“Tank” an existing basement

Many homes with old basements or even just sections of wall which are partly below ground level, suffer from active moisture penetration or dampness. The Kingfisher Aquatech cementitious tanking system offers a practical solution to the problem without resorting to major earthwork excavations. The Aquatech system is designed to exclude water by creating a tough layer of waterproofing which is physically bonded to the wall to form a continuous membrane seal. Seek advice from your local Kingfisher representative or tech services before embarking on a new project so that we can advise on site specific issues.

1. **Surface Preparation**

Thorough preparation is a major factor in the success of your tanking system so you should remove all old render and plaster, rake out and re-point severely crumbling mortar beds and scabble the surface if necessary to create a sound substrate. This creates a good key surface.

2. Neutralise Ground Water Salts

Ground water salt contamination is present to a degree in all underground structures and must be neutralised to prevent damaging chloride crystals from forming. These chlorides degrade plasters, and will rapidly break down tanking if not neutralised at time of installation. Spray the walls with Aquatech Anti-Sulphate 50:50 solution with water and leave overnight. Within 24 hours you should apply a further application of NEAT anti-sulphate.

3. Seal Wall to Floor Joint

A common point of failure in poorly executed tanking systems is in failing to pay attention to the wall/ floor junction. This joint represents a weak point which any hydrostatic pressure from groundwater will inevitably find. Simply chase a 40 mm channel out of the floor (e.g. with an angle grinder) at a 45 degree angle to allow installation of a high bond Barrier Mortar fillet.

4. Render

A polymer modified render coat is now applied using Kingfisher K-x11, sharp sand and cement. The ratios are 4: 1 sharp sand and cement mixed with 3:1 clean water and K-x11. This creates a uniform, bonded and water resistant render for application of the Aquatech below ground tanking slurry . *Note: It is often helpful to prime the wall to improve adhesion prior to rendering: 3 parts sand, 1 part cement, Kingfisher K-X11 as required (no water) mix in a bucket to a yogurt consistency, then “spatter dash” onto the wall by flicking it on with a tanking brush or masonry paint brush. Begin applying render within 20 to 30 minutes.*

5. Apply “Aquatech” Tanking Slurry

Allow the render to cure overnight. Mix the Aquatech with a power paddle to a slurry consistency with a 5:1 ratio of water to K-x11. The first coat should be applied with vertical brush strokes, ensuring full coverage over the entire wall and over the wall/floor fillet onto the floor Ca. 200mm. The second coat of Aquatech is mixed / applied in the same way but with horizontal brush strokes.

6. Plastering

Your basement or below ground wall should now be water-tight and ready for plastering or dry lining. Use Kingfisher Drywall renovating plaster or a dry lining method that does not puncture the tanking.

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