

## Laboratory Assessment Preparation List

**General Assessment Guidance:** This document is intended to provide guidance for laboratories preparing for an AASHTO re:source On-Site Laboratory Assessment, specifically with regard to the preparation and availability of materials required for demonstration of the test method(s). Preparing for the assessment will improve the efficiency, productivity, and benefit of the assessment for the laboratory.

This document does not address all of the apparatus and procedural requirements which may be evaluated during the assessment. Please consult the applicable AASHTO or ASTM standard for specific requirements. The laboratory may elect to demonstrate the AASHTO, ASTM, or both versions of the test method. The laboratory should be prepared to present required apparatus and to perform the test method in its entirety. Please contact us at (240) 436-4900 if your laboratory has additional questions with regard to preparing for the On-Site Assessment.

<b>AASHTO</b>	<b>ASTM</b>	<b>Asphalt Mixture Assessment Preparation</b>
<b>R30</b>		Have a sample ready to demonstrate mixture conditioning.
<b>R35</b>		Have a record from a mix design. Be prepared to discuss the steps taken in designing the mix and the calculations used. Be prepared to demonstrate all required test methods.
<b>R47</b>		Have a heated sample ready to be reduced. Be prepared to demonstrate one of the three procedures completely.
<b>R59</b>	<b>D1856</b>	If the assessment is scheduled for 1 day, have a previously prepared extractant from test method T164/D2172 Method A (or AASTHO T164 Method E). If multi-day assessment, be prepared to use the extractant from the T164/D2172 demonstration. Be prepared to demonstrate the recovery procedure.
<b>R68</b>	<b>D6926</b>	Have materials ready to demonstrate mixing and compaction of the specimen. If the laboratory does not mix samples in-house, the mixed sample should be heated to compaction temperature prior to the start of the demonstration.
<b>R79</b>	<b>D7227</b>	Have a wet, compacted or cored sample ready to demonstrate the drying procedure.
<b>R97</b>	<b>D979</b>	A separate sample is not required. The assessor will evaluate sampling techniques used by the laboratory based on a discussion with appropriate personnel that regularly perform the test (such as a field technician).
<b>T30</b>	<b>D5444</b>	Have an extraction (T164/D2172) or ignition oven (T308/D6307) sample prepared prior to the assessment or retain the sample completed during assessment demonstration. If a previously obtained sample is used, please retain records of all masses recorded for the various stages of the test.
<b>T110</b>	<b>D1461</b>	Have a sample pre-heated. Be prepared to demonstrate proper drip rates and perform calculations at the completion of the test.
<b>T164</b>	<b>D2172</b>	Have a sample pre-heated if needed and be prepared to demonstrate the full extraction process and mineral matter determination on all solvent extract if this step is regularly performed. Washing and gradation analysis of the extracted aggregate is covered separately by test procedures T30/D5444.
<b>T166</b>	<b>D2726</b>	Have a dry, compacted or cored specimen at room temperature and bath at temperature.
<b>T167</b>	<b>D1074</b>	Have materials ready to demonstrate mixing, compaction of the specimen, and testing the specimen. If the laboratory does not mix samples in-house, the mix should be heated to compaction temperature. A second sample may be compacted (and moisture conditioned per D1075 if regularly performed) and should be ready to demonstrate the strength testing portion of the procedure.

<b>AASHTO</b>	<b>ASTM</b>	<b>Asphalt Mixture Assessment Preparation (Continued)</b>
<b>T209</b>	<b>D2041</b>	Have a sample ready to be placed into the vacuum bowl. Be able to discuss the sample preparation procedures. Be prepared to demonstrate the vacuuming procedure, the weighing in water or weighing in air procedure, and be capable of completing all calculations at the conclusion of testing.
<b>T245</b>	<b>D6927</b>	Have a sample already compacted and the bath at temperature.
<b>T246 T247</b>	<b>D1560 D1561</b>	Have materials ready to demonstrate mixing and compaction of the specimen. Be prepared to demonstrate adjustment of the stabilometer prior to testing and demonstration of resistance to deformation (and cohesion if regularly performed by laboratory).
<b>T269</b>	<b>D3203</b>	Have results from Bulk Specific Gravity (T166/D2726, T275/D1188, or T331/D6752) and Maximum Specific Gravity (T209/D2041) and be prepared to demonstrate the calculation.
<b>T275</b>	<b>D1188</b>	Have a dry, compacted or cored specimen at room temperature and the paraffin warming prior to the demonstration (if performing T275). If the lab is running both AASHTO and ASTM, both the AASHTO paraffin and ASTM paraffin procedures must be demonstrated.
<b>T283</b>	<b>D4867</b>	Have a minimum of two specimens compacted prior to the assessment, one for the demonstration of the dry set, one to demonstrate the saturation procedure, and a third in the freezer (if applicable). A completed data sheet for percent air voids and saturation is expected to be presented.
<b>T287</b>	<b>D4125</b>	Have materials ready to demonstrate mixing. If mixing was demonstrated in another test method (R68/D6926; T167/D1074; T247/D1561; T305/D6390; T312/D6925; T324; CP-L-5106; CP-L-5115; TEX-206-F), have a sample heated to compaction temperature. Be prepared to perform compaction of the sample, the standardization of the gauge, and testing of the compacted samples. Have available for review the calibration data for the selected mix and be prepared to discuss the steps for obtaining the calibration samples and data.
<b>T305</b>	<b>D6390</b>	Have a dry, pre-mixed asphalt sample ready to be weighed into the baskets.
<b>T308</b>	<b>D6307</b>	Have a dry pre-mixed asphalt sample ready to be weighed into the baskets and the oven pre-heated to test temperature. Be prepared to explain correction factor determination procedures and present correction factors determined using the laboratories own oven for the mix being used for testing. If demonstrating Method A (Internal Balance), have the furnace set to print the long ticket.
<b>T312</b>	<b>D6925</b>	Have materials ready to demonstrate mixing and compaction of the specimen. If the laboratory does not mix samples in-house, the mixed sample should be heated to compaction temperature prior to the start of the demonstration.
<b>T324</b>		Have a slab or cylindrical compacted sample ready to be loaded into the testing machine and be ready to demonstrate the test. Be prepared to discuss preparation of the sample and any clean up performed on the testing equipment. A completed report and the records from Annex A are expected to be presented.
<b>T329</b>		Have a field or plant produced sample ready to be tested.
<b>T331</b>	<b>D6752</b>	Have a dry, compacted or cored specimen at room temperature. Be prepared to perform all calculations at the completion of the test including correcting for the specific gravity of the plastic bags. Be prepared to present the record for the in-house verification of the plastic bags.

