

## ON Asphalt Laboratory Certification Tests (Updated October 2017)

Certification Programs - Select (√) as applicable	
<b>1. Asphalt Mix Compliance - Marshall Method (Type B)</b>	<b>MTO/ASTM/AASHTO</b>
<b>Basic Asphalt Certification</b>	
Preparation of Marshall Specimens (from Bituminous mixes)	LS-261
Bulk Relative Density of Compacted Bituminous Mixtures	LS-262/D2726
Using Coated Specimens (if required) Or	LS-306
Using Automatic Vacuum Sealing (if required)	D6752
Marshall Stability and Flow of Bituminous Mixtures	LS 263/D6927
Theoretical Maximum Specific Gravity and Density	LS-264
Percent Air Voids in Compacted Dense Bituminous Pavement Mixtures	LS-265/D3203
Percent Voids in Mineral Aggregates (VMA) in Compacted Paving Mixtures	LS-266
Percent Compaction of Compacted Bituminous Paving Mixtures	LS-281 or LS-287
<b>AC Determination Methods - Select at least one of the two</b>	
Quantitative Extraction of Asphalt Cement and Sieve Analysis Using Solvent Methods	LS-282
Asphalt Content of Hot Mix Asphalt by Ignition Method and Sieve Analysis	LS-292/D6307

### Additional Asphalt Certification Programs

**2. Asphalt Mix Compliance - Superpave Method (Type B).** Must also participate in the Basic Asphalt Certification in #1 above

Density of Hot Mix Asphalt (HMA) Specimens by Gyratory Compactor	LS-313/T312
Bulk Specific Gravity of Compacted Hot Mix Asphalt (HMA)	LS-262/T166/D2726
Theoretical Maximum Specific Gravity and Density of Bituminous Mixtures	LS-264
Air Voids	LS-265/T269/D3203

**3. Asphalt Mix Design Laboratory - Marshall Method (Type A).** Must also participate in the Basic Asphalt Certification in #1 above

Preparation of Marshall Specimens (from basic components)	LS-261
Dry Preparation of Aggregates for the Determination of Physical Constants	LS-600
Mineral Finer than 75 µm Sieve in Mineral Aggregates by Washing	LS- 601/C117
Relative Density and Absorption of Coarse Aggregate	LS-604/C127
Relative Density and Absorption of Fine Aggregate	LS-605/T84
Percent Crushed Particles in Processed Coarse Aggregate	LS-607
Percent Flat and Elongated Particles in Coarse Aggregate	LS-608

**4. Asphalt Mix Design Laboratory - Superpave Method (Type A).** Must also participate in all tests in # 1, 2 and 3 above

Mixture Conditioning of Hot Mix Asphalt (HMA)	R30
Resistance of Compacted Hot Mix Asphalt to Moisture Induced Damage	T283
Sand Equivalent Test (Plastic Fines in Graded Aggregate & Soils)	T176/D2419
Uncompacted Void Content of Fine Aggregate (Fine Aggregate Angularity)	T304

**5. Penetration of Recovered Asphalt Cement (Type E).** Must also participate at least in the Basic Asphalt Certification #1 above

Penetration of Asphalt Cement	LS-200/D5
Recovery of Asphalt from Solution by Abson Method OR	LS-284
Recovery of Asphalt from Solution Using the Rotary Evaporation Method	LS-284

**6. Performance Grading of Asphalt Binder (Type F).** Must also participate in #1 above

Accelerated Aging of Asphalt Binder Using a Pressurized Aging Vessel (PAV)	R28
Effect of Heat & Air on a Moving Film of Asphalt Binder, RTFO	T240
Flexural Creep Stiffness of Asphalt Binder Using Bending Beam Rheometer	T313
Rheological Properties of Asphalt Binder Using a Dynamic Shear Rheometer	T315
Viscosity of Asphalt Binder Using Rotational Viscometer	T316