

An ACI Standard

Specification for Inspection of Concrete Construction

Reported by ACI Committee 311

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Specification for Inspection of Concrete Construction

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American Concrete Institute
38800 Country Club Drive
Farmington Hills, MI 48331
Phone: +1.248.848.3700
Fax: +1.248.848.3701

www.concrete.org

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Michael C. Jaycox,* Chair

Tracy Grover, Secretary

Joseph W. Clendenen
Mario R. Diaz
Robert L. Henry

Jose Damazo Juarez
Venkatesh S. Iyer
Claude E. Jaycox*

Robert S. Jenkins
David Savage
Woodward L. Vogt

George R. Wargo
Michelle L. Wilson

Consulting Members

Joseph F. Artuso

Ann Balogh

Roger E. Wilson

*Task group preparing this specification.

This reference specification covers quality assurance inspection services for preplacement, placement, and post-placement of concrete construction. This reference specification can be made applicable to a particular construction project by citing it in the inspection services contract. The specifier shall supplement the provisions of this reference specification as needed by specifying individual project requirements in the inspection services contract. The materials, processes, quality control measures, and inspections described in this specification should be tested, monitored, or performed as applicable only by individuals holding the appropriate ACI Certifications or equivalent.

Keywords: accreditation; certification; concrete construction; inspection agency; placement; post-placement; preplacement; special inspection; specification.

(mandatory portion follows)

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SECTION 1—GENERAL REQUIREMENTS

1.1—Scope

1.1.1 Services specified—This specification sets the minimum requirements for quality assurance inspection of concrete construction whenever inspection services are required by the local building codes or the Contract Documents. The services covered are directed to Special Inspections covered in the current edition of the IBC. This specification is also valid for other projects at the option of the user. It includes inspection requirements for preplacement (reinforcement, forms, and embedments), placement (conveyance and consolidation), and post-placement (finishing, curing, stressing, grouting, and formwork removal) of concrete construction, as well as requirements for personnel qualification and Inspection Agency accreditation. All inspection services required in this specification shall be performed by an Inspection Agency engaged by the Owner.

1.1.2 Independence—An Inspection Agency shall be objective, competent, and independent from the Contractor responsible for the Work being inspected. The Owner or the Owner's Representative shall not delegate these services to the Contractor, Construction Manager, Construction Manager at Risk, or any other party responsible for constructing the Work.

1.1.3 Coordination with Contractor—The Owner shall instruct the Contractor to coordinate with the Inspection Agency, provide access to the Work, and provide notification when the Work is ready for inspection.

1.2—Units of measurement

1.2.1 Units—Inch-pound is the standard units of measurement in this document.

1.3—Referenced standards

Standards cited in this specification are listed by name and designation, including year, unless otherwise specified.

1.3.1 American Concrete Institute

ACI 301-16—Specifications for Structural Concrete

ACI 311.6-18—Specification for Ready Mixed Concrete Testing Services

ACI 318-14—Building Code Requirements for Structural Concrete

ACI 355.4-11—Qualification of Post-Installed Adhesive Anchors in Concrete and Commentary

1.3.2 ASTM International

ASTM A706/A706M-15—Standard Specification for Deformed and Plain Low-Alloy Steel Bars for Concrete Reinforcement

ASTM E329-14—Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection

1.3.3 American Welding Society

AWS D1.4/D1.4M: 2011—Structural Welding Code—Reinforcing Steel

1.3.4 International Code Council

IBC 2015

1.4—Definitions

The following definitions govern in this specification. For definitions of other terms, refer to “ACI Concrete Terminology (ACI CT).”

acceptance—acknowledgement by Architect/Engineer that submittal or completed work is acceptable.

accreditation—act or result of having an Inspection Agency's quality system, including equipment calibration and personnel certifications, reviewed and accredited by a qualified third-party Accreditation Agency.

Architect/Engineer—architect, engineer, architectural firm, or engineering firm developing Contract Documents or administering the Work under construction Contract Documents, or both.

certified—having met the requirements of a program that determines and attests that an individual is qualified to perform a specific service.

Contractor—person, firm, or entity under contract for the construction of the Work.

continuous inspection—full-time observation of Work requiring inspection by a Special Inspector who is present in the specific area where the Work is being performed.

discrepancy—an item that does not conform to the contract documents and is reported to the contractor for correction.

inspection agency—person, firm, or entity under contract for providing inspection services.

inspection services—periodic or continuous Special Inspections as required in this specification and Inspection Services Contract between the Owner and Inspection Agency.

Inspection Services Contract—set of documents supplied by the Owner to the Inspection Agency that serves as the basis for the agreement to perform inspection services; these documents can contain contract forms, contract conditions, Statement of Special Inspections, specifications, drawings, addenda, and contract changes. A different set of Contract Documents will exist between the Owner and construction Contractor.

Non-conformance—discrepancy that is not corrected prior to completion of that phase of the work and is reported to the building official and RDPRC so the RDPRC can determine the action to be taken.

Owner—corporation, association, partnership, individual, or public body or authority for whom the Work is constructed.