

ON and QC Asphalt Laboratory Certification Programs (Updated April 2019)

Certification Programs

Asphalt Mix Compliance - Marshall Method (Type B) 1. Basic Asphalt Certification

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 Bituminous Mixtures Using Automatic Vacuum Sealing Method (if required)	D6752
Resistance to Plastic Flow of Bituminous Mixtures Using Marshall Apparatus	LS 263/D6927
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 V.M.A. in Compacted Bituminous Mixtures	LS-266
Determination of Percent Compaction of Compacted Bituminous Paving Mixtures	LS-287

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 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 Crushed Particles in Processed Coarse Aggregate	LS-607
Determination of Percent Flat and Elongated Particles in Coarse Aggregate	LS-608

4. Asphalt Mix Design Laboratory Superpave Method (Type A) Must also participate in ALL of the above tests, Numbers 1, 2 and 3 above

Practice for Superpave Mix Design	LS-309/R35
Determination of Draindown Characteristics in Uncompacted Asphalt Mixtures (if required)	LS-310
Mixture Conditioning of Hot Mix Asphalt (HMA)	R30
Resistance of Compacted Asphalt Mixtures to Moisture-Induced Damage	T283
Uncompacted Void Content of Fine Aggregate	T304
Sand Equivalent Value of Soils and Fine Aggregate	D2419
Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate	D4791
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 at least in the Basic Asphalt Certification, Number 1 above

Penetration of Bituminous Materials	LS-200/D5
Recovery of Asphalt from Solution by Absorption Or	LS-284
Recovery of Asphalt from Solution by Rotary Evaporator	LS-284

6. Laboratories Testing Performance Graded Asphalt Cement (Type F) Must also participate at least in the Basic Asphalt Certification, Number 1 above

Grading or Verifying the Performance Grade (PG) of an Asphalt Binder	R29
Effect of Heat and Air on a Moving Film of Asphalt Binder (Rolling Thin-Film Oven Test)	T240
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