

TCG conducts test methods and specifications according to ASTM, NACE, AASHTO, USBR, CRD, and ACI.

ASTM No.	DESCRIPTION
C29	Bulk Density ("Unit Weight") and Voids in Aggregate
C31	Making and Curing Concrete Test Specimens in the Field
C33	Specifications for Concrete Aggregates
C39	Compressive Strength of Cylindrical Concrete Specimens
C40	Organic Impurities in Fine Aggregates for Concrete
C42	Obtaining and Testing Drilled Cores and Sawed Beams of Concrete
C78	Flexural Strength of Concrete (Using Simple Beam with Third-Point Loading)
C88	Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate
C90	Loadbearing Concrete Masonry Units
C94	Ready-Mixed Concrete
C109	Compressive Strength of Hydraulic Cement Mortars (Using 2" or (50mm) Cube Specimens
C114	Chemical Analysis of Hydraulic Cement
C117	Materials Finer than No. 200 Sieve in Mineral Aggregates by Washing
C123	Lightweight Particles in Aggregate
C127	Relative Density (Specific Gravity) and Absorption of Coarse Aggregate
C128	Relative Density (Specific Gravity) and Absorption of Fine Aggregate
C136	Sieve Analysis of Fine and Coarse Aggregates
C138	Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete
C140	Sampling and Testing Concrete Masonry Units and Related Units
C142	Clay Lumps and Friable Particles in Aggregates
C143	Slump of Hydraulic-Cement Concrete
C157	Length Change of Hardened Cement Mortar and Concrete
C173	Air content of Freshly Mixed Concrete by the Volumetric Method
C185	Air Content of Hydraulic Cement Mortars
C192	Making and Curing Concrete Test Specimens in the Laboratory
C227	Potential Alkali Reactivity of Cement-Aggregate Combinations (Mortar-Bar Method)
C231	Air Content of Freshly Mixed Concrete by the Pressure Method
C265	Water-Extractable Sulfate in Hydrated Hydraulic Cement Mortar
C270	Mortar for Unit Masonry
C330	Lightweight Aggregates for Structural Concrete
C331	Lightweight Aggregates for Concrete Masonry Units
C227	Potential Alkali Reactivity of Cement-Aggregate Combinations (Mortar-Bar Method)
C231	Air Content Freshly Mixed Concrete by the Pressure Method
C403	Time of Setting of Concrete Mixtures by Penetration Resistance
C426	Linear Drying Shrinkage of Concrete Masonry Units
C430	Fineness of Hydraulic Cement by the 45- μ m (No. 325) Sieve
C441	Effectiveness of Pozzolans or GBRS in Preventing Excessive Expansion of Concrete Due to the ASR
C452	Potential Expansion of Portland-Cement Mortars Exposed to Sulfate
C457	Microscopical Determination of Parameters of the Air-Void System in Hardened Concrete
C469	Static Modulus of Elasticity and Poisson's Ratio of Concrete in Compression
C496	Splitting Tensile Strength of Cylindrical Concrete Specimens
C512	Creep of Concrete in Compression
C642	Density, Absorption, and Air Voids in Hardened Concrete
C666	Resistance of Concrete to Rapid Freezing and Thawing

ASTM No.	DESCRIPTION
C672	Scaling Resistance of Concrete Surfaces Exposed to Deicing Chemicals
C805	Rebound Number of Hardened Concrete
C1012	Length Change of Hydraulic Cement Mortars Exposed to Sulfate Solution
C1064	Temperature of Freshly Mixed Concrete
C1077	Concrete and Concrete Aggregates for use in Construction and Criteria for Testing Agency Evaluation
C1152	Acid Soluble Chloride in Mortar and Hardened Concrete
C1202	Electrical Indication of Concrete's Ability to Resist Chloride Ion Penetration
C1218	Water Soluble Chloride in Mortar and Concrete
C1231	Use of Unbonded Caps in Determination of Compressive Strength of Hardened Cylindrical Concrete Specimens
C1260	Potential Alkali Reactivity of Aggregates (Mortar-Bar Method)
C1262	Evaluating the Freeze-Thaw Durability of Dry-Cast Segmental Retaining Wall Units and Related Concrete Units
C1293	Determination of Length Change of Concrete Due to ASR
C1437	Flow of Hydraulic Cement Mortars
C1542	Measuring Length of Concrete Cores
C1567	Determining the Potential ASR of Combinations of Cementitious Materials and Aggregate (Accelerated Mortar-Bar Method)
C1581	Determining Age at Cracking and Induced Tensile Stress Characteristics of Mortar and Concrete under Restrained Shrinkage
C1583	Pull-Off Bond or Tensile Strength Concrete Repairs and Overlay Materials by Direct Tension
D75	Sampling Aggregates
D6489	Determining the Water Absorption of Hardened Concrete Treated with a Water Repellent Coating
E11	Wire Cloth and Sieves for Testing Purposes
E105	Probability Sampling of Materials
G5	Making Potentiodynamic Anodic Polarization Measurements
G16	Applying Statistics to Analysis of Corrosion Data
G46	Examination and Evaluation of Pitting Corrosion
G57	Field Measurement of Soil Resistivity Using the Wenner Four-Electrode Method
G61	Conducting Cyclic Potentiodynamic Polarization Measurements for Localized Corrosion Susceptibility of Iron-, Nickel-, or Cobalt-Based Alloys
G109	Determining the Effects of Chemical Admixtures on the Corrosion of Embedded Steel Reinforcement in the Concrete Exposed to Chloride Environments
G180	Corrosion Inhibiting Admixtures for Steel in Concrete by Polarization Resistance in Cementitious Slurries
AASHTO T_259	Resistance of Concrete to Chloride Ion Penetration
AASHTO T_260	Sampling and Testing for Chloride Ion in Concrete and Concrete Raw Materials
AASHTO T_277	Rapid Determination of the Chloride Permeability of Concrete
AASHTO T_303	Accelerated Detection of Potentially Deleterious Expansion of Mortar-Bars Due to Alkali-Silica Reaction
AASHTO T_318	Water Content of Freshly Mixed Concrete Using Microwave Oven Drying

For information regarding specific tests or instructions on taking samples, please visit our Website or contact Larry Wachowski, Laboratory Manager, at 269.384.9980 or lwachowski@tourneyconsulting.com.