pleased to advise on suitable equipment.

Decoration

A period of at least six months should be allowed before permanent decoration is considered. During this period use only permeable emulsion paints.

APPLICATION TEMPERATURE RANGE

Minimum surface temperature @ +5°C

PACKAGING & YIELD

SpECTite WS is supplied in 25kg bags

Coverage

| | |
|------------|--|
| By brush : | 1 to 1.5 kg per m ² per layer |
| By trowel: | 2 to 2.5 kg per m ² per layer |
| By spray: | 1.5 kg per m ² per layer |

STORAGE & SHELF LIFE

Store in cool dry conditions.

HEALTH & SAFETY

SpECTite WS is a non-hazardous material - treat as for cement.

Protect eyes and skin from direct contact.

Freshly mixed **SpECTite WS** is slightly alkaline - the use of PVC or rubber gloves is recommended. Seek medical advice if allergies develop.

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