<b>AASHTO</b>	<b>ASTM</b>	<b>Asphalt Mixture Assessment Preparation (Continued)</b>
<b>T340</b>		Have a compacted sample in the test molds at the preheating temperature. Be prepared to demonstrate either the manual or automatic rut-depth measurement and to present a completed report showing all sample prep calculations. If samples are compacted following T312/D6925, preparation requirements will be covered during the demonstration of T312/D6925. If using a vibratory compactor, prepare a sample to demonstrate the vibratory compaction procedure. Be prepared to present current APA calibration records according to Annex A for review.
<b>T343</b>	<b>D7113</b>	Have the electronic sensing device available for test demonstration on-site. The assessor will view the calibration determination and the steps performed after calibration. Ensure a test site area is prepared and available to demonstrate the procedure. If necessary, please coordinate the availability of a field technician to demonstrate the test prior to the assessment.
<b>T355</b>	<b>D2950</b>	Have a nuclear gauge available for test demonstration on-site. The assessor will view the standard count determination, as well as backscatter. Ensure a test site area is prepared and available to demonstrate the procedure. If necessary, please coordinate the availability of a field technician to demonstrate the test prior to the assessment. Current gauge calibration records and standard count records will be examined.
	<b>D1075</b>	Have a compacted specimen prepared in accordance with Group 1, Group 2, or Group 2 alternative procedure. Be prepared to discuss preparation of samples and have a completed report or data sheet available for review. Perform compressive strength determination according to D1074.
	<b>D3549</b>	Have a specimen available to demonstrate taking measurements, unless measurements are performed in conjunction with T245/D6927, T283/D4867, or D6931.
	<b>D3665</b>	Be prepared to discuss stratified-random sampling processes.
	<b>D5404</b>	If the assessment is scheduled for 1 day, have a previously prepared extractant from test method T164/D2172 Method A. If multi-day assessment, be prepared to use the extractant from the T164/D2172 demonstration. Be prepared to demonstrate the recovery procedure.
	<b>D6931</b>	Have a compacted specimen prepared in accordance with one of the specified test methods listed in D6931. Be able to demonstrate measuring, conditioning, and testing of the specimen.
	<b>D7906</b>	If the assessment is scheduled for 1 day, have a previously prepared extractant from test method D2172 Method A, using Toluene as the solvent. If multi-day assessment, be prepared to use the extractant from the D2172 demonstration. Be prepared to demonstrate the recovery procedure.
	<b>D8159</b>	Have a dry, loose mix sample available and be prepared to demonstrate the entire extraction procedure.
	<b>D8225</b>	Have a previously compacted sample or a core specimen available to demonstrate the test. Be prepared to discuss the preparation of the sample as applicable, and the dimensions of the sample as required. Be prepared to present a report at the completion of the test.

State		<b>Asphalt Mixture Assessment Preparation for State Methods</b>
<b>CP-L 5106</b>		Have a compacted specimen warming in the oven prior to demonstration. Be prepared to demonstrate adjustment of the stabilometer prior to testing and demonstration of resistance to deformation. Have available the most recent date that the exposed piston length was measured.
<b>CP-L 5115</b>		Have materials ready to demonstrate mixing and compaction of the specimen. If the laboratory does not mix samples in-house, the mixed sample should be heated to compaction temperature prior to the start of the demonstration. Have available a previous report or data sheet to demonstrate density calculations.
<b>TEX-206-F</b>		Have materials ready to demonstrate mixing and compaction of the specimen. If the laboratory does not mix samples in-house, the mixed sample should be heated to compaction temperature prior to the start of the demonstration.
<b>TEX-208-F</b>		Have a compacted specimen with bond paper attached warming in the oven prior to demonstration. Be prepared to demonstrate adjustment of the stabilometer prior to testing and demonstration of resistance to deformation.

