



CERTIFICATE OF ACCREDITATION



Froehling & Robertson, Incorporated

in

Richmond, Virginia, USA

has demonstrated proficiency for the testing of construction materials and has conformed to the requirements established in AASHTO R 18 and the AASHTO Accreditation policies established by the AASHTO Committee on Materials and Pavements.

The scope of accreditation can be viewed on the Directory of AASHTO Accredited Laboratories (aashtoresource.org).



Jim Tymon,
AASHTO Executive Director



Matt Linneman
AASHTO COMP Chair



SCOPE OF AASHTO ACCREDITATION FOR:

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Quality Management System

Standard:

Accredited Since:

R18	Establishing and Implementing a Quality System for Construction Materials Testing Laboratories	06/25/2018
C1077 (Aggregate)	Laboratories Testing Concrete and Concrete Aggregates	12/28/2023
C1077 (Concrete)	Laboratories Testing Concrete and Concrete Aggregates	04/12/2012
C1093 (Masonry)	Accreditation of Testing Agencies for Unit Masonry	01/26/2016
D3740 (Soil)	Minimum Requirements for Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction	10/09/2015
E329 (Concrete)	Standard Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction	10/22/2014
E329 (Soil)	Standard Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction	12/28/2023
E329 (Sprayed Fire-Resistive Material)	Standard Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction	10/09/2015



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Asphalt Mixture

Standard:

T166 (Cores) Bulk Specific Gravity of Compacted Hot Mix Asphalt Using Saturated Surface-Dry Specimens (Cores)

D2726 (Cores) Bulk Specific Gravity of Compacted Hot Mix Asphalt Using Saturated Surface-Dry Specimens (Cores)

Accredited Since:

11/01/2023

11/01/2023



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Soil

Standard:

Accredited Since:

R58	Dry Preparation of Disturbed Soil and Soil Aggregate Samples for Test	11/01/2023
T88	Particle Size Analysis of Soils by Hydrometer	11/01/2023
T89	Determining the Liquid Limit of Soils (Atterberg Limits)	11/01/2023
T90	Plastic Limit of Soils (Atterberg Limits)	11/01/2023
T99	The Moisture-Density Relations of Soils Using a 5.5 lb [2.5 kg] Rammer and a 12 in. [305 mm] Drop	11/01/2023
T100	Specific Gravity of Soils	11/01/2023
T180	Moisture-Density Relations of Soils Using a 10 lb [4.54 kg] Rammer and an 18 in. [457 mm] Drop	11/01/2023
T191	Density of Soil In-Place by the Sand Cone Method	11/01/2023
T193	The California Bearing Ratio	11/01/2023
T265	Laboratory Determination of Moisture Content of Soils	11/01/2023
T310	In-Place Density and Moisture Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)	11/01/2023
D421	Dry Preparation of Disturbed Soil and Soil Aggregate Samples for Test	05/23/2011
D422	Particle Size Analysis of Soils by Hydrometer	05/23/2011
D698	The Moisture-Density Relations of Soils Using a 5.5 lb [2.5 kg] Rammer and a 12 in. [305 mm] Drop	11/15/1998
D854	Specific Gravity of Soils	11/01/2023
D1140	Amount of Material in Soils Finer than the No. 200 (75- μ m) Sieve	05/23/2011
D1556	Density of Soil In-Place by the Sand Cone Method	05/23/2011
D1557	Moisture-Density Relations of Soils Using a 10 lb [4.54 kg] Rammer and an 18 in. [457 mm] Drop	11/15/1998
D1883	The California Bearing Ratio	05/23/2011
D2216	Laboratory Determination of Moisture Content of Soils	05/23/2011
D2487	Classification of Soils for Engineering Purposes (Unified Soil Classification System)	11/15/1998
D2488	Description and Identification of Soils (Visual-Manual Procedure)	11/15/1998
D4318	Determining the Liquid Limit of Soils (Atterberg Limits)	05/23/2011



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Soil (Continued)

