

SUMMARY OF CHANGES: AASHTO R 18-26

AASHTO R 18 has undergone a significant revision through several years of balloting through the AASHTO Committee on Materials and Pavements (COMP).

AASHTO re:source and CCRL will officially start assessing testing agency conformance to the updated requirements specified in AASHTO R 18-26 beginning January 1, 2027. A testing agency may implement the changes prior to January 1, 2027, but it should notify the assessor about the implementation prior to the on-site assessment to avoid confusion.

Below is a summary of the more significant updates in AASHTO R 18; however, this document will not identify every change that was made to AASHTO R 18. Testing agencies are expected to review and implement all new requirements when they acquire their own updated version of AASHTO R 18 and by January 1, 2027.

Section 5.1: Quality Management System

- **Example QMS Documents:** A note was added to reference the [AASHTO re:source website](#) where the sample QMS documents can be found. The examples have been removed from the appendix of the standard so that an appropriate number of updated examples can be made available to the public.

Section 5.2: Document Control

- **Standards / Literature:** Laboratories shall have legitimate and proper access to standards and test methods.

Section 5.3: Organization

- **Company Relationships:** Added a new section to require the laboratories to document any parent and subsidiary relationship that may exist. This is helpful in determining if the company is truly independent or part of a larger company that lends risk to the laboratory's impartiality.
- **Organizational Charts:** Modified to focus on relevant individual positions rather than large corporate structures or other operational groups within a company that are not relevant to the testing operational group.

Section 5.4: Staff

- **Position Descriptions:** Modified to allow the laboratory to customize the position descriptions to better suit their needs. Other changes to how positions are described were also made in this section.

Sections 5.5 and 5.6: Technician Training and Evaluation

- **Training vs Competency Evaluation:** Training and competency evaluation were split apart to make it clear that these are two different activities. It should be noted that AASHTO R 18 still does not require certification of staff members.

- **Training for Equipment C/S/C/M Activities:** A new subsection was added to state that the technicians performing internal *calibration, standardization, check, and maintenance activities* should be trained on how to accomplish this. This new subsection does not require the laboratory to produce records of this training activity, but it is recommended that any training be documented in the QMS for future reference.
- **Conducting Training / Evaluations:** Revised to require the person reviewing the technician competency to be familiar with the test method similar to the language in the training section.

Section 5.7: Customer Complaints

- **Customer Complaints:** A new section was created specifically for customer complaints. Previously it was included under corrective actions, but it was never clearly defined. There were some comments made in the last ballot about whether there should be clarification on when a corrective action is needed since some complaints are not valid, and language was added to address that topic.

Section 5.8: Internal Audits

- **Elements to Audit:** Removed the ambiguous requirement that “the internal audit program shall address all elements of the quality management system” and replaced it with a list of required items to include in the audit.

Section 5.9: Management Reviews

- **Management Review Procedure:** Clarified that the Management Review is a meeting and added a requirement for the laboratory to write a procedure for how the management review is conducted.

Section 5.10: Corrective Action

- **Company-Defined Deadlines:** Laboratories are now required to define their own deadline for completing corrective actions. While accreditation bodies and some specifiers have defined their own deadlines, there are issues that are handled by the laboratories internally that are not submitted to those third parties (for example, customer complaints, internal audits, and management reviews).

Section 6.1.1: Inventory Lists

- **Records vs. Lists:** Previously, it was common for laboratories to track their equipment using stand-alone inventory lists; however, most laboratories now maintain this information in database systems rather than stand-alone lists. The wording in R 18 was updated to keep up with common practices that have been found to be effective. Also, a reference to the equipment tables in R 18 was added to show the minimum equipment that must be included in the inventory.

Section 6.2 - 6.5: Calibration, Standardization, Check, and Maintenance

- **Measurement (Reference) Standards:** R 18 clearly states that these items are not to be used as general testing equipment, unless they are re-calibrated prior to use as

measurement standards. Other requirements that were in separate AASHTO Accreditation Program policy documents regarding measurement standard requirements were also incorporated into this version of AASHTO R 18.

- **Equipment Records:** Test points and resolution of measurement are now defined in this section.

Section 6.9: Calibration Service Provider Selection

- **Choosing Calibration Service Providers:** A new section was added to complement the changes made to 6.2 whereby the laboratory shall review the capabilities of the calibration service provider before hiring them.

Annex A: Equipment Calibration, Standardization, Check, and Maintenance Tables

- **Action Items Added:** Each piece of equipment now includes more details about what exactly needs to be calibrated, standardized, checked, or maintained (in the “Requirement” column).
- **Items Removed:** Several volume standardizations were removed from the list since those should be performed more often or as needed based on when the laboratory performs the test in practice.
- **Fixed Measurement Items:** New options now exist for one-time standardizations on items that are highly unlikely to change over time like rulers.
- **Pavement Preservation:** A new table (A.5) was added to require standardization and checks for pavement presentation equipment.
- **Measurement Standards:** A new table (A.11) was added to require calibration of measurement standards.
- **Maintenance:** An updated maintenance table was added to provide more direction to the user of the standard.

Appendix: Examples

- **Setting a Good Example:** AASHTO R 18 was proven to be the wrong place to store examples due to length restrictions, formatting limitations, and the lack of ability to update the examples as needed when the underlying standards are updated. Examples now exist on the AASHTO re:source [Document Library](#).