

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

CONTENTS

CHAPTER 1—INTRODUCTION AND SCOPE, p. 2

- 1.1—Introduction, p. 2
- 1.2—Scope, p. 2

CHAPTER 2—NOTATION AND DEFINITIONS, p. 3

- 2.1—Notation, p. 3
- 2.2—Definitions, p. 3

CHAPTER 3—MATERIALS AND MIXTURE PROPORTIONS OF ALAKLI-RESISTANT GLASS FIBER-REINFORCED CONCRETE PREMIX, p. 3

- 3.1—Types of premix, p. 3
- 3.2—Typical mixture ingredients, p. 3
- 3.3—Typical mixture proportions, p. 5

CHAPTER 4—PROPERTIES OF ALKALI-RESISTANT GLASS FIBER-REINFORCED CONCRETE PREMIX, p. 6

- 4.1—Influence of fiber content, p. 6
- 4.2—Influence of fiber length, p. 7
- 4.3—Influence of fiber orientation, p. 7

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