



**Alaska
Department of
Transportation
and
Public Facilities**

**Alaska
Test Methods
Manual**

May 15, 2023

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 and patience in seeing this task to completion.

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List of Revisions for this edition:

ATM 207- minor revisions
ATM 213 – “probe” renamed “source rod”
ATM 303 – updating of mechanical splitter procedure and diagrams
ATM 304 – additional notes. Guidance page direction for sieve overload determination added.
ATM 401 – sections reorganized
ATM 402 – Safety language added to Scope
ATM 406 – minor clarifications
ATM 407 – note 1 removed, notes renumbered
ATM 408 - Guidance page direction for sieve overload determination added.
ATM 409 –updated to 2020 AASHTO – added “Annex A – Standardization of Bowl and Pycnometer or Volumetric Flask”
ATM 410 – minor revision and clarification
ATM 411 - added WAQTC to name in TOC. “Probe” changed to “source rod.”
ATM 415 - name changed “Preparing and Determining the Density of Asphalt Mixture Specimens by Means of the Superpave Gyrotory Compactor FOP for AASHTO T 312” added step (8) and note 6 to “compaction Procedure”
ATM 420 - Section 5 Apparatus – Frequency for 1. Abrasion apparatus added
ATM 501 – Aparatus updated. Minor revisions.
ATM 504 – procedure modified
ATM 505 – substantial procedure modifications
ATM 601 – updated blank test form and example calculations

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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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