

AVILES ENGINEERING CORPORATION 5790 Windfern Rd Houston, TX 77041 Ronald E. Ortwerth, P.E. Phone: 713 895 7645

Valid To: November 30, 2025

Certificate Number: 0035.01

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

CONSTRUCTION MATERIALS ENGINEERING

ASTM: C1077 (Standard Practice for Agencies Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Testing Agency Evaluation);
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, Testing, or Special Inspection)

Test Method:	Test Description:
Aggregates:	
ASTM C29/C29M	Bulk Density ("Unit Weight") and Voids in Aggregate
ASTM C40/C40M	Organic Impurities in Fine Aggregates for Concrete
ASTM C70	Surface Moisture in Fine 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/C136M	Sieve Analysis of Fine and Coarse Aggregates
ASTM C142/C142M	Clay Lumps and Friable Particles in Aggregates
ASTM C566	Total Evaporable Moisture Content of Aggregate by Drying
ASTM C702/C702M	Reducing Samples of Aggregate to Testing Size
ASTM D75/D75M ¹	Sampling Aggregates
ASTM D2419	Sand Equivalent Value of Soils and Fine Aggregate
Tex-201-F	Bulk Specific Gravity and Water Absorption of Aggregate
Tex-202-F	Apparent Specific Gravity of Material Finer Than No.50 Sieve
Tex-203-F	Sand Equivalent Test
Bituminous:	
ASTM D979/D979M ¹	Sampling Bituminous Paving Mixtures
ASTM D2041/D2041M	Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures

CONSTRUCTION MATERIALS TESTING

Test Method:	Test Description:
ASTM D2726/D2726M	Bulk Specific Gravity and Density of Non-Absorptive Compacted
	Bituminous Mixtures
ASTM D2950 ¹	Density of Bituminous Concrete in Place by Nuclear Methods
ASTM D3203/D3203M	Percent Air Voids in Compacted Dense and Open Bituminous Paving Mixtures
ASTM D3549/D3549M	Thickness or Height of Compacted Bituminous Paving Mixture
ASTWI D3549/D3549/M	Specimens
ASTM D3665	Random Sampling of Construction Materials
ASTM D5444	Mechanical Size Analysis of Extracted Aggregate
ASTM D6307	Asphalt Content of Hot-Mix Asphalt by Ignition Method
ASTM D6752/D6752M	Bulk Specific Gravity and Density of Compacted Asphalt Mixtures
	Using Automatic Vacuum Sealing Method
ASTM D6926	Preparation of Bituminous Specimens Using Marshall Apparatus
ASTM D6927	Marshall Stability and Flow of Bituminous Mixtures
AASHTO T30	Mechanical Analysis of Extracted Aggregate
Tex-200-F	Sieve Analysis of Fine and Coarse Aggregates
Tex-205-F	Laboratory Method of Mixing Bituminous Mixtures
Tex-206-F	Compacting Specimens Using the Texas Gyratory Compactor (TGC)
Tex-207-F	Determining Density of Compacted Bituminous Mixtures
Tex-208-F	Test for Stabilometer Value of Bituminous Mixtures
Tex-217-F	Determining Deleterious Material and Decantation Test for Coarse
	Aggregates
Tex-222-F	Sampling Bituminous Mixtures
Tex-225-F	Random Selection of Bituminous Mixture Samples
Tex-227-F	Theoretical Maximum Specific Gravity of Bituminous Mixtures
Tex-236-F	Determining Asphalt Content from Asphalt Paving Mixtures by the Ignition Method
Tex-241-F	Compacting Bituminous Specimens using the Superpave Gyratory
	Compactor (SGC)
Concrete:	
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	Slump of Hydraulic-Cement Concrete
ASTM C172/C172M ¹	Sampling Freshly Mixed Concrete
ASTM C173/C173M ¹	Air Content of Freshly Mixed Concrete by the Volumetric Method
ASTM C173/C173M ¹ ASTM C174/C174M	Air Content of Freshly Mixed Concrete by the Volumetric Method Measuring Thickness of Concrete Elements Using Drilled Concrete
ASTM C173/C173M ¹ ASTM C174/C174M	Air Content of Freshly Mixed Concrete by the Volumetric Method Measuring Thickness of Concrete Elements Using Drilled Concrete Cores
ASTM C174/C174M ASTM C192/C192M	Measuring Thickness of Concrete Elements Using Drilled Concrete Cores Making and Curing Concrete Test Specimens in the Laboratory
ASTM C174/C174M ASTM C192/C192M ASTM C231/C231M ¹	Measuring Thickness of Concrete Elements Using Drilled Concrete Cores Making and Curing Concrete Test Specimens in the Laboratory Air Content of Freshly Mixed Concrete by the Pressure Method
ASTM C174/C174M ASTM C192/C192M	Measuring Thickness of Concrete Elements Using Drilled Concrete Cores Making and Curing Concrete Test Specimens in the Laboratory Air Content of Freshly Mixed Concrete by the Pressure Method Flexural Strength of Concrete (Using Simple Beam With
ASTM C174/C174M ASTM C192/C192M ASTM C231/C231M ¹	Measuring Thickness of Concrete Elements Using Drilled Concrete Cores Making and Curing Concrete Test Specimens in the Laboratory Air Content of Freshly Mixed Concrete by the Pressure Method

