

**CONTRACTORS SHOULD INCLUDE A COPY OF THIS SPECIFICATION
WITH THEIR QUOTATION TO THE CLIENT.**

GENERAL CONDITIONS OF ISSUE

Specifications are based on the information provided from non-disruptive assessments and remain valid for three months from date of issue. The advice given for walls and floors is for the suitability of that substrate to receive Hey'di tanking or Delta Membranes. This report must not be regarded as a substitute for a structural survey and is also exempt from the provisions of the Contracts (Rights of Third Parties) Act 1999 (paragraph 1(2) refers), in that it is not intended for use by Third Parties without our prior consent.

The specification is only applicable to the areas stipulated in the Specification Request Form for the conditions found at that time. Contracts should not commence if there has been a radical change to the water table conditions and a new specification will be provided. Alterations are only permissible through the Technical Department.

Except where instructed by the client, the onus remains with the company carrying out the contract in deciding upon the suitability and extent to which the system will be used.

Limitations of Guarantee and Specification

1. Tanking is the design and application of a barrier to protect a structure against water from the ground, therefore forming a type A structure as defined in BS8102:2009. With below ground structures tanking should be applied to all surfaces below ground, and ideally linking with an effective damp proof course above ground level, in order to achieve a continuous system. Any areas that are not tanked, for whatever reason, such as being financially non viable, will remain vulnerable to dampness/water ingress; and 'sectional or limited' tanking will be deemed to have taken place. Where sectional or limited tanking has been applied then this is at the clients contractors instruction, and any guarantee will be limited to the actual area treated only. Note: Almost all basement structures are likely to be subjected to water pressure at some point in their life. This must be considered when determining the extent of tanking.
2. The K11 tanking system must be applied to structurally stable walls and floors, which must meet the current design standards/regulations. Floors must be of such design so as to resist both floatation stresses exerted by hydrostatic pressure and deflection from internal loading. Where this cannot be achieved then consideration must be given to an alternative specification using Sovereign Delta Cavity Drainage Membrane Systems.
3. Where there is possible water pressure then we would recommend applying a single coat of K11 Grey across the floor area in order to complete the watertight integrity and continuity; alternatively use a drained cavity system. If this is not completed, then Limited or Sectional tanking has taken place (See 1 above)
4. Only areas within the building line can be guaranteed, e.g. areas under the pavement are outside guarantee unless clearly identified as such within the specification
5. New rendercoats should consist of Sovereign Ready Render or a rendercoat modified with Sovereign SBR Bonding Agent in accordance with Sovereign specification.
6. Liability will not be accepted where the treatment has been punctured, or similarly interfered with, where structural movement has occurred, or the substrate has deteriorated after completion, or where the system has been applied to an existing rendercoat, which subsequently fails.

Specimen copy guarantee attached

New build designs should comply with - BS8102:2009 (Code of Practice for 'Protection of Structures Against Water from the Ground') and are assumed to have been built to Good Building Practice with mortar beds fully filled off. (NHBC Standard Chapter 6). The issue of a tanking guarantee does not underwrite build design considerations or the limitations of sectional tanking.

Advice or assistance from Sovereign Salesman, for whatever reason, does not constitute "supervision"

SPECIFICATION NO.----- BB101010-PP
CUSTOMER'S NAME----- A SMITH
CUSTOMER'S ADDRESS-----11 THE DRIVE, BARROW IN FURNESS, CUMBRIA
CUSTOMER'S ACCOUNT NO.----- 10101010
CONTRACT ADDRESS ----- 33 THE ROAD, BARROW IN FURNESS, CUMBRIA
CONTRACT REQUIREMENTS-----K11 TANKING – BELOW & ABOVE GROUND LEVEL
INSPECTION DATE ----- 101010
SPECIFICATION DESPATCHED ----- 101010

INSPECTION DETAILS

This specification is for sectional tanking at the above property.

The building concerned is a stone built large detached barn currently undergoing conversion works to provide additional accommodation and leisure facility to the main property.

Due to the nature of the structural walls, being solid random stone construction and areas of high external ground levels it is intended that areas of walls are tanked using the Sovereign Hey'di K11 Tanking System to provide protection against both lateral penetrating and rising dampness.

All wall surfaces must be thoroughly prepared to provide a sound/stable background. Any embedded timber must be removed from areas of walls where K11 is to be applied.

Ground water ingress is occurring.

Where structural concrete underpinning works have taken place extra care and attention should be given to this areas to ensure that the background is prepared correctly and water ingress is stopped before further works are carried out. Powder X can be used as a water plug.

Note: Where achievable maintainable external land drainage should be positioned to reduce hydrostatic build up against earth retaining walls.

Shuttered concrete may require a light acid wash to open up the surface and increase porosity and therefore the bond strength of applied coatings.