Standard:**Accredited Since:**

D4318 Plastic Limit of Soils (Atterberg Limits)	11/15/1998
D4718 Oversize Particle Correction	11/01/2023
D6913 Particle-Size Distribution (Gradation) of Soils Using Sieve Analysis	11/01/2023
D6938 In-Place Density and Moisture Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)	05/31/2013
D7928 Particle-Size Distribution (Gradation) of Fine-Grained Soils Using the Sedimentation (Hydrometer) Analysis	11/01/2023



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Aggregate

Standard:

Accredited Since:

R76	Reducing Samples of Aggregate to Testing Size	11/01/2023
R90	Sampling Aggregate	11/01/2023
T11	Materials Finer Than 75- μ m (No. 200) Sieve in Mineral Aggregates by Washing	11/01/2023
T19	Bulk Density ("Unit Weight") and Voids in Aggregate	11/01/2023
T21	Organic Impurities in Fine Aggregates for Concrete	11/01/2023
T27	Sieve Analysis of Fine and Coarse Aggregates	12/28/2023
T84	Specific Gravity (Relative Density) and Absorption of Fine Aggregate	11/01/2023
T85	Specific Gravity and Absorption of Coarse Aggregate	11/01/2023
T96	Resistance to Abrasion of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine	11/01/2023
T104	Soundness of Aggregate by Use of Sodium Sulfate or Magnesium Sulfate	12/28/2023
T112	Clay Lumps and Friable Particles in Aggregate	11/01/2023
T113	Lightweight Pieces in Aggregate	11/01/2023
T255	Total Moisture Content of Aggregate by Drying	11/01/2023
C29	Bulk Density ("Unit Weight") and Voids in Aggregate	07/18/2018
C40	Organic Impurities in Fine Aggregates for Concrete	09/01/1998
C88	Soundness of Aggregate by Use of Sodium Sulfate or Magnesium Sulfate	05/31/2013
C117	Materials Finer Than 75- μ m (No. 200) Sieve in Mineral Aggregates by Washing	10/05/2018
C123	Lightweight Pieces in Aggregate	09/04/2020
C127	Specific Gravity and Absorption of Coarse Aggregate	09/01/1998
C128	Specific Gravity (Relative Density) and Absorption of Fine Aggregate	09/01/1998
C131	Resistance to Abrasion of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine	07/18/2018
C136	Sieve Analysis of Fine and Coarse Aggregates	12/28/2023
C142	Clay Lumps and Friable Particles in Aggregate	09/04/2020



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Aggregate (Continued)

Standard:**Accredited Since:**

C535 Resistance to Degradation of Large-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine	09/04/2020
C566 Total Moisture Content of Aggregate by Drying	09/01/1998
C702 Reducing Samples of Aggregate to Testing Size	09/01/1998
D75 Sampling Aggregate	07/18/2018
D4791 Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate	07/18/2018



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Sprayed Fire-Resistive Material

Standard:

E605 Thickness and Density of Sprayed Fire-Resistive Material(SFRM) Applied to Structural Members

Accredited Since:

10/09/2015

E736 Cohesion/Adhesion of Sprayed Fire-Resistive MaterialsApplied to Structural Members

10/09/2015



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Concrete

Standard:

Accredited Since:

