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Guide to Selecting Protective Treatments for Concrete

Reported by ACI Committee 515



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Guide to Selecting Protective Treatments for Concrete

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Concrete structures can be subjected to physical or chemical attacks by various substances, including water, acids, alkalis, salt solutions, and organic chemicals. Damage may vary in intensity from surface discoloration or roughening to catastrophic loss of structural integrity due to acid attack. This guide addresses the effects of various substances on untreated concrete and provides recommendations for protective treatments.

Keywords: acids; alkali; chemical attack; coal tar distillates; coatings; deicer; distress; durability; exposure condition; fatty acids; hardener; membrane; petroleum oils; protective treatment; resin; salt solution; sealer; solvents; topping; vegetable oils.

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