As the tanking is to be lapped onto the floor it is assumed that the structural integrity of the floor is adequate for the tanking to be applied successfully.

In view of the nature of the substrate we would recommend applying a new, tight, modified rendercoat prior to tanking. Two coats of K11 are required for retaining walls, returning 1 metre onto internal abutting walls and overlapping a minimum of 200 mm onto the floor and incorporating between coats a 25 mm Barrier Mortar fillet to the wall/floor and vertical wall/wall junction. A single coat of K11 Grey will suffice for any further areas of floor, internal abutting walls, returns or areas of tanking above external ground level.

All earth retaining walls must be tanked to external ground levels to be effective against lateral penetration and to a minimum of 1.5m above the high ground/floor level to protect against rising moisture.

On completion of K11 works we would recommend the application of Sovereign Renderlite Renovating Plaster. Dot and dab dry lining is not recommended where waterproofing systems are applied due to the heightened risk of condensation. For further information, please contact our Technical Department.

CONTRACT DETAILS

1. Is there hydrostatic water -----Yes - Some seeping water
2. Construction of the area ----- Stone/Concrete/Concrete block
3. Is the area rendered -----No
4. Type of cleaning ----- Mechanical/Acid Wash
5. Are there salts/fungal growths ----- Yes
6. Previously tanked -----No
7. Are pipes passing through ----- Yes
8. Fixings to be attached ----- Yes
9. Hey'di system specified ----- K11 onto new modified render

DRAINAGE

Improving external land drainage can in many instances, substantially reduce hydrostatic water pressure and must be considered phase one of the contract. This will make subsequent tanking far easier to complete if water ingress is a problem.

SPECIAL REQUIREMENTS OF THE CONTRACT

The specification is valid providing the Conditions of Issue are acceptable and have been complied with.

Where quotations are made for tanking to "Sovereign Specification", then Contractors are advised to include the caveat "Subject to Conditions of Issue" and present a copy of this specification to the client.

Attention is drawn to the limitations of sectional tanking, see Conditions of Issue, Limitations of Guarantee and Specification, paragraph (1).

PREPARATION

1. Hack off any existing plaster and/or other surface coatings and mechanically prepare suitably for receiving a new tight rendercoat. Any plastic membrane should be trimmed then burnt back.
2. Running Water. The contract should commence when water ingress is not a problem, however, any running water must be stopped with Powder X to allow the preparation to continue.

Either rub Powder X firmly and directly into water ingress (wearing safety goggles and gauntlets) or, in overhead cases, or for wall and floor joints, use the following method:-

Pour about half a cup of water into a builders bucket. Using gloves and wearing safety goggles, add about 2-3 handfuls of Powder X. Mix up quickly to thick slurry. Scoop out the bucket and **press very firmly into place**, smoothing off at the same time. This will go off very rapidly, i.e. within seconds! Hold into place until the mix has cured.

Further advice should be sought from the Technical Department if stopping the water in one area causes water ingress in other areas.

Note: Ensure that all excess materials are removed from the wall and floor joint before commencing.

3. Ground salts are present where ground water has penetrated and must be stabilised prior to treatment. To do this Hey'di Anti Sulphate should be applied in the following manner:-

Brush or spray a solution of Hey'di Anti Sulphate diluted 1:1 with water liberally over the entire surface and leave overnight.

Note: Anti Sulphate should not be applied in temperatures of less than +5°C.

Note: When Hey'di Anti Sulphate has been applied the Hey'di K11 should be applied within a 3 day period.

4. New Rendercoat

Before rendering apply a Bonding Coat consisting of SBR Bonding Agent:water 1:1, mixed with fresh Portland Cement. Achieve a thin yoghurt consistency and brush thinly over the walls. Render up while this is still tacky. If the Bonding Coat starts to dry then re-apply.

Render up using sharp washed sand:Portland cement (sulphate resistant is recommended but not mandatory) 4:1 gauged with SBR Bonding Agent:water 1:4. Minimum thickness 8-10 mm. Leave for a minimum of 24 hours.

5. For new rendercoats onto existing builds, before commencing K11 treatment brush apply a coat of neat Anti Sulphate and allow to soak in. When the substrate is damp but without surface water commence tanking thereafter keeping the substrate damp throughout the application.

K11 TANKING SYSTEM APPLICATION

Prior to commencing operatives should be informed of the purpose of tanking so they understand the integrity of the system cannot be compromised.

For the chemical reaction to take place K11 must be applied to a damp surface where the underlying substrate has a high moisture content. Failure to do so will result in the future breakdown of the system. Dry areas should be prewetted with water, as early as possible, to assist this process.

