Modern Ways of Keeping Water Out by Callum

Article published on June 25th 2012 | Gardening

There is a true saying that states that water is life. The human body is composed of 70% water. You cannot survive more than three days without water. These are just few of the things that we hear everyday concerning the importance of water. Water is very important nobody can contest that fact. However, we all know that when water intrudes where it ought not to be, it can be destructive. Concrete, used in most building projects, is in itself not waterproof though it can easily be made so by mixing it with certain chemicals.

In the past, we used tar, bitumen, and all other sorts of techniques to keep water out, however, advancements in technology have brought about better methods of dealing with the water menace. Modern methods of waterproofing focus on understanding the functional behavior of a structure and the properties of the materials available to come up with the best, permanent waterproofing solution.

Crystalline Waterproofing System

This method involves using insoluble crystals to block water passage. It is best for waterproofing structures that retain water, such as swimming pools, bathrooms sinks and water tanks, both underground and overhead.

The method employed in this technique involves saturating the surface to be treated with water. Two and a half volume of the grey/brown looking powder of insoluble crystals is then mixed with one volume of water and stirred to form consistent hot slurry. This slurry is applied with a brush on the water-saturated surface. The chemical ingredients in the slurry pass through the capillaries bearing water and react with calcium oxide in the concrete to form insoluble crystals, which then block the water capillaries, stopping water flow through them effectively.

Further, the active ingredients remain in the concrete to reactivate the whole process of formation of insoluble crystals should another capillary be formed. This method is used to waterproof water retaining structures in almost all developed countries.

Flexible Membrane Waterproofing System

This method entails the use of a product made up of two components, a liquid and powder component mixed roughly in the ratio of 1:4. An acrylic emulsion forms the liquid component while cement with modified polymers and film forming chemicals and fillers makes up the powder. Some manufacturers may add reinforcing fibers to the cement to make it more effective. The two ingredients are mixed together to form a slurry.

The slurry is then brushed on the surface to be treated. It dries forming a flexible film. The compatibility of this product with concrete is great as it contains cement. The film is advantageous further because it allows the concrete to breath without hindrance, thus lasts long as there are no problems of de-lamination. It is also flexible to allow deflections in the slab and movements caused either by wind or temperature stress on the concrete.

The treatment can be applied on surfaces that had previously been treated by bitumen. In Europe, it is being put to work to coat concrete on bridges thus protecting them from an over-aggressive chemical atmosphere.

Article Source:
http://www.articleside.com/gardening-articles/modern-ways-of-keeping-water-out.htm - Article Side

Callum - About Author:
Looking for a a waterproofing company today? Why not take a look at a quality provider that you can trust? Click a here!

Article Keywords:
waterproofing company, basement waterproofing

You can find more free articles on Article Side. Sign up today and share your knowledge to the community! It is completely FREE!