

TECHNICAL DATA SHEET

TANKING SLURRY

WATERPROOF CEMENT BASED COATING FOR MASONRY AND CONCRETE

Construction Chemicals Tanking Slurry is a sophisticated cementitious formulation designed for use in below and above ground waterproofing situations. The product is made up of many components, which give high water resistance, flexibility, salt resistance, good adhesion and set control in a form that only requires water for mixing.

HIGH WATER RESISTANCE

This is achieved by using a highly hydrophobic dispersible polymer that reacts with the other components to give water resistance and flexibility. The grading of the powders in the slurry means that a very dense coating is produced. Particle sizes as low as 0.5 micron ensure that every potential air space is filled with an impervious sphere of water and chemical resistant material.

FLEXIBILITY

The polymer used is flexible and to improve this performance special fibres are added which allow a much higher level of flexibility.

SALT RESISTANCE

The presence of salts in below ground situations can cause expansion when drying and lead to de-lamination at worst and efflorescence. Two components contained in the product actually react with these soluble salts turning them into solids that do not exhibit efflorescent or hygroscopic effects.

GOOD ADHESION

Adhesion comes from the polymer and the presence of special cements, which bind the slurry cohesively and give good adhesion to masonry.

SET CONTROL

This is achieved by using rapid setting cements together with set accelerators. This ensures that even in areas where there may be water movement the slurry sets quickly whilst allowing a reasonable period for application. Where running water is experienced however, CC water seal must be used to control water flow whilst the slurry is curing. Construction Chemicals Tanking Slurry is manufactured to have to a high level of performance in any situation where lateral or penetrating dampness is found. It has been carefully formulated to ensure that it is not affected by the problems normally associated with water movement such as salt damage and movement.

USES

Tanking slurry is used as a waterproofing membrane, which may be applied by brush or spray. Where external ground level is above internal floor level it is usually necessary to provide a barrier to penetrating moisture in conjunction with an injected DPC. In such circumstances **TANKING SLURRY** may be applied directly onto the brickwork before DPC injection takes place. In cellars and other areas of high hydrostatic pressure and where there could be sulphate salts present, it is advisable to use a sulphate resistant (tight) backing coat before applying **TANKING SLURRY**.

Areas of use include the following:

- CELLARS/BASEMENTS
- TANKS AND DUCTS
- UNDERGROUND CAR PARKS
- SWIMMING POOLS
- POTABLE WATER TANK
- BUND WALLS
- FOUNDATION SLABS
- SILAGE PITS
- PARTY WALLS
- AS A VERTICAL DPC IN STONE WALLS OR WALLS OVER 250MM
- FISH TANKS (BLACK SLURRY AVAILABLE)
- LIFT SHAFTS



Turn old damp cellars into useful living areas with Tanking Slurry. Specification service on request

DESCRIPTION

Tanking slurry is a blend of Portland cements, quality graded aggregates and chemical modifiers, which provide a waterproof coating system. The standard product is supplied in grey, other colours can be made on request. It also contains an acrylic polymer to assist bonding therefore reducing the use of SBR directly into the slurry.

TANKING SLURRY IS NOT SULPHATE RESISTANT.

ADVANTAGES

- Excellent adhesion:** Special mix design produces stable adhesion to construction surfaces.
- Durable protection:** Waterproof coating has long life characteristics.
- Water based:** Safe to apply on damp surfaces.
- Easy application:** May be applied by brush or spray.

SPECIFICATION

Construction Chemicals Tanking Slurry should be used to form all coatings required for waterproofing purposes.

The product must be stored, handled and applied strictly in accordance with the manufacturer's instructions.

APPLICATION/ PREPARATION

Preparation

All contact surfaces must be clean and sound. Remove all loose material, laitence, dust and any previous coating. Tap off water pressure where necessary and cut out a 20mm x 20mm fillet at floor and wall joint (see page 4 individual specification). Repair any existing cracks and fractures with Construction Chemicals Rapid Cement.

SERVICES

Seal around all services and pipes with CONSTRUCTION CHEMICALS PRO-BOND 2000 MS POLYMER

PRIMING

Under normal applications no priming is required; however you should refer to the individual specification that may be provided by your Technical Representative. On dry surfaces the background should be dampened to assist the coating in fully wetting out.

