

ON and QC Asphalt Laboratory Certification Programs

(Updated 2025 May)



Certification Programs	
1. Basic Asphalt Certification, Asphalt Mix Compliance - Marshall Method (Type B)	MTO/AASHTO/ASTM
Preparation of Marshall Specimens	LS-261
Bulk Relative Density of Compacted Bituminous Mixtures	LS-262/D2726
Bulk Relative Density of Compacted Bituminous Mixtures Using Paraffin Coated Specimens (if required) Or	LS-306
Bulk Specific Gravity and Density of Compacted Asphalt Mixtures Using Automatic Vacuum Sealing Method (if required)	D6752
Theoretical Maximum Relative Density of Bituminous Paving Mixtures	LS-264
Determination of Percent Air Voids in Compacted Dense Bituminous Pavement Mixtures	LS-265/D3203
Determination of Percent V.M.A. in Compacted Bituminous Mixtures	LS-266
Determination of Percent Compaction of Compacted Bituminous Paving Mixtures (MRD Method)	LS-287
Marshall Stability and Flow of Asphalt Mixtures	D6927
AC Determination and Gradation of Extracted Aggregate - Select at least one of the two methods	
Quantitative Extraction of Asphalt Cement and Analysis of Extracted Aggregate From Bituminous Paving Mixtures	LS-282/D2172
Quantitative Determination of Asphalt Cement Content by Ignition and Analysis of Remaining Aggregate From Bituminous Paving Mixtures	LS-292/D6307
Additional Asphalt Certification Programs	
2. Asphalt Mix Compliance Laboratory Superpave Method (Type B) Must also participate in ALL of the Basic Asphalt Certification, Number 1 above	
Preparing and Determining the Density of Hot Mix Asphalt (HMA) Specimens by Means of the Superpave Gyratory Compactor	LS-313/T312
Bulk Relative Density of Compacted Bituminous Mixtures	LS-262/D2726
Theoretical Maximum Relative Density of Bituminous Paving Mixtures	LS-264
Determination of Percent Air Voids in Compacted Dense Bituminous Pavement Mixtures	LS-265/D3203
3. Asphalt Mix Design Laboratory Marshall Method (Type A) Must also participate in ALL of the Basic Asphalt Certification, Number 1 above	
Dry Preparation of Aggregates for the Determination of Physical Constants	LS-600
Materials Finer than 75µm Sieve in Mineral Aggregates by Washing	LS-601/C117
Sieve Analysis of Aggregates	LS-602
Relative Density and Absorption of Coarse Aggregate	LS-604/T85
Relative Density and Absorption of Fine Aggregate	LS-605/T84
Determination of Percent Flat and Elongated Particles in Coarse Aggregate	LS-608
Determination of Percent Crushed Particles in Processed Coarse Aggregate	LS-607
4. Asphalt Mix Design Laboratory Superpave Method (Type A) Must also participate in ALL of the above tests, Numbers 1, 2 and 3 above	
Short-Term Laboratory Conditioning of Asphalt Mixtures	R30
Practice for Superpave Mix Design	LS-309/R35
Effect of Moisture on Asphalt Mixtures	D4867
Sand Equivalent Value of Soils and Fine Aggregate	D2419
Uncompacted Void Content of Fine Aggregate	C1252
Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate	D4791
Determination of Draindown Characteristics in Uncompacted Asphalt Mixtures (if required)	LS-310/T305
Determining the Percentage of Fractured Particles in Coarse Aggregate	D5821
5. Laboratories Carrying Out Penetration Testing of Recovered Asphalt Cement (Type E) Must also participate in ALL of the Basic Asphalt Certification, at least Number 1 above	
Penetration of Bituminous Materials	LS-200/D5
Recovery of Asphalt from Solution by Rotary Evaporator	LS-284/D8078
6. Laboratories Testing Performance Graded Asphalt Cement (Type F) Unless the laboratory is dedicated to binder testing ONLY, it must also participate at least in the Basic Asphalt Certification, Number 1 above	
Effect of Heat and Air on a Moving Film of Asphalt Binder (Rolling Thin-Film Oven Test)	T240
Grading or Verifying the Performance Grade (PG) of an Asphalt Binder	R29
Accelerated Aging of Asphalt Binder Using a Pressurized Aging Vessel (PAV)	R28
Determining the Flexural Creep Stiffness of Asphalt Binder Using the Bending Beam Rheometer (BBR)	T313
Determining the Rheological Properties of Asphalt Binder Using a Dynamic Shear Rheometer (DSR)	T315
Viscosity Determination of Asphalt Binder Using Rotational Viscometer	T316
Recovery of Asphalt from Solution Using the Rotary Evaporator	LS-284
Determination of Asphalt Cement's Resistance to Ductile Failure Using Double Edge Notched Test (DENT)	LS-299
Determination of Performance Grade of Physically Aged Asphalt Cement Using Extended Bending Beam Rheometer (BBR) Method	LS-308