
Standard Method of Test for Percent Air Voids in Compacted Dense and Open Asphalt Mixtures

AASHTO Designation: T 269-24¹

Technically Revised: 2024

Editorially Revised: 2024

Technical Subcommittee: 2c, Asphalt–Aggregate Mixtures

ASTM Designation: D3203/D3203M-17



American Association of State Highway and Transportation Officials
555 12th Street NW, Suite 1000
Washington, D.C. 20004

Standard Method of Test for

Percent Air Voids in Compacted Dense and Open Asphalt Mixtures

AASHTO Designation: T 269-24¹

Technically Revised: 2024

Editorially Revised: 2024

Technical Subcommittee: 2c, Asphalt–Aggregate Mixtures

ASTM Designation: D3203/D3203M-17

1. SCOPE
- 1.1.

This method covers the determination of the percent air voids (P_a) in compacted dense and open asphalt mixtures.
- 1.2.

This standard may involve hazardous materials, operations, and equipment. This standard does not purport to address all of the safety concerns 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.
- 1.3.

The quality of the results produced by this standard are dependent on the competence of the personnel performing the procedure and the capability, calibration, and maintenance of the equipment used. Agencies that meet the criteria of R 18 are generally considered capable of competent and objective testing/sampling/inspection/etc. Users of this standard are cautioned that compliance with R 18 alone does not completely assure reliable results. Reliable results depend on many factors; following the suggestions of R 18 or some similar acceptable guideline provides a means of evaluating and controlling some of those factors.

2. REFERENCED DOCUMENTS
- 2.1.

AASHTO Standards:

■

R 18, Establishing and Implementing a Quality Management System for Construction Materials Testing Laboratories

■

T 166, Bulk Specific Gravity (G_{mb}) of Compacted Asphalt Mixtures Using Saturated Surface-Dry Specimens

■

T 209, Theoretical Maximum Specific Gravity (G_{mm}) and Density of Asphalt Mixtures

■

T 275, Bulk Specific Gravity (G_{mb}) of Compacted Asphalt Mixtures Using Paraffin-Coated Specimens

■

T 331, Bulk Specific Gravity (G_{mb}) and Density of Compacted Asphalt Mixtures Using Automatic Vacuum Sealing Method
- 2.2.

ASTM Standards:

■

D3549/D3549M, Standard Test Method for Thickness or Height of Compacted Asphalt Mixture Specimens