



# Standard Practice for Certification Bodies that Certify Personnel Engaged in Inspection and Testing of Construction Activities and Materials Used in Construction, Including Special Inspection<sup>1</sup>

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## 1. Scope

1.1 This practice provides supplemental requirements to those of ANSI/ISO/IEC 17024 for bodies that certify personnel engaged in inspection and testing of construction activities and materials used in construction, including Special Inspection. ANSI/ISO/IEC 17024 provides generic requirements that can be adapted to any discipline where assurance that certified individual meets the requirements of the certification scheme. Therefore, certification bodies certifying personnel engaged in inspection and testing of construction activities and materials used in construction, including Special Inspection, must meet the requirements of this practice and ANSI/ISO/IEC 17024.

1.2 This practice may be used as a reference by:

1.2.1 Developers of standards requiring personnel certification in inspection and testing of construction activities and materials used in construction, including Special Inspection, as a reference to harmonize terminology and reduce confusion among users;

1.2.2 Personnel certification bodies that establish criteria and certify construction inspection, construction testing, and Special Inspection agency personnel against specific requirements,

1.2.3 Accreditation bodies that accredit certification bodies, and

1.2.4 Users and specifiers as a reference when requiring personnel certification.

1.3 This practice follows the format of ANSI/ISO/IEC 17024 and provides additional requirements where needed.

1.4 Certification may be specific to a single test or inspection method or practice or a grouping or collection of methods or practices (any such method, code, or practice being herein-after referred to as “method,” or collectively as “methods”).

1.5 Personnel certification is an important aspect of the quality system of agencies engaged in inspection and testing of construction activities and materials used in construction, including Special Inspection. Certification of personnel is required to meet the personnel qualifications of Practice E329.

## 2. Referenced Documents

2.1 *ASTM Standards*:<sup>2</sup>

E329 Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection

2.2 *ANSI/ISO/IEC Standards*:<sup>3</sup>

ANSI/ISO/IEC 17024 Conformity Assessment – General Requirements for Bodies Operating Certification Systems of Persons

## 3. Terminology

3.1 The definitions in Section 3 supplement the terms and definitions provided in ANSI/ISO/IEC 17024.

3.2 *Definitions of Terms Specific to This Standard:*

3.2.1 *agency, n*—an organization, or part thereof, authorized by the project sponsor or his duly authorized representative to inspect, test, or both, construction and materials used in construction as required by the project specifications.

3.2.1.1 *inspection agency, n*—an agency whose personnel make visual observations and field measurements of construction activities and materials used in construction.

(a) *Discussion*—An inspection agency may collect and submit samples identified with respective portions of the construction for laboratory evaluation. The inspection agency and testing agency may be one organization or separate organizations.

<sup>2</sup> For referenced ASTM standards, visit the ASTM website, [www.astm.org](http://www.astm.org), or contact ASTM Customer Service at [service@astm.org](mailto:service@astm.org). For *Annual Book of ASTM Standards* volume information, refer to the standard’s Document Summary page on the ASTM website.

<sup>3</sup> Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036, <http://www.ansi.org>.

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3.2.1.2 *Special Inspection agency, n*—a third-party inspection agency approved by the applicable building official to perform Special Inspections.

3.2.1.3 *testing agency, n*—an agency whose personnel measure, examine, test, or otherwise determine the characteristics or performance of construction activities and materials used in construction.

3.2.2 *applicant, n*—a person who has submitted an application to be accepted into the certification process.

3.2.3 *candidate, n*—an applicant who has fulfilled specified prerequisites and has been admitted to the certification process.

3.2.4 *certification body, n*—an organization that offers or operates, or both, a certification program.

3.2.5 *competence, n*—demonstrated ability to apply knowledge or skills, or both, and, where relevant, demonstrated personal attributes as defined in the certification scheme.

3.2.6 *computer-based testing (CBT, also e-exam, computerized testing, and computer-administered testing), n*—a method of administering examinations in which the responses are electronically recorded, assessed, or both.

3.2.7 *evaluation, n*—a process that assesses a candidate's fulfillment of the requirements of the scheme leading to a decision on certification.

3.2.8 *examiner, n*—a person with relevant technical and personal qualifications, competent to conduct or score, or both, an examination where the examination requires judgment.

3.2.9 *inspection, n*—the process of measuring, examining, testing, gaging, or using other procedures to ascertain the quality or state, detect errors or defects or otherwise appraise materials, products, services, systems, or environments to a pre-established standard.

3.2.10 *Special Inspection, n*—the process of making visual observations or measurements of specific materials, equipment, installation, fabrication, erection or placement of components and connections by individuals with special expertise as approved by the responsible building official to ensure compliance with approved construction documents, relevant codes, and referenced standards.

3.2.10.1 *Discussion*—Special Inspection is a unique term used in building codes to define inspection requirements to be performed by persons approved by the building official for particular types of construction or operations.

