



# CERTIFICATE OF ACCREDITATION



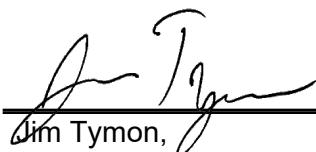
## Froehling & Robertson, Incorporated

in

**Columbia, Maryland, 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](http://aashtoresource.org)).



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Jim Tymon,  
AASHTO Executive Director



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Matt Linneman  
AASHTO COMP Chair



## SCOPE OF AASHTO ACCREDITATION FOR:

Froehling & Robertson, Incorporated  
in Columbia, Maryland, USA

## Quality Management System

### Standard:

### Accredited Since:

R18	Establishing and Implementing a Quality System for Construction Materials Testing Laboratories	10/15/1998
C1077 (Aggregate)	Laboratories Testing Concrete and Concrete Aggregates	09/20/2018
C1077 (Concrete)	Laboratories Testing Concrete and Concrete Aggregates	05/29/2015
D3740 (Soil)	Minimum Requirements for Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction	01/10/2011
E329 (Aggregate)	Standard Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction	09/20/2018
E329 (Concrete)	Standard Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction	05/29/2015
E329 (Soil)	Standard Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction	01/10/2011



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## Asphalt Mixture

**Standard:****Accredited Since:**

T166 (Cores)	Bulk Specific Gravity of Compacted Hot Mix Asphalt Using Saturated Surface-Dry Specimens (Cores)	05/18/2018
T355	Density of Bituminous Concrete In Place by Nuclear Methods	11/12/2020
D2726 (Cores)	Bulk Specific Gravity of Compacted Hot Mix Asphalt Using Saturated Surface-Dry Specimens (Cores)	10/13/2017
D2950	Density of Bituminous Concrete In Place by Nuclear Methods	11/12/2020



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## Soil

### Standard:

### Accredited Since:

R58	Dry Preparation of Disturbed Soil and Soil Aggregate Samples for Test	05/18/2018
T88	Particle Size Analysis of Soils by Hydrometer	12/21/2020
T89	Determining the Liquid Limit of Soils (Atterberg Limits)	05/18/2018
T90	Plastic Limit of Soils (Atterberg Limits)	05/18/2018
T99	The Moisture-Density Relations of Soils Using a 5.5 lb [2.5 kg] Rammer and a 12 in. [305 mm] Drop	05/18/2018
T100	Specific Gravity of Soils	05/18/2018
T180	Moisture-Density Relations of Soils Using a 10 lb [4.54 kg] Rammer and an 18 in. [457 mm] Drop	05/18/2018
T191	Density of Soil In-Place by the Sand Cone Method	05/18/2018
T193	The California Bearing Ratio	05/18/2018
T265	Laboratory Determination of Moisture Content of Soils	05/18/2018
T310	In-Place Density and Moisture Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)	05/18/2018
D421	Dry Preparation of Disturbed Soil and Soil Aggregate Samples for Test	10/15/1998
D422	Particle Size Analysis of Soils by Hydrometer	12/21/2020
D698	The Moisture-Density Relations of Soils Using a 5.5 lb [2.5 kg] Rammer and a 12 in. [305 mm] Drop	10/15/1998
D854	Specific Gravity of Soils	10/15/1998
D1140	Amount of Material in Soils Finer than the No. 200 (75- $\mu$ m) Sieve	10/15/1998
D1556	Density of Soil In-Place by the Sand Cone Method	05/18/2018
D1557	Moisture-Density Relations of Soils Using a 10 lb [4.54 kg] Rammer and an 18 in. [457 mm] Drop	10/15/1998
D1883	The California Bearing Ratio	10/15/1998
D2216	Laboratory Determination of Moisture Content of Soils	10/15/1998
D2487	Classification of Soils for Engineering Purposes (Unified Soil Classification System)	10/15/1998
D2488	Description and Identification of Soils (Visual-Manual Procedure)	10/15/1998
D4318	Determining the Liquid Limit of Soils (Atterberg Limits)	10/15/1998



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### Soil (Continued)

**Standard:**

D4318 Plastic Limit of Soils (Atterberg Limits)

D6938 In-Place Density and Moisture Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)

**Accredited Since:**

10/15/1998

10/15/1998



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## Aggregate

**Standard:****Accredited Since:**

C29 Bulk Density ("Unit Weight") and Voids in Aggregate	12/30/2004
C117 Materials Finer Than 75-µm (No. 200) Sieve in Mineral Aggregates by Washing	12/30/2004
C127 Specific Gravity and Absorption of Coarse Aggregate	12/30/2004
C128 Specific Gravity (Relative Density) and Absorption of Fine Aggregate	09/20/2018
C136 Sieve Analysis of Fine and Coarse Aggregates	09/05/2012
C566 Total Moisture Content of Aggregate by Drying	12/30/2004
C702 Reducing Samples of Aggregate to Testing Size	12/30/2004



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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:**

07/05/2011

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

07/05/2011



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## Concrete

### Standard:

### Accredited Since:

C31 (Beams)	Making and Curing Concrete Test Specimens in the Field	10/15/1998
C31 (Cylinders)	Making and Curing Concrete Test Specimens in the Field	10/15/1998
C39	Compressive Strength of Cylindrical Concrete Specimens	10/15/1998
C78	Flexural Strength of Concrete (Using Simple Beam with Third-Point Loading)	10/15/1998
C138	Density (Unit Weight), Yield, and Air Content of Concrete	10/15/1998
C143	Slump of Hydraulic Cement Concrete	10/15/1998
C172	Sampling Freshly Mixed Concrete	10/15/1998
C173	Air Content of Freshly Mixed Concrete by the Volumetric Method	10/15/1998
C231	Air Content of Freshly Mixed Concrete by the Pressure Method	10/15/1998
C511	Moist Cabinets, Moist Rooms, and Water Storage Tanks Used in the testing of Hydraulic Cements and Concretes	09/05/2012
C617 (5000 psi and below)	Capping Cylindrical Concrete Specimens	07/10/2023
C1064	Temperature of Freshly Mixed Portland Cement Concrete	10/15/1998
C1231 (7000 psi and below)	Use of Unbonded Caps in Determination of Compressive Strength of Hardened Concrete Cylinders	09/05/2012



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## Masonry

**Standard:****Accredited Since:**

C511	Moist Cabinets, Moist Rooms, and Water Storage Tanks Used in the testing of Hydraulic Cements and Concretes	06/17/2020
C780 (Annex 1)	Preconstruction and Construction Evaluation of Mortars for Plain and Reinforced Unit Masonry - Consistency by Cone Penetration	06/17/2020
C780 (Annex 6 - Cubes)	Preconstruction and Construction Evaluation of Mortars for Plain and Reinforced Unit Masonry - Compressive Strength of Cubes	06/17/2020
C1019	Sampling and Testing Grout	06/17/2020