Page 2 of 4

Test Method:	Test Description:
ASTM C567/C567M	Determining Density of Structural Lightweight Concrete
ASTM C617/C617M	Capping Cylindrical Concrete Specimens
ASTM C642	Density, Absorption, and Voids in Hardened Concrete
ASTM C803/C803M	Penetration Resistance of Hardened Concrete
ASTM C805/C805M ¹	Rebound Number of Hardened Concrete
ASTM C823/C823M	Examination and Sampling of Hardened Concrete in Constructions
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
ASTM C1435/C1435M	Molding Roller-Compacted Concrete in Cylinder Molds Using a Vibrating Hammer
Masonry:	
ASTM C780, Annex A.6	Preconstruction and Construction Evaluation of Mortars for Plain and Reinforced Unit Masonry
ASTM C1019	Sampling and Testing Grout
ASTM C1314	Compressive Strength of Masonry Prisms
Soils:	
<u>Sons</u> : ASTM D558	Moisture-Density (Unit Weight) Relations of Soil-Cement Mixtures
ASTM D558/D559M	Wetting and Drying Compacted Soil-Cement Mixtures
ASTM D559/D559/M	Laboratory Compaction Characteristics of Soil Using Standard Effort
ASTM D854	Specific Gravity of Soil Solids by Water Pycnometer
ASTM D1140	Amount of Material in Soils Finer than No. 200 (75-µm) Sieve
ASTM D1556/D1556M	Density and Unit Weight of Soil in Place by Sand-Cone Method
ASTM D1557	Laboratory Compaction Characteristics of Soil Using Modified Effort
ASTM D1632 (Curing only)	Making and Curing Soil-Cement Compression and Flexure Test Specimens in the Laboratory
ASTM D1633	Compressive Strength of Molded Soil-Cement Cylinders
ASTM D2216	Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
ASTM D2488 ¹	Description and Identification of Soils (Visual-Manual Procedure)
ASTM D3282	Classification of Soils and Soil-Aggregate Mixtures for Highway Construction Purposes
ASTM D4253	Maximum Index Density and Unit Weight of Soils Using a Vibratory Table
ASTM D4254	Minimum Index Density and Unit Weight of Soils and Calculation of Relative Density
ASTM D4318	Liquid Limit, Plastic Limit, and Plasticity Index of Soils
ASTM D4718/D4718M	Unit Weight and Water Content for Soils Containing Oversize Particles
ASTM D4832	Preparation and Testing of Controlled Low Strength Material (CLSM) Test Cylinders
ASTM D6913/D6913M	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	Particle-Size Distribution (Gradation) of Fine-Grained Soils Using the Sedimentation (Hydrometer) Analysis

Page 3 of 4

Test Method:	Test Description:
Тех-100-Е	Surveying and Sampling Soils for Highways
Тех-101-Е	Preparing Soil and Flexible Base Materials for Testing
Тех-103-Е	Determining Moisture Content in Soil Materials
Тех-104-Е	Determining Liquid Limits of Soils
Тех-105-Е	Determining Plastic Limit of Soils
Тех-106-Е	Calculating the Plasticity Index of Soils
Тех-108-Е	Determining the Specific Gravity of Soils
Тех-110-Е	Particle Size Analysis of Soils
Tex-111-E	Determining the Amount of Material in Soils Finer than the 75 m
	(No. 200) Sieve
Тех-112-Е	Admixing Lime to Reduce Plasticity Index of Soils
Тех-113-Е	Laboratory Compaction Characteristics and Moisture-Density
	Relationship of Base Materials
Tex-114-E	Laboratory Compaction Characteristics and Moisture-Density
	Relationship of Subgrade, Embankment Soils, and Backfill Material
Tex-115-E (Part II)	Field Method for Determining In-Place Density of Soils and Base
	Materials
Tex-117-E	Triaxial Compression for Disturbed Soils and Base Materials
Tex-118-E	Triaxial Compression Test for Undisturbed Soils
Тех-120-Е	Soil-Cement Testing
Тех-121-Е	Soil-Lime Testing
Тех-127-Е	Lime Fly-Ash Compressive Strength Test Methods
Тех-128-Е	Determining Soil pH

¹ This laboratory performs field testing activities for these tests.

 2 This laboratory's scope contains withdrawn or superseded methods. As a clarifier, this indicates that the applicable method itself has been withdrawn or is now considered "historical" and not that the laboratory's accreditation for the method has been withdrawn.

hun





Accredited Laboratory

A2LA has accredited

AVILES ENGINEERING CORP.

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 10th day of November 2023.

Mr. Trace McInturff, Vice President, Accreditation Services For the Accreditation Council Certificate Number 0035.01 Valid to November 30, 2025