



## Construction Materials Testing – Asphalt

### Level IV Selected General References

Candidates are permitted to bring only the following references into the test center.

<u>Title</u>	<u>Edition*</u>	
1AC 150/5370-14B – Hot Mix Asphalt Paving Handbook		2013
ASTM Section 4 Construction Volume 04.02 Concrete and Aggregates		2016
2ASTM C127: Standard Test Method for Relative Density (Specific Gravity) and Absorption of Coarse Aggregate	2015	
3ASTM C136/C136M: Standard Test Method for Sieve Analysis of Fine and Coarse Aggregate	2014	
4ASTM D3666: Standard Specification for Minimum Requirements for for Agencies Testing and Inspecting Road and Paving Materials	2016	
5ASTM E329: Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection	2016	
ASTM Section 4 Construction Volume 04.03 Road and Paving Materials; Vehicle-Pavement Systems		2016
6ASTM D5/D5M: Standard Test Method for Penetration of Bituminous Materials	2013	
7ASTM D75/D75M: Standard Practice for Sampling Aggregates Falling-Weight-Type Impulse Load Device	2014	
8ASTM D2041/D2041M: Standard Test Method for Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures	2011	
9ASTM D4694: Standard Test Method for Deflections with a Falling-Weight-Type Impulse Load Device	2016	
10ASTM D4695: Standard Guide for General Pavement Deflection Measurements	2016	
11ASTM D6928: Standard Test Method for Resistance of Coarse Aggregate to Degradation by Abrasion	2016	
12ASTM D7369: Standard Test Method for Determining the Resilient Modulus of Bituminous Mixtures	2016	
13ASTM D7428: Standard Test Method for Resistance of Fine Aggregate to Degradation by Abrasion in Micro-Deval Apparatus	2016	
14OSHA 3885: Recommended Practices for Safety and Health Programs		2016

\*The test questions are based on the standard editions listed above; therefore, candidates are strongly urged to bring these editions to the exam. Note: candidates may bring older or newer editions—instead of the editions listed above—at their own risk.

Note: References must be bound or secured in a three-ring binder with a title page (example provided on the main program page). They may have highlighted text and self-adhesive index tabs or dividers, however they must be permanently attached. No other additions or modifications to the references are allowed. References with loose paper or pages and freestanding tabs (e.g., repositionable sticky notes/tabs of any kind) are not permitted into the testing centers.

During the exam, the following titles will be available to candidates **on-screen only**:

<u>Title</u>	<u>Edition*</u>
13AASHTO M 156: Standard Specification for Requirements for Mixing Plants For Hot-Mixed, Hot-Laid Bituminous Paving Mixtures	2013



15AASHTO M 319: Standard Specification for Reclaimed Concrete Aggregate For Unbound Soil – Aggregate Based Course	2002
16AASHTO R 9: Acceptance Sampling Plans for Highway Construction	2005
17AASHTO R 13: Conducting Geotechnical Subsurface Investigations	2016
18AASHTO R 18: Standard Recommended Practice for Establishing and Implementing a Quality System for Construction Materials Testing Laboratories	2016
19AASHTO R 54: Standard Practice for Accepting Pavement Ride Quality When Measured Using Inertial Profiling Systems	2014
20AASHTO R 18: Standard Recommended Practice for Establishing and Implementing a Quality System for Construction Materials Testing Laboratories	2017
21AASHTO R 77: Standard Practice for Certifying Suppliers of Emulsified Asphalt	2016
22AASHTO R 90: Standard Practice for Sampling Aggregate Products	2018
23AASHTO T 72: Standard Method of Test for Saybolt Viscosity	2015
24AASHTO T 166: Standard Method of Test for Bulk Specific Gravity (Gmb) of Compacted Hot Mix Asphalt (HMA) Using Saturated Surface-Dry Specimens	2016
25AASHTO T 209: Standard Method of Test for Theoretic Maximum of Specific Gravity (Gmm) and Density of Hot Mix Asphalt (HMA)	2016

\*Test questions are based on the editions listed above. These editions will be available to candidates during the exam in PDF format.

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In addition to the references listed above, the following publications can provide some of the job knowledge required by a construction materials testing technician. While these books may help prepare for the exam, they are NOT permitted in the test center.

- 26American Portable Nuclear Gauge Manual (2009), American Portable Nuclear Gauge (APNGA)
- 27MS-2 (2015): Asphalt Design Method, 7<sup>th</sup> Edition, Asphalt Institute (AI)
- 28MS-22 (2001): Construction of Hot Mix Asphalt, Asphalt Institute (AI)
- 29OSHA 1910 (2002): Occupational Safety and Health Standards – Fire Protection – Portable Fire Extinguishers, Occupational Safety and Health Administration (OSHA).
- 30OSHA 1926 (2016): Safety and Health Regulations for Construction, Occupational Safety and Health Administration (OSHA).
- 31OSHA 3071 (2002): Job Hazard Analysis, Occupational Safety and Health Administration (OSHA).
- 32Title 10 CFR – Energy, Chapter 1, United States Nuclear Regulatory Commission (NRC)
- 33TSPWG TSC 13-1 (2013): Inspector’s Manual for Hot-Mixed Asphalt and Portland Cement Concrete Pavement Construction, Dr. Ray Brown, Jack Scott, and Rick Donovan, U.S. Army Corps of Engineers

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➤ This listing is not intended to be complete or representative.

December 1, 2019

[footnote number is linked to a task on the Content Outline](#)