

ACI 549R-18

# Report on Ferrocement

Reported by ACI Committee 549



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## Report on Ferrocement

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# Report on Ferrocement

Reported by ACI Committee 549

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*This report provides an overview of the history, formulation, construction, and applications of ferrocement. The focus of this report is to create an awareness in engineers, architects, and potential end-users of the characteristics and capabilities of ferrocement.*

**Keywords:** compressive strength; construction materials; crack width; ferrocement; fibers; flexural strength; mechanical properties; reinforced concrete; welded wire reinforcement.

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## CHAPTER 1—INTRODUCTION AND SCOPE

### 1.1—Introduction

Ferrocement is a form of reinforced concrete that differs from conventional reinforced or prestressed concrete primarily by the manner in which the reinforcing elements are dispersed and arranged. It consists of closely spaced, multiple layers of mesh or fine rods completely embedded in cementitious mortar. A composite material is formed that behaves differently from conventional reinforced concrete in strength, deformation, and potential applications, and thus is classified as a separate and distinct material. It can be formed into thin panels or sections, mostly less than 1 in. (25 mm) thick, with only a thin mortar cover over the outermost layers of reinforcement. Unlike conventional

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