



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

RINER ENGINEERING, INC.
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Valid To: August 31, 2024

Certificate Number: 2718.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory for:

CONSTRUCTION MATERIALS ENGINEERING

ASTM: C1077 (Standard Practice for Agencies Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Testing Agency Evaluation) [Concrete and Aggregate]
 D3666 (Standard Specification for Minimum Requirements for Agencies Testing and Inspecting Road and Paving Materials);
 D3740 (Standard Practice for Minimum Requirements for Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction);
 E329 (Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection) [Testing-Concrete, Soils, Asphalt, Aggregate]

CONSTRUCTION MATERIALS TESTING

<u>Test Method:</u>	<u>Test Description:</u>
<u>Aggregates:</u>	
ASTM C29	Bulk Density (“Unit Weight”) and Voids in Aggregate
ASTM C117	Materials Finer than 75-µm (No. 200) Sieve in Mineral Aggregates by Washing
ASTM C127	Density, Relative Density (Specific Gravity), and Absorption of Coarse Aggregate
ASTM C128	Density, Relative Density (Specific Gravity), and Absorption of Fine Aggregate
ASTM C136	Sieve Analysis of Fine and Coarse Aggregates
ASTM C566	Total Evaporable Moisture Content of Aggregate by Drying
ASTM C702	Reducing Samples of Aggregate to Testing Size
ASTM D75 ¹	Sampling Aggregates
Tex-400-A ¹	Sampling Flexible Base, Stone, Gravel, Sand, and Mineral Aggregate
Tex-401-A	Sieve Analysis of Fine and Coarse Aggregate
Tex-403-A	Saturated Surface-Dry Specific Gravity and Absorption of Aggregates
Tex-404-A	Determining Unit Mass (Weight) of Aggregates
Tex-406-A	Material Finer Than 75 µm (No. 200) Sieve in Mineral Aggregates (Decantation Test for Concrete Aggregates)
Tex-409-A	Free Moisture and Water Absorption in Aggregate for Concrete

<u>Test Method:</u>	<u>Test Description:</u>
<u>Bituminous:</u>	
ASTM D9791	Sampling Bituminous Paving Mixtures
ASTM D1560	Resistance to Deformation and Cohesion of Bituminous Mixtures by Means of Hveem Apparatus
ASTM D2041	Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures
ASTM D2726	Bulk Specific Gravity and Density of Non-Absorptive Compacted Bituminous Mixtures
ASTM D2950/D2950 ¹	Density of Bituminous Concrete in Place by Nuclear Methods
ASTM D3549 (Method A only) ¹	Thickness or Height of Compacted Bituminous Paving Mixture Specimens
ASTM D5361 ¹	Sampling Compacted Bituminous Mixtures for Laboratory Testing
ASTM D6307	Asphalt Content of Hot-Mix Asphalt by Ignition Method
Tex-201-F	Bulk Specific Gravity and Water Absorption of Aggregate
Tex-206-F	Compacting Specimens Using the Texas Gyrotray Compactor (TGC)
Tex-207-F (Part VI, VII and VII)	Determining Density of Compacted Bituminous Mixtures
Tex-208-F	Test for Stabilometer Value of Bituminous Mixtures
Tex-227-F	Theoretical Maximum Specific Gravity of Bituminous Mixtures
Tex-236-F	Determining Asphalt Content from Asphalt Paving Mixtures by the Ignition Method
<u>Concrete:</u>	
ASTM C31/C31M ¹	Making and Curing Concrete Test Specimens in the Field
ASTM C39/C39M	Compressive Strength of Cylindrical Concrete Specimens
ASTM C42/C42M	Obtaining and Testing Drilled Cores and Sawed Beams of Concrete
ASTM C78/C78M ¹	Flexural Strength of Concrete (Using Simple Beam with Third-Point Loading)
ASTM C138/C138M ¹	Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete
ASTM C143/C143M ¹	Slump of Hydraulic-Cement Concrete
ASTM C172/C172M ¹	Sampling Freshly Mixed Concrete
ASTM C173 ¹	Air Content of Freshly Mixed Concrete by the Volumetric Method
ASTM C192/C192M	Making and Curing Concrete Test Specimens in the Laboratory
ASTM C231/C231M ¹	Air Content of Freshly Mixed Concrete by the Pressure Method
ASTM C293/C293M	Flexural Strength of Concrete (Using Simple Beam With Center-Point Loading)
ASTM C617	Capping Cylindrical Concrete Specimens
ASTM C1064/C1064M ¹	Temperature of Freshly Mixed Hydraulic-Cement Concrete
ASTM C1231/C1231M	Unbonded Caps in Determination of Compressive Strength of Hardened Concrete Cylinders
Tex-407-A ¹	Sampling Freshly Mixed Concrete
Tex-414-A ¹	Air Content of Freshly Mixed Concrete by the Volumetric Method
Tex-415-A ¹	Slump of Hydraulic Cement Concrete
Tex-416-A ¹	Air Content of Freshly Mixed Concrete by the Pressure Method
Tex-417-A ¹	Unit Weight, Yield, and Air Content (Gravimetric) of Concrete
Tex-418-A	Compressive Strength of Cylindrical Concrete Specimens
Tex-422-A	Measuring Temperature of Freshly Mixed Portland Cement Concrete
Tex-450-A	Capping Cylindrical Concrete Specimens