MIXING

The water requirement to produce the coating is 7.5 to 8.5 litres of water per 25 kg of dry material. Pour the required quantity of water into suitable mixing vessel. Slowly add the powder to the water whilst continuously mixing. Mechanical mixing is recommended using a slow speed high torque drill with a plastering paddle. Mixing should be continued for three minutes after all the powder has been added to the mixing water to obtain a %creamy+ consistency.

COATING

Construction Chemicals Tanking Slurry is applied in two coats (except above ground, see individual specification) the first coat in a horizontal direction down to fillet level. Apply second coat at right angles to the first as this will ensure complete coverage of the substrate. Second coat can be applied before the first is dry providing the first does not drag. In some cases a tight coat of render made up of 3:1 sand cement mix, using a sulphate resistant cement and SBR mixed at 2:1 with water as the gauging water may be required, refer to your individual specification or our technical dept if you are unsure.

N.B.

Do not re-temper stiffened material. Tanking Slurry should not be applied in frost conditions or to frost filled surfaces or when temperature is 5 deg C and falling.



Stretton Hall on the border of Lincolnshire and Leicestershire, refurbished to a high standard using many of Construction Chemicals products. The cellars have been waterproofed using tanking slurry and have been converted into a gym, sauna and plunge pool.



Tanking slurry is chemical resistant and ideal for bund walls.

CURING

In warm or windy conditions mist spraying may be used to compensate for moisture loss. In tanking applications a through flow of air is required to prevent condensation. Tanking Slurry may be rendered after 24 hours and will become fully effective after 8 days. Render coat should contain SBR to assist bonding and floor coatings should be screeded or sealed with an abrasion resistant coating. Protect from frost, direct sunlight, and drying winds for 24 hours.

TYPICAL PROPERTIES AT 20 DEG C

Water addition: 7.9 lt per 25kg unit.

Coverage – yield: 2 kg per square mt per coat depending on the substrate
8.3 to 12.5 square mt per 25kg unit depending on substrate

Initial set: 30 minutes

PRECAUTIONS

Health and Safety

Tanking Slurry is alkaline when mixed with water and should not come into contact with skin or eyes. Avoid inhalation of dust during mixing and wear safety glasses, dust mask and gloves. If skin contact occurs wash with clean water. Should eye contact occur rinse immediately with plenty of clean water and seek medical advice. For full health and safety data refer to Product Safety Data Sheet.

FIRE

Tanking slurry is not a fire risk

COVERAGE

The coverage will depend on the substrate surface.

Course surface . 2kg to 3kg per square mtr per coat

Smooth surface - 2kg to 2.5kg per square mtr per coat

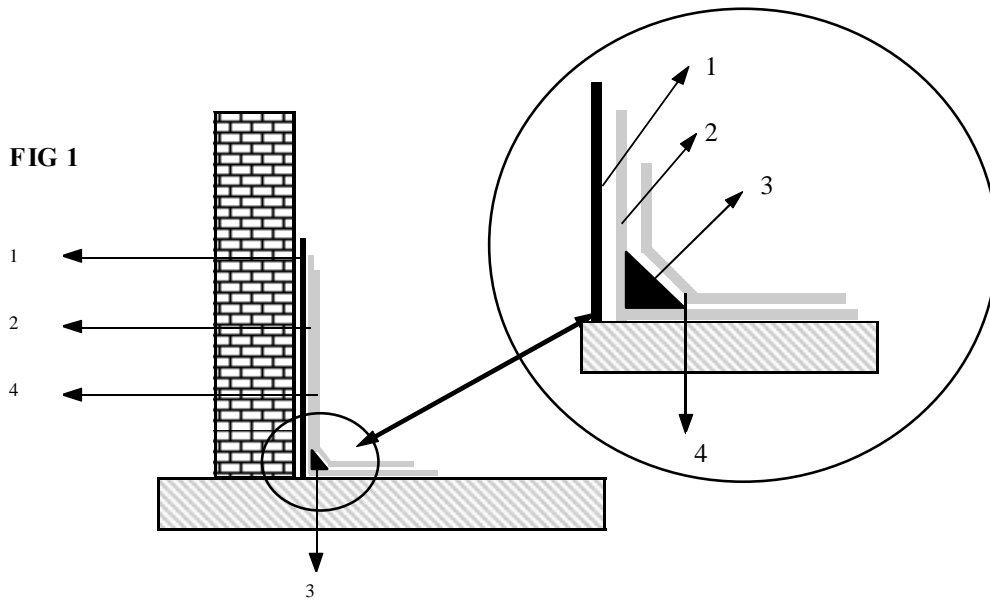
STORAGE AND SHELF LIFE

Tanking slurry will have a shelf life of six months in bags. Store in dry conditions at temperatures above 5deg C.

