

IN-LB

Inch-Pound Units

SI

International System of Units

Glass Fiber-Reinforced Concrete Premix—Report

Reported by ACI Committee 549

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Glass Fiber-Reinforced Concrete Premix—Report

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Alkali-resistant (AR) glass fiber-reinforced concrete premix technology has become increasingly popular worldwide for manufacture of precast concrete products used in industrial, architectural, civil engineering, and construction applications. AR glass fiber-reinforced concrete premix products provide a useful balance of properties such as strength, toughness, durability, moisture resistance, dimensional stability, fire resistance, and aesthetics. This report summarizes the current knowledge of materials, manufacturing methods, engineering properties, and applications of AR glass fiber-reinforced concrete premix.

Keywords: cement-based composites; cement boards; composite materials; ductility; durability; fiber-reinforced cement-based materials; ferrocement; fibers; flexural strength; glass fiber-reinforced concrete; glass fibers; manufacturing methods; mesh reinforcement; panels; premix; toughness.

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