

Standard Specification for Minimum Requirements for Accreditation Bodies that Accredit Agencies Testing and Inspecting Road and Paving Materials¹

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1. Scope

- 1.1 This document contains minimum requirements for establishing and implementing an Accreditation Program for agencies testing and inspecting road and paving materials.
- 1.2 The criteria in this document are applicable to Accreditation Programs which accredit agencies testing and inspecting road and paving materials.
- 1.3 This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

2. Referenced Documents

2.1 ASTM Standards:²

D3666 Specification for Minimum Requirements for Agencies Testing and Inspecting Road and Paving Materials

2.2 ANSI/ISO/IEC Standards:

ANSI/ISO/IEC 17011 General Requirements for Accreditation Bodies Accrediting Conformity Assessment Bodies ANSI/ISO/IEC 17025 General Requirements for the Competence of Testing and Calibration Laboratories

3. Terminology

- 3.1 Accreditation Body—Authoritative body that manages an accreditation program.
- 3.2 Accreditation Program for Agencies Testing and Inspecting Road and Paving Materials—a program administered by an independent authority to fairly and equitably recognize an agency for conformance to defined quality criteria.
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- ² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

- 3.3 Testing Agency Quality System—the organizational structure, staff responsibilities, policies, standard operating procedures, and processes which, when implemented, assist the testing agency in achieving its quality objectives.
- 3.4 Evaluation Authority—an independent entity, apart from the testing laboratory being evaluated, that has the capability to provide an unbiased evaluation of the professional and testing activities of testing laboratories.
- 3.5 *Agency*—the organization engaged to test or inspect, or both, road and paving materials as required by a specification or contract.

4. Significance and Use

- 4.1 This document supplements ANSI/ISO/IEC 17011 and together these two documents provide the minimum requirements for an accreditation body which accredits agencies testing and inspecting road and paving materials.
- 4.2 The user is cautioned that accreditation granted by an accreditation body can only serve a useful purpose if the procedures followed to obtain the accreditation are practiced on a daily basis by the testing agency. It is not the existence of the system but the routine implementation of the procedures and policies of the quality system that is important.

5. Accreditation Body

5.1 The accreditation body in developing and implementing its accreditation program shall meet the requirements in ANSI/ISO/IEC 17011 and the requirements of this standard.

6. Personnel

- 6.1 The accreditation body shall document the duties, responsibilities and authorities of top management who could affect the quality of the accreditation process.
- 6.2 The accreditation body shall ensure that personnel have the necessary and proper education, experience, training, and technical knowledge.
- 6.3 The accreditation body shall describe the required qualifications, education, and experience for each position within their organization.

- 6.4 The accreditation body shall ensure that the assessors they employ are familiar with the accreditation process and accreditation criteria.
- 6.5 The assessors shall be trained through a formal assessor training program that verifies an assessor's technical qualifications. The assessors shall be trained in the use of the methods and documents used for assessments. Training records shall be maintained by the accreditation body.
- 6.6 The assessors shall be thoroughly trained in the quality management system requirements and have a thorough knowledge of the test methods which they are assessing. Training records shall be maintained by the accrediting body.
- 6.7 The assessors shall not perform any assessment if a conflict of interest exists between the assessor and the laboratory.
- 6.8 The accreditation body shall evaluate each assessor's performance. The evaluations shall consist of an on-site observation or peer monitoring in conjunction with the review of either the assessors feedback from laboratories or a review of assessment reports. These reviews shall be conducted at least once every three 3 years. Evaluation records shall be maintained by the accreditation body.
- 6.9 The accreditation body shall, as a minimum, hold meetings at least annually with assessors to discuss changes in procedures, provide training to ensure consistency in assessments, present any issues noted during the annual management review that apply to the assessments, and other topics that would assist the assessors in improving the quality of their services.