TANKING AND SBR USAGE CHART

SQ MTR	10	15	20	30	35	40	45	50	55	60	65	70
ABOVE GROUND KG	20	30	40	60	70	80	90	100	110	120	130	140
SBR 5L	1	1	1	2	2	2	3	3	3	4	4	4
BELOW GROUND KG	40	60	80	120	140	160	180	200	220	240	260	280
SBR 5L PRIMER SLURRY	2	2	2	4	4	4	5	5	5	6	6	6
SBR 5L TIGHT COAT	4	4	4	6	6	6	8	8	8	10	10	10

FLOOR AND WALL JOINT DETAIL. Fig 1

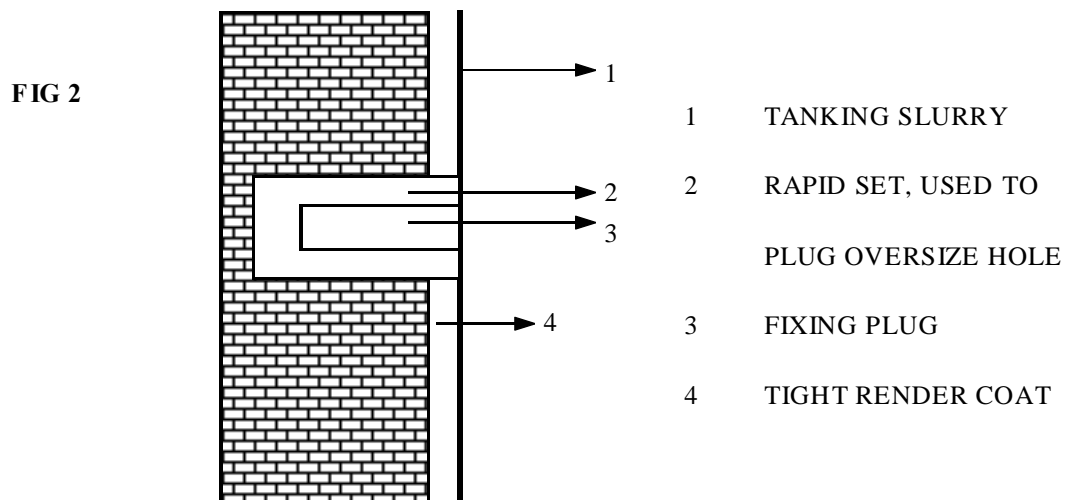


- 1 SURFACE LEVELLED WITH 3;1 SULPHATE RESISTANT PORTLAND CEMENT: SAND MIX, INCORPORATING SBR 2:1 WATER AS GAUGING.
- 2 VERTICAL TANKING SLURRY TAKEN OVER FLOOR
- 3 20MM FILLET 3;1 SAND CEMENT. SBR NEAT AS GAUGING.
- 4 SECOND COAT OF TANKING SLURRY TAKEN OVER FLOOR

FIXING DETAIL

Anything that disrupts the continuity of Tanking Slurry will give rise to a weakness in the system. Wherever possible fixing of items to tanked walls should be avoided. Where fixing have to be made, provisions should be made in advance by drilling oversized holes and plugging with RAPID SET, then inserting plastic plugs whilst the RAPID SET is still soft, or drill the correct size hole after it has set. Skirting and Daido rails should be glued using Construction Chemicals Panel Adhesive.

SEE FIG 2



CONSTRUCTION CHEMICALS TANKING SLURRY

1. IDENTIFICATION OF THE SUBSTANCES/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name : Tanking Slurry
Use : Cementitious tanking system

Company : Construction Chemicals (UK) Ltd
Address : 75 Town Green Street, Rothley, Leicester, LE7 7NW
Telephone : 0116-2301955 Fax: 0116-2301944

2. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture of sands, fillers, surfactants and chemical modifiers not classified as hazardous. Portland Cements CAS 65997-15-1. EEC-Symbol Xi. R Phrases 36/37/38/41.

