

Microbial Concrete and Self Healing Property: A Review

Rashmi S. Majgaonkar

P.G. Student, Department of Civil Engineering

Pankaj Laddad College of Engineering and Management, Buldhana, Maharashtra, India

Abstract: Concrete is the most common material, crack is the main problem that arises in a concrete structure. This causes corrosion in the steel reinforcement. The structure deteriorates with cracks, so due attention is needed to this problem. This work consists of various self-medication methods used by researchers to inhibit cracks and prevent further deterioration of the structure. To prevent cracks Microbiological induced calcite precipitation, ie. MICP is used in most literature to inhibit cracks. The use of bacteria in the healing of cracks has been more successful, and the strength of concrete is also increasing. This article discusses the different types of bacteria used to heal cracks. The maximum strength increased, and the width of the crack healed using these methods, also mentioned in the article.

Keywords: Self-healing, microbial concrete, micro structure and CaCO₃ precipitation

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