<u>Test Method:</u>	<u>Test Description:</u>
<u>Fireproofing:</u>	
ASTM E605 ¹	Thickness and Density of Sprayed Fire-Resistive Material (SFRM) Applied to Structural Members
<u>Masonry:</u>	
ASTM C780 (Annex 6 Only) ¹	Preconstruction and Construction Evaluation of Mortars for Plain and Reinforced Unit Masonry
ASTM C1019 ¹	Sampling and Testing Grout
Tex-442-A	Determining Compressive Strength of Grouts
<u>Soils:</u>	
ASTM D558	Moisture-Density (Unit Weight) Relations of Soil-Cement Mixtures
ASTM D698	Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft ³ (600 kN-m/m ³))
ASTM D854	Specific Gravity of Soil Solids by Water Pycnometer
ASTM D1140	Determining the Amount of Material Finer than 75- μ m (No. 200) Sieve in Soils by Washing
ASTM D1557	Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft ³ (2,700 kN-m/m ³))
ASTM D1633	Compressive Strength of Molded Soil-Cement Cylinders
ASTM D1883	CBR (California Bearing Ratio) of Laboratory-Compacted Soils
ASTM D2216	Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
ASTM D2487	Classification of Soils for Engineering Purposes Classification of Soils for Engineering Purposes (Unified Soil Classification System)
ASTM D2488 ¹	Description and Identification of Soils (Visual-Manual Procedures)
ASTM D3282	Classification of Soils and Soil-Aggregate Mixtures for Highway Construction Purposes
ASTM D4318	Liquid Limit, Plastic Limit, and Plasticity Index of Soils
ASTM D4718	Unit Weight and Water Content for Soils Containing Oversize Particles
ASTM D4972	pH of Soils
ASTM D6913	Particle-Size Distribution (Gradation) of Soils Using Sieve Analysis
ASTM D6938 ¹	In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)
ASTM D7928	Standard Test Method for Particle-Size Distribution (Gradation) of Fine-Grained Soils Using the Sedimentation (Hydrometer) Analysis
ASTM G57	Method for Measurement of Soil Resistivity Using the Wenner Four-Electrode Method
ASTM G187	Method for Measurement of Soil Resistivity Using the Two-Electrode Soil Box Method
Tex-103-E	Determining Moisture Content in Soil Materials
Tex-104-E	Determining Liquid Limits of Soils
Tex-105-E	Determining Plastic Limit of Soils
Tex-106-E	Calculating the Plasticity Index of Soils
Tex-108-E	Determining the Specific Gravity of Soils
Tex-110-E	Particle Size Analysis of Soils
Tex-111-E	Determining the Amount of Material in Soils Finer than the 75 μ m (No. 200) Sieve

<u>Test Method:</u>	<u>Test Description:</u>
<u>Steel (Shop & Field) ¹:</u>	
AWS D1.1 ¹	Structural Welding Code - Sheet Steel (Clause 6 Inspection)
AISC 360 ¹	Specification for Structural Steel Buildings (Chapter N, Section 16.1, N5, 6 QA/QC Fabrication & Erection)
RCSC ¹	Specification for Structural Joints Using High-Strength Bolts (Section 9, Inspection)
ASTM E797, E164, E587 and AWS D1.1 (Chapter 6)	Ultrasonic Thickness Testing - Contact Straight Beam, Contact Angled Beam

¹ This laboratory performs field testing activities for these tests.





Accredited Laboratory

A2LA has accredited

RINER ENGINEERING, INC.

Houston, TX

for technical competence in the field of

Construction Materials Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 14th day of July 2022.

A blue ink signature of Mr. Trace McInturff, written over a horizontal line.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 2718.01
Valid to August 31, 2024