3. HAZARDS IDENTIFICATION

Irritating to eyes, respiratory system and skin. Risk of serious damage to eyes.

4. FIRST AID MEASURES

Eye contact : Rinse immediately with water for at least 15 minutes. Get medical attention.
Skin contact : Wash with soap and water.
Inhalation : Move into fresh air.
Ingestion : Wash mouth with plenty of water. DO NOT induce vomiting. In case of spontaneous vomiting ensure vomit can drain freely to avoid suffocation. Get medical attention.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media : None required as not flammable.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Wear suitable protective clothing and eye/face protection.
Environmental precautions : Prevent contamination of soil, drains and surface water.
Methods for cleaning : Take up material. Avoid air born dust. Place in enclosed containers. Dispose of waste

7. HANDLING AND STORAGE

Handling: Ensure adequate ventilation. Do not breathe dust. Avoid eye contact.
Storage : Keep in original container. Keep dry.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering protective measures : No special measures required.
Occupational exposure limits : Amorphous Silica 8 hour. TWA ó Total Inhalation Dust. OES 6.0mg/m3. Respirable Dust ó OES 2.4mg/m3.
Respiratory protection : In case of insufficient ventilation wear suitable respiratory equipment.
Hand protection : Wear suitable gloves (eg PVC).
Eye protection : Wear suitable safety glasses to BS2092.
Skin protection : Wear overalls and closed footwear.

9. PHYSICAL AND CHEMICAL PROPERTIES

Melting point/range : Not Applicable
Boiling point/range : N/A
Oxidising properties : N/A
Auto-flammability : N/A
Solubility in water : Forms alkaline mixture
Vapour pressure : N/A
Partition Coefficient : N/A
Explosive properties : N/A
Appearance : Grey granular powder
Odour : Slight
Density : Bulk density 1.5-1.8 approximately
Flashpoint : N/A
Ignition : N/A
pH value : 13 approx. when in aqueous mixture
Viscosity : N/A

10. STABILITY AND REACTIVITY

Stability : Stable

Condition to avoid : Non known
Materials to avoid : Non known
Hazardous decomposition products : Non known

11. TOXICOLOGICAL INFORMATION

Toxicological information no available. Well known health effects are available industrially.

Health effects:

Eyes : Can cause burns
Skin : Causes irritation when wet
Inhalation : Causes respiratory irritation
Ingestion : Causes irritation of mouth, throat and digestive tract
Chronic : Respirable dust fraction, if inhaled over a prolonged period Constitutes a health hazard. Such inhalation can give rise to Fibrosis of the lungs
Other : When mixed with water, alkali is released. Precautions should be taken to prevent dry materials entering eyes, mouth and nose and to prevent skin contact with wet mixed material.

12. ECOLOGICAL INFORMATION

Prevent contamination of soil, drains and surface water.

Mobility : Granular powder
Solubility : Forms aqueous mixture
Persistence and degradability : Once set, long term stable
Bio-accumulative potential : Once set, long term stable

13. DISPOSAL CONSIDERATIONS

For large quantities, disposal must be carried out under guidance from local and national legislation. Small quantities can be disposed of as common waste via a licensed waste contractor.

14. TRANSPORT INFORMATION

Not classified as dangerous for transportation.

15. REGULATORY INFORMATION

Symbol : Xi
Contains : Portland Cement mixture
Risk phrases : R36/37/38 irritating to eyes, respiratory system and skin
R14 Risk of serious damage to eyes
Safety phrases : S1/2 Keep locked up and out of the reach of children
S22 Do not breathe dust
S24/25 Avoid contact with skin and eyes
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S28 After contact with skin was with plenty of water
S37/39 Wear suitable gloves and eye/face protection

16. OTHER INFORMATION

This data is given in connection with the product being used for the purposes outlined in the Technical Data Sheet available from Construction Chemicals (UK) Ltd. Use of the product for other purposes may result in risks not given above.

If the product is to be used by a third party at work, it is the duty of the initial recipient to ensure that the third party is supplied with the data given above.

Employees have the duty to inform employees and others who may be affected of any hazards given in the data above and any precautions which should be adopted.

Users of the product should undertake their own assessment of work place risks as required by the Health and Safety Legislation.