



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 suited for pre-cast concrete products, including small products that are subject to great stress, such as manhole covers and gully tops and can provide numerous benefits.

A Spanish company specialized in the manufacture of reinforced concrete manholes and covers has adopted this solution with excellent results, achieving reduced weight, improved durability and higher load-bearing capacity compared to ordinary products.

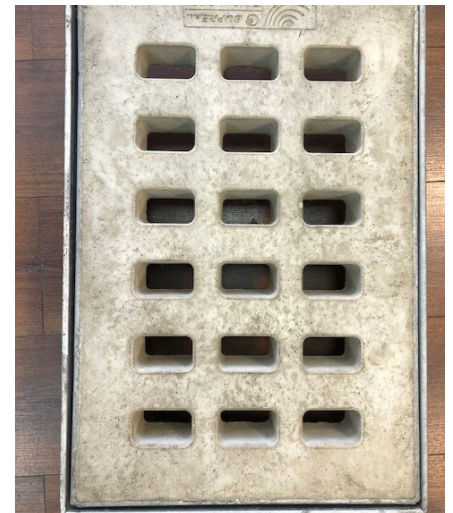
The European Standard EN 124-4:2015 provides the possibility to use hot dip galvanized steel reinforcement (i.e. in accordance with EN ISO 1461) and special concrete classes to achieve reductions in the concrete cover.

By applying EN 124-4:2015 and therefore using a combination of high-quality concrete with reduced porosity and galvanized rebars, the Spanish company has been able to reduce the concrete cover. In addition, thanks to this reduction, it was also able to improve the steel reinforcement distribution within the product and reduce its intensity.



Through the use of concrete with reduced porosity, galvanized reinforcement and improved design, the company's products benefit from reduced thickness and weight, increased durability and higher load-bearing capacity compared to traditional products with similar dimensions.

This innovative solution has made these products competitive both in the domestic and export markets.



Images: Bupre SI