3.2.11 *surveillance, v*—the periodic monitoring, between the periods of certification, of a certificant's competence to ensure continued compliance with relevant provisions of certification scheme.

## 4. Significance and Use

4.1 This practice provides basic criteria for the development and operation of a certification body, the development and operation of a certification program, and the development and use of customary mechanisms to evaluate a candidate's knowledge, skill, and ability.

4.2 The basic criteria provided by this practice are intended to be supplemented by more specific criteria serving the requirements of the certification body.

4.3 The certification body and its program, accredited according to the requirements of ANSI/ISO/IEC 17024 and this practice, shall be considered as having met the full intent of this practice.

## 5. Requirements for Certification Bodies

5.1 This practice does not impose additional requirements on the policies and procedures of the certification body beyond those of ANSI/ISO/IEC 17024.

NOTE 1—ANSI/ISO/IEC 17024 includes requirements for the certification body to develop and maintain policies and procedures that are “fair and equitable” to all certification candidates and certificants in addressing granting, maintaining, renewing, expanding and reducing the scope of a certification and suspending or withdrawing a certification. ANSI/ISO/IEC 17024 addresses the structure of the certification body to give confidence to interested parties in its competence, impartiality and integrity including the involvement of a “scheme committee” responsible for the development and maintenance of certification schemes. It specifically requires the certification body to demonstrate that any training and related activities are independent of the certification process to ensure confidentiality and impartiality. ANSI/ISO/IEC 17024 addresses the financial viability of the organization, the sufficiency and quality of its staff and any subcontractors, its management system, its maintenance of records, and its approach to resolution of appeals and complaints. Finally, ANSI/ISO/IEC 17024 provides requirements for confidentiality and security of the information obtained in the process of its activities.

## 6. Requirements for Persons Employed or Contracted by a Certification Body

6.1 This practice does not impose additional requirements on the persons employed or contracted by a certification body beyond those of ANSI/ISO/IEC 17024.

NOTE 2—ANSI/ISO/IEC 17024 addresses the competence requirements for employed or contracted persons involved in the certification process including “examiners” and related documentation requirements. Requirements include commitments to confidentiality and independence from any prior and/or present link with the persons to be examined that would compromise impartiality.

## 7. Certification Process

7.1 A monitored written examination is required.

7.1.1 The scope/contents of written examinations shall include all essential elements of the requisite test or inspection method(s), such as apparatus, specimen preparation, procedures, calculations and reporting requirements as well as common sources of error in conducting the test or inspection method(s), a basic understanding of the principles underlying the test or inspection method, and the basis of some of the required calculations for the test or inspection method(s).

7.1.2 Written examinations shall be given in a room that provides the lighting level, noise control, work space, ventilation, and temperature control that are universally recognized as necessary for a testing facility in which written examinations are administered.

7.1.3 Written examinations may be administered in traditional pencil-and-paper format or computer-based format.

7.2 A monitored performance examination is required whenever a requisite test method includes physical performance activities that are essential to properly/accurately conduct that test method.

NOTE 3—The requirements for “performance examination” for inspection activities, including Special Inspection, have not been well established or standardized. If a certifying body offers a ANSI/ISO/IEC 17024-compliant performance test, the requirements of Section 7 shall apply.

7.2.1 Performance examinations shall test the candidate’s ability to perform a given test method(s) in accordance with standard procedures.

7.2.2 The scope/contents of performance examinations shall include all essential elements of the requisite test method(s), such as apparatus, specimen preparation, procedures, calculations, and reporting requirements.

7.2.3 A performance examination shall give consideration to the environment where the test method is normally conducted.

7.3 Any alternative assessment method used shall be comparable to the required written and performance examinations discussed in 7.1 and 7.2.

7.4 Certification examinations which are recognized as a mandatory employment requirement shall comply with legal and governmental requirements for employment-related examinations.

7.5 Certification examinations shall be based on nationally-relevant practice-analysis research, with a pass/fail standard which is developed through recognized methodology.

7.6 The certification body shall establish the period of certification to reflect the rate of change in technology and common practices within the industry but not to exceed five years.

7.7 The period for which the certification is valid shall be clearly and prominently stated on any documents that attest to the certification(s) held by the individual.

7.8 Revocation of certification for just cause shall occur only after due process is provided to the person charged.

NOTE 4—ANSI/ISO/IEC 17024 addresses the certification process including the requirements of the application for certification, the organization’s evaluation of the application, an overview of the requirements of the examination process, and documentation of the results of the examination. It addresses issuance of the certificate and the requirements of the certificate, surveillance by the certification body, and requirements of the recertification process. Finally, it addresses acceptable use of and reference to the certificate and the certification bodies’ program.

## 8. Keywords

8.1 certification; certification body; construction inspection; personnel; personnel certification; construction testing

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