1. Wet the areas to be treated with wash down water consisting of 9 parts water to 1 part SBR Bonding Agent 20 minutes before the application of K11. The 20 minutes is an approximate time that will ensure that the inner surface is still wet, but without surface water.
2. Mix Hey'di K11 Grey with SBR Bonding Agent diluted 2 parts Bonding Agent to 1 part water, until a plastic consistency is obtained. Approximately 8 litres of gauging water will be required per 25 kg of K11. Apply the K11 slurry using a block brush at a rate of 2 kg/m² giving a K11 coating thickness of approximately 2 – 2.5mm per coat.

Note 1: Do not mix more K11 than 1 man can apply in 20 minutes.

Note 2: Keep the wash down (9 water to 1 part SBR Bonding Agent) well away from the K11 gauging.

3. At all vertical and horizontal joints a 25 mm angled fillet must be formed of Hey'di Barrier Mortar mixed with water as gauging. For this application the K11 does not have to be allowed to dry, Hey'di Barrier Mortar is designed to be applied to a damp surface, so it is only necessary for the K11 to set up (approximately 1 hour).

4. The second application of K11 can be applied as soon as it is possible to brush on without dragging the first coat. Ideally, this should be brushed on at right angles to the first coat. This is the preferred method of application. However, if the wall has started to dry out (6 hours approximately) then leave for a full 24 hours and rewet the surface as per paragraph 1, before applying the second coat.

K11 must not be rewet before it has fully cured (24 hours).

5. Leave for a minimum of 24 hours before rendering/plastering. (See Customer Care Section)

Note: The two-coat system of 4 kg/m² must not exceed 5 mm in total thickness. The best way to ensure correct coverage is to check the weight of materials used against the area covered. Insufficient coverage could lead to future problems.

Note: All areas treated must be protected from strong sunlight and rain for 24 hours after application.

Note: **Never apply K11 in conditions below +5°C over a 24-hour period.** However, heating should never be used directly onto newly applied K11.

PIPE SEALING AND FIXTURES

FIXINGS

Preparation for fixings must be built into the tanking system as it is essential that the treatment with Hey'di K11 should not be punctured.

Two systems can be used depending on the strength required.

1. Where there is little load bearing requirements all fixtures and fittings should be fixed with Sovereign Pro-Stick 2000.
2. Where load bearing is required the surface should be marked out using the fixture as a template. Holes drilled as required to take the fixing, making sure that the hole is approximately twice the diameter and one and a half times the depth. Fill the hole with a mortar mix of Hey'di Rapid mixed with neat SBR Bonding Agent and while still soft press home the required fixing. Alternatively, leave the mix to cure and drill and fix at a later date.

Note: Where lots of fixings are involved, attaching the fixings to a board in the front of the wall has proved successful. Heavy-duty fixings can be quickly installed by drilling a hole twice the diameter and one and a half times the depth, as in paragraph 2, above.

3. In above ground situations the fixing hole can be partially filled with Pro-Stick 2000 which, when the fixture is screwed into place, will prevent penetrating damp.

Note: Whenever possible fixings should be made onto interior walls, rather than exterior walls, e.g. hand rails on staircases.

PIPE SEALING

Allow the above to fully cure before commencing.

All pipework tanking joints are to receive a 15-25 mm collar of Pro-Stick 2000 when the surface is dry.

CUSTOMER CARE

Remember tanking may encourage condensation and the owner should be made aware of ways to resolve this. We recommend using Renderlite Renovating Plaster because of its thermal qualities.

Plastering or rendering can be carried out the next day without the need for a bonding coat.

Note: Where required, i.e. internal and external corners, use stainless steel beading, not galvanised, prior to rendering.

If plastering/rendering onto cured K11, then a bonding coat must be applied as follows:-

Knock up a bonding coat consisting of SBR Bonding Agent:water 1:1, mixed with fresh Portland Cement to a thin creamy consistency. Apply a thin coat by brush and render up while the bonding coat is still tacky.

Care should be taken when using K11 tanking. Drips or splashes should be removed before they have cured. Removal after cure is extremely difficult.

When cleaning out containers used in application, the contents are NOT to be emptied down drains etc, where they will set solid.

It may be worthwhile, where possible to fix a notice on the wall using Pro-Stick 2000 explaining that the wall has been “tanked” and who to contact before puncturing the membrane or for domestic dwellings, ensure the owner is aware of what tanking means.

MATERIALS REQUIRED

" Contractors must verify all material requirements on site prior to undertaking the project"

Earth retaining walls	=	65m ²
Walls above ground level	=	130m ²
Sovereign K11 Grey	-	24 x 25kg
Sovereign SBR Bonding Agent	-	23 x 10kg
Sovereign Anti Sulphate	-	5 x 10kg
Sovereign Barrier Mortar	-	5 x 25kg

Should you require to discuss this further, please contact our technical department on: 0845 603 0722.

TECHNICAL MANAGER

Note: Both Sovereign Hey'di K11 and Sovereign Renderlite Renovating Plaster both have BBA Certification.