

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



Certification Programs

Aggregate Quality Control Laboratories (Type C)	MTO/ASTM
1. Basic Aggregate Certification (Participation is mandatory for all CCIL certified aggregate laboratories)	
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
Determination of Percent Crushed Particles in Processed Coarse Aggregate	LS-607
Determination of Percent Flat and Elongated Particles in Coarse Aggregate	LS-608
Determination of Amount of Asphalt-Coated Particles in Coarse Aggregate	LS-621

Additional Aggregate Certification Programs

Must also participate in Basic Aggregate Certification, Number 1 above

Aggregate Physical Property Laboratories (Type D)

2. Aggregate Physical Property Tests	MTO/ASTM/AASHTO
Scaling Resistance of Concrete Surfaces Exposed to Deicing Chemicals	LS-412
Resistance to Degradation of Coarse Aggregate by Abrasion and Impaction in the Los Angeles Abrasion Machine	LS-603/C131 & C535
Relative Density and Absorption of Coarse Aggregate	LS-604/C127/T85
Relative Density and Absorption of Fine Aggregate	LS-605/T84
Soundness of Aggregates by Use of Magnesium Sulphate	LS-606
Petrographic Analysis of Coarse Aggregate	LS-609
Organic Impurities in Concrete Sands	LS-610/C40
Determination of Acid Insoluble Residue of Aggregates	LS-613
Freezing and Thawing of Coarse Aggregate	LS-614
Determination of Potential Alkali-Carbonate Reactivity of Carbonate Rocks by Chemical Composition	LS-615
Determination of Percent Particles with Two or More Crushed Faces and Uncrushed Particles in Processed Coarse Aggregate	LS-617
Resistance of Coarse Aggregate to Degradation by Abrasion in the Micro-Deval Apparatus	LS-618
Resistance of Fine Aggregate to Degradation by Abrasion in the Micro-Deval Apparatus	LS-619
Accelerated Detection of Potentially Deleterious Alkali-Silica Reactive Aggregate by Expansion of Mortar Bars	LS-620
Resistance of Concrete to Rapid Freezing and Thawing	C666

3. Superpave Aggregate Consensus Properties

Uncompacted Void Content of Fine Aggregate	LS-629/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

4. Soils Physical Property Tests

Determination of Particle Size Analysis of Soils	LS-702
Liquid Limit, Plastic Limit, and Plasticity Index of Soils	LS-703/704/D4318
Determination of Specific Gravity of Soils	LS-705
Moisture-Density Relationship of Soils Using 2.5 kg Rammer and 305 mm Drop	LS-706/D698
Determination of Permeability of Granular Soils	LS-709