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Reinforced Concrete, Problems and Solutions: A Literature Review

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Abstract : Reinforced concrete is a concrete lined with steel so that the materials work together in the resistance forces. Reinforcement rods or mesh are used for tensile, shear, and sometimes intense pressure in a concrete structure. Reinforced concrete is subject to many natural problems or industrial errors. The result of these problems is that it reduces the efficiency of the reinforced concrete or its usefulness. Some of these problems are cracks, earthquakes, high temperatures or fires, as well as corrosion of reinforced iron inside reinforced concrete. There are also factors of ancient buildings or monuments that require some techniques to preserve them. This research presents some general information about reinforced concrete, the pros and cons of reinforced concrete, and then presents a series of literary studies of some of the late published researches on the subject of reinforced concrete and how to preserve it, propose solutions or treatments for the treatment of reinforced concrete problems, raise efficiency and quality for a longer period. These studies have provided advanced and modern methods and techniques in the field of reinforced concrete.

Keywords: reinforced concrete, treatment, concrete, corrosion, seismic, cracks

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