

eBook Information

Self-Healing Concrete

David J. Fisher

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Self-healing techniques are most successful in preventing concrete from cracking or breaking. The book reviews the most promising methods.

Keyword: Self-Healing Concrete, Concrete Inspection, Concrete Maintenance, Concrete Repair, Polymers, Bacteria, Fungi, Cementitious Composites, Biomineralization, Carbonation, Wet/dry Cycling, Denitrification, Calcium Carbonate Formation, Sulfate Reduction, Methane Production, Micro-organisms, Phototrophic Micro-organisms, Aerobic Organotrophic Bacteria, Anaerobic Micro-organisms

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Summary:

Self-healing techniques are most successful in preventing concrete from cracking or breaking. The book reviews the most promising methods, including the use of polymers, epoxy resins, fungi or cementitious composites; biomineralization, continuing hydration or carbonation or wet/dry cycling. Various micro-organisms are able to produce favorable effects, such as denitrification, calcium carbonate formation, sulfate reduction or the production of methane. The book references 289 original resources and includes their direct web link for in-depth reading.



Full Color Book Information

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