

# **ACI Manual of Concrete Inspection (SP-2)**

## **Tenth Edition**

Reported by ACI Committee 311

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### **SYNOPSIS**

*This manual is intended to guide, assist, and instruct concrete inspectors and others engaged in concrete construction and testing, including field engineers, construction superintendents, supervisors, laboratory and field technicians, and workers. Designers may also find the manual to be a valuable reference by using the information to better adapt their designs to the realities of field construction. Because of the diverse possible uses of the manual and the varied backgrounds of the readers, it includes the reasoning behind the technical instructions.*

*The field of concrete construction has expanded dramatically over the years to reflect the many advances that have taken place in the concrete industry. Although many of the fundamentals presented in previous editions of this manual remain relevant and technically correct, this tenth edition incorporates new material to address these advances in technology. A list of only a few of the recent developments in materials, equipment, and processes includes:*

- *Shrinkage-compensating cement;*
- *Increased use of supplementary cementitious materials (SCMs);*
- *Polymer-modified mixtures;*
- *Self-consolidating concretes;*
- *New and refined admixtures;*
- *Fiber-reinforced concrete;*
- *Epoxy resins;*
- *High-capacity and automated concrete production equipment;*
- *High-performance and high-strength concrete; and*
- *Epoxy-coated and stainless steel-clad reinforcement.*

*The need to cover new issues affecting inspection is the reason ACI Committee 311 continues to revise the ACI Manual of Concrete Inspection. In preparing this edition of the manual, as with previous editions, the committee's task was to interpret the policies set forth by other authorized bodies rather than to make policy on construction practices. The main emphasis of the manual is on the technical aspects of inspection and construction. For further information about construction practices, readers are encouraged to refer to the ACI Manual of Concrete Practice.*

*Because the content of this manual is general and broad in nature, no part of the manual should be included by reference in contract documents. Applicable inspection requirements for each project should be determined and included in the specifications.*