M201	Moist Cabinets, Moist Rooms, and Water Storage Tanks Used in the testing of Hydraulic Cements and Concretes	06/16/2025
R39	Making and Curing Concrete Test Specimens in the Laboratory	06/16/2025
R60	Sampling Freshly Mixed Concrete	06/16/2025
R100 (Beams)	Making and Curing Concrete Test Specimens in the Field	06/16/2025
R100 (Cylinders)	Making and Curing Concrete Test Specimens in the Field	06/16/2025
R115	Mechanical Mixing of Hydraulic Cement Pastes and Mortars of Plastic Consistency	06/16/2025
T22	Compressive Strength of Cylindrical Concrete Specimens	06/16/2025
T24 (Testing Drilled Cores of Concrete)	Testing Drilled Cores of Concrete	06/16/2025
T97	Flexural Strength of Concrete (Using Simple Beam with Third-Point Loading)	06/16/2025
T119	Slump of Hydraulic Cement Concrete	06/16/2025
T121	Density (Unit Weight), Yield, and Air Content of Concrete	06/16/2025
T152	Air Content of Freshly Mixed Concrete by the Pressure Method	06/16/2025
T196	Air Content of Freshly Mixed Concrete by the Volumetric Method	06/16/2025
T198	Splitting Tensile Strength of Cylindrical Concrete Specimens	06/16/2025
T231 (8000 psi and below)	Capping Cylindrical Concrete Specimens	06/16/2025
T303	Potential Alkali Reactivity of Aggregates (Mortar-Bar Method)	06/16/2025
T309	Temperature of Freshly Mixed Portland Cement Concrete	06/16/2025
C31 (Beams)	Making and Curing Concrete Test Specimens in the Field	09/01/1998
C31 (Cylinders)	Making and Curing Concrete Test Specimens in the Field	09/01/1998
C39	Compressive Strength of Cylindrical Concrete Specimens	09/01/1998
C42 (Testing Drilled Cores of Concrete)	Testing Drilled Cores of Concrete	01/26/2016
C78	Flexural Strength of Concrete (Using Simple Beam with Third-Point Loading)	09/01/1998
C138	Density (Unit Weight), Yield, and Air Content of Concrete	09/01/1998



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Concrete (Continued)

Standard:**Accredited Since:**

C143	Slump of Hydraulic Cement Concrete	09/01/1998
C172	Sampling Freshly Mixed Concrete	09/01/1998
C173	Air Content of Freshly Mixed Concrete by the Volumetric Method	09/01/1998
C192	Making and Curing Concrete Test Specimens in the Laboratory	09/01/1998
C231	Air Content of Freshly Mixed Concrete by the Pressure Method	09/01/1998
C305	Mechanical Mixing of Hydraulic Cement Pastes and Mortars of Plastic Consistency	06/16/2025
C496	Splitting Tensile Strength of Cylindrical Concrete Specimens	01/26/2016
C511	Moist Cabinets, Moist Rooms, and Water Storage Tanks Used in the testing of Hydraulic Cements and Concretes	05/31/2012
C617 (8000 psi and below)	Capping Cylindrical Concrete Specimens	12/02/2024
C642	Density, Absorption, and Voids in Hardened Concrete	01/26/2016
C1064	Temperature of Freshly Mixed Portland Cement Concrete	09/01/1998
C1231 (7000 psi and below)	Use of Unbonded Caps in Determination of Compressive Strength of Hardened Concrete Cylinders	04/23/2012
C1260	Potential Alkali Reactivity of Aggregates (Mortar-Bar Method)	06/16/2025
C1542	Measuring Length of Concrete Cores	01/26/2016
C1567	Determining the Potential Alkali-Silica Reactivity of Combinations of Cementitious Materials and Aggregate (Accelerated Mortar-Bar Method)	06/16/2025



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Masonry

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C140 (Full-Size Concrete Masonry Units)	Sampling and Testing Concrete Masonry Units and Related Units	07/08/2025
C511	Moist Cabinets, Moist Rooms, and Water Storage Tanks Used in the testing of Hydraulic Cements and Concretes	06/16/2025
C780 (Annex 1)	Preconstruction and Construction Evaluation of Mortars for Plain and Reinforced Unit Masonry - Consistency by Cone Penetration	06/16/2025
C780 (Annex 6 - Cubes)	Preconstruction and Construction Evaluation of Mortars for Plain and Reinforced Unit Masonry - Compressive Strength of Cubes	06/16/2025
C780 (Annex 6 - Cylinders)	Preconstruction and Construction Evaluation of Mortars for Plain and Reinforced Unit Masonry - Compressive Strength of Cylinders	06/16/2025
C1019	Sampling and Testing Grout	06/16/2025
C1314 (Prisms Constructed of Full-Size Concrete Masonry Units)	Compressive Strength of Masonry Prisms	07/08/2025
C1552	Capping Concrete Masonry Units, Related Units and Masonry Prisms for Compression Testing	01/26/2016