7. Accreditation Process

- 7.1 The accreditation body shall conduct on-site assessments that include a detailed review of test procedures, testing equipment, and quality systems. This assessment shall verify that the testing agency has the appropriate equipment, calibration and verification records, test procedures, and trained personnel to perform every procedure for which the laboratory has requested accreditation.
- 7.2 The accreditation body shall conduct on-site assessments at 24-month intervals. If the accreditation body performs annual surveillance or desk audits, the interval for on-site assessments may be increased to a maximum of 30 months.
- Note 1—The accreditation body may use designated evaluation authorities to perform some or all of the on-site assessments required for accreditation provided the accreditation body has documented that the evaluation authority meets all the requirements of this standard.
- 7.3 The on-site assessment shall include a demonstration of each test method or practice for which the testing agency has requested accreditation. At the discretion of the assessor, it is permitted for some procedural aspects of the test methods or practices to be described by laboratory personnel in lieu of demonstration. The test methods shall be performed by technicians employed by the laboratory at the specific location seeking accreditation.
- 7.4 The assessor shall verify that the equipment that the laboratory uses to perform the testing that is listed in the

proposed scope of accreditation complies with the specifications listed within the test standards. This accreditation body shall verify the compliance of the laboratory's test equipment with its own equipment that, where practical, has been calibrated by an agency which complies with ISO/IEC 17025 (Note 2). The assessor has the option of either physically verifying the test equipment or observing laboratory personnel physically verifying the test equipment with the equipment that is owned or controlled by the accreditation body. A review of the laboratory's equipment records would satisfy this requirement if the equipment has been calibrated or verified by a calibration agency which satisfies the requirements of ISO/IEC 17025.

Note 2—Certain equipment used in verifications is not readily calibrated such as tape measures, feeler gauges, and straight edges. Equipment such as temperature measuring devices, calipers, pressure gauges, can be readily calibrated.

- 7.5 The on-site assessment shall include a review of the testing agency's quality system. The testing agency's quality system as a minimum shall conform to the requirements of ASTM D3666
- 7.6 The accreditation body shall require that the testing agency return an initial response within 30 days from the date of the assessment report. This response shall include a record of investigations made and corrective action taken. All findings noted in the assessment reports issued to the testing agency shall be completely resolved within 90 days from the assessment report date.

8. Proficiency Testing Requirements

- 8.1 The accreditation body shall verify and document that the testing agency participates in applicable proficiency sample programs for those tests that the laboratory is requesting accreditation, when such programs exist. The proficiency sample program shall meet the following minimum criteria:
- 8.1.1 Includes a minimum of 30 participants, each representing a different laboratory and different technicians.
 - 8.1.2 Issues rating(s) for the test method(s) covered.
- 8.1.3 Covers one or more of the test methods for which the testing agency requested accreditation.
 - 8.1.4 Is independent of the participating laboratories.
 - 8.1.5 Distributes samples at least once annually.
- 8.2 The accreditation body shall require that the testing agency complete a record of investigations made and corrective action taken to address any proficiency sample result that was greater than 2 standard deviations from the average obtained by the participating laboratories.

9. Assessment Reports

- 9.1 The accreditation body or their designated evaluation authority shall issue a detailed assessment report on adherence to standards by the testing agency as evidenced by the testing agency's quality manual and verified by the assessor for all standards under which the testing agency has requested accreditation. The assessment report shall include as a minimum the following:
- 9.1.1 Standards / Test Methods / Practices which were covered during the on-site assessment.



- 9.1.2 Nonconformities/findings which were observed during the on-site assessment.
 - 9.1.3 Date of Assessment.
 - 9.1.4 Name of Assessor.

10. Granting Accreditation

- 10.1 The accreditation body shall, prior to making a decision, be satisfied that all the requirements have been satisfied.
- 10.2 If all requirements have been met, the accreditation body shall issue an accreditation certificate or shall otherwise publicize accreditation details including:
 - 10.2.1 Identity and logo of accreditation body.
 - 10.2.2 Identity and location of the testing agency.
 - 10.2.3 Unique identification number of the testing agency.
 - 10.2.4 Effective date of granting accreditation.
 - 10.2.5 Accreditation expiration date.

- 10.2.6 Scope of accreditation including each test method, practice or other standard.
- 10.2.7 Reference to the standard upon which the accreditation was based.
- 10.3 The accreditation body shall maintain a directory that includes all accredited laboratories. The directory shall include the following:
 - 10.3.1 Name and location of each laboratory.
 - 10.3.2 Dates of granting accreditation.
 - 10.3.3 Accreditation expiration date.
- 10.3.4 Scopes of accreditation including each test method, practice or other standard.

11. Keywords

11.1 Accreditation Programs; Laboratory Accreditation; Construction Materials Testing Laboratories; Construction Materials Testing; Quality Manual; Quality System

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