

PRODUCTS AND SYSTEMS FOR THE PROTECTION AND REPAIR OF CONCRETE STRUCTURES

Regulation EN 1504

THESE PRODUCTS ARE SUBJECT TO THE regulation CPR 305/2011

This standard establishes the criteria and requirements for the conformity assessment, classification and description of products for the protection and repair of concrete structures.

Standard EN 1504 is composed of 10 parts. Here we will analyse only a few:

Part 2

Specifies requirements for the identification, performance (including aspects of durability), safety and conformity assessment of products and systems to be used for the protection of concrete surfaces, to increase the durability of concrete structures and reinforced concrete, as well as for new concrete and for maintenance and repair works.

Part 3

STRUCTURAL

Class R4 / Class R3

NON STRUCTURAL

Class R2 / Class R1

To be classified R4 and R3, products must have higher resistance in all provided tests with respect to the R2 and R1 class of products, they must have a higher elastic modulus of the limits set by the standard and must pass the resistance to carbonation test.

Part 5

Defines and specifies requirements regarding products and systems that, when injected with a concrete element, repair the integrity and durability of the structure used for:

- filling cracks, voids and interstices in concrete in order to transmit forces (category F)
- ductile filling of cracks, voids and interstices in concrete (category D)
- expansive filling of cracks, voids and interstices in concrete (category S)

Part 7

The standard specifies requirements for the identification and performance (including durability) of products and systems used for active coatings or barrier coatings for the protection of existing reinforcement steel that is uncoated and buried in concrete structures to be repaired.

