



Alaska Department of Transportation and Public Facilities

Alaska Test Methods Manual

October 1, 2026

Preface

This manual provides a compilation of approved Test Methods, Forms and Standard Practices to be used to test materials on Alaska Department of Transportation & Public Facilities (DOT&PF) projects.

Most of these testing procedures follow two nationally recognized standards; American Society for Testing and Materials (ASTM), and the American Association of State Highway and Transportation Officials (AASHTO). Modifications to these standards are in recognition of the necessity of adjusting test requirements to meet local demands and/or naturally occurring materials.

This manual also includes Field Operating Procedures (FOPs) for existing AASHTO test methods. These procedures are developed and maintained by the Western Alliance for Quality in Transportation Construction (WAQTC). The FOPs select options and provide concise directions in the use of the AASHTO methods.

In addition, this manual includes WAQTC test methods that are not covered by AASHTO or ASTM. These methods have been submitted to AASHTO for adoption. Other procedures were developed by the Alaska DOT&PF to address specific needs in the State of Alaska that are not adequately covered in AASHTO, ASTM or WAQTC.

The Appendix contains standardized practices to be used by all DOT&PF regional and/or field laboratories including consultant fixed and field laboratories.

The test methods (including referenced test methods) in this manual refer to the most recent issue in effect on the date of the test, including interim publications or errata; unless the test methods (including referenced test methods) are specified by year or date.

Submit suggested additions, deletions or revisions to these procedures to the Statewide Materials Engineer and the Statewide Construction Standards Engineer.

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Acknowledgement

Design and Engineering Services, Statewide Materials is indebted to the following organizations for use of, or reference to, portions of their publications.

The American Association of State Highway and Transportation Officials
The American Society for Testing and Materials
The Western Alliance for Quality Transportation Construction (WAQTC)

Appreciation is also extended to Laboratory and Construction personnel from each Region for their dedication, participation and patience in seeing this task to completion.

Seventeenth Edition Printing, 2026

List of Revisions for this edition:

Global – *ATM 216 WAQTC FOP for AASHTO R 75 Developing Moisture-Density Relations* is renamed to *ATM 216 WAQTC FOP for AASHTO R 75 Developing Moisture-Density Relations (Family of Curves)*

Note: In 2025, AASHTO released updated test Methods for

- Earthwork (200): T255
- Aggregate (300): T11, T 85, T99/180
- Asphalt (400): T 30, T 166, T 209, T308
- Concrete (500): T 121, R 100

Section 200

ATM 202 – Table 3 split into Table 3 and Table 4.

ATM 210 – added *ASTM D 4253 Standard Test Methods for Maximum Index Density and Unit Weight of Soils Using a Vibratory Table*.

ATM 212 – Substitution of ATM 210 (ASTM 4253) allowed, with oversize correction from ATM 207 Annex. Supplementary check required, unless excused. ATM 212 has a mandatory supplemental requirement.

ATM 213 – note 4b modified to allow additional methods of determining Standard Density.

ATM 215 – Table 1 added. Example curves modified. Individual moisture-density curve instruction modified.

ATM 216 – (Family of Curves) added to method title.

Section 300

ATM 303 – New clarification for Method B Quartering and Sectoring

ATM 304 – Note 3, regarding Mechanical Washer, added.

ATM 316 – Test Renamed to *Dust Palliative performance Test Method*.

Section 400

ATM 404 – Quartermaster mechanical splitter and instruction added.

ATM 408 – Drying instruction added. Annex B, Overload Determination, rewritten.

ATM 409 – Circulator note 1 added. Minor edits.

ATM 410 – Circulator note 1 added.

ATM 422 - *In-Place Density of Crushed Asphalt Base Course/ Recycled Asphalt Material Pavement by Nuclear Methods (Shallow Depth)* New test added.

Section 500

ATM 501 – Sampling from a continuous (volumetric) mixer procedure added.

ATM 502 – Editorial revision.

ATM 503 – Instruction on securing the mold during testing added.

ATM 505 – Guidance page Note 1 added as a check for meter leakage after pressure determined. Curb and Gutter may be rodded, regardless of slump.

ATM 506 – Renamed to “Method of Casting and Curing Concrete Strength Test Specimens in the Field.” Tables 1 and 2 added.

ATM 507 – Figure 1 modified to show corrected tamping pattern.

Section 600 - no change

Special Provisions (SP)

SP 7 – Reserved.

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**This Test Method has specific guidelines for the use of the noted test method by the State of Alaska DOT&PF.*

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