Galvanized Reinforcement - Project File

Galvanized Reinforcement in Water Filter Slabs

Galvanized steel reinforcement in concrete products and structures can provide a range of benefits. In aggressive environments, the need for increased concrete cover can be avoided. When lighter thinner concrete designs are required, galvanized steel reinforcement will protect against carbonation when concrete cover has been reduced.

Hot dip galvanized steel reinforcement is an effective solution to increase the durability of concrete products. Moreover, the use of galvanized rebar involves a number of benefits, such as improved bond strength at the steel/ concrete interface.

This is the reason why galvanized steel rebars have been chosen by a leading French pre-cast concrete product manufacturer to make porous concrete slabs to be used as water filters for drinking water basins.

Porous pavements have a fair filtering and water purification capability. However, since their function is to filter water, their steel reinforcement is continually exposed to the passage of water and therefore require additional protection against corrosion.

In this case the use of hot dip galvanized steel reinforcement has allowed the increase of the products' durability. The manufacturer found that the use of galvanized reinforcement also improved the bond strength and prevented the need to increase the concrete cover.

Images: Celtys

Further Information on Galvanized Reinforcement for Concrete

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