

# AB and YT Aggregate Laboratory Certification Programs (Updated April 2019)



## Certification Programs

### Aggregate Quality Control Laboratories (Type C)

	ASTM
<b>1. Basic Aggregate Certification</b> (Participation is mandatory for all CCIL certified aggregate laboratories)	
Reducing Samples of Aggregate to Testing Size	C702
Minerals Finer than 75-µm (No.200) Sieve in Mineral Aggregates by Washing	C117
Sieve Analysis of Fine and Coarse Aggregates	C136
Determining the Percentage of Fractured Particles in Coarse Aggregate	D5821

### 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

ASTM/AASHTO/CSA/LS

Scaling Resistance of Concrete Surfaces Exposed to Deicing Chemicals	C672
Resistance to Degradation of Small & Large-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine	C131 & C535
Relative Density (Specific Gravity) and Absorption of Coarse Aggregate	C127
Relative Density (Specific Gravity) and Absorption of Fine Aggregate	C128
Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate	C88
Petrographic Analysis of Coarse Aggregate	LS-609
Organic Impurities in Fine Aggregates for Concrete	C40
Insoluble Residue in Carbonate Aggregates	D3042
Resistance of Unconfined Coarse Aggregate to Freezing and Thawing	A23.2-24A
Determination of Potential Alkali-Carbonate Reactivity of Quarried Carbonate Rocks by Chemical Composition	A23.2-26A
Resistance of Coarse Aggregate to Degradation by Abrasion in the Micro-Deval Apparatus	D6928
Resistance of Fine Aggregate to Degradation by Abrasion in the Micro-Deval Apparatus	D7428
Detection of Alkali-Silica Reactive Aggregate by Accelerated Expansion of Mortar Bars	A23.2-25A
Resistance of Concrete to Rapid Freezing and Thawing	C666

#### 3. Superpave Aggregate Consensus Properties

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

#### 4. Soils Physical Property Tests

Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lb/ft <sup>3</sup> (600 kN-m/m <sup>3</sup> ))	D698
Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lb/ft <sup>3</sup> (2,700 kN-m/m <sup>3</sup> ))	D1557
Specific Gravity of Soil Solids by Water Pycnometer	D854
Liquid Limit, Plastic Limit, and Plasticity Index of Soils	D4318
Particle Size Analysis of Soils	T88
Permeability of Granular Soils (Constant Head)	T215