



# CERTIFICATE OF ACCREDITATION



## Pennsylvania Department of Transportation

in

### Harrisburg, Pennsylvania, 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)).



---

Jim Tymon,  
AASHTO Executive Director



---

Matt Linneman  
AASHTO COMP Chair



# SCOPE OF AASHTO ACCREDITATION FOR:

Pennsylvania Department of Transportation  
in Harrisburg, Pennsylvania, USA

## Quality Management System

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

R18	Establishing and Implementing a Quality System for Construction Materials Testing Laboratories	12/01/1990
ISO/IEC 17025	General Requirements for the Competence of Testing and Calibration Laboratories	07/17/2003
C1077 (Concrete) Laboratories Testing Concrete and Concrete Aggregates		01/10/2011
C1222 (Cement)	Evaluation of Laboratories Testing Hydraulic Cement	01/10/2011



# SCOPE OF AASHTO ACCREDITATION FOR:

Pennsylvania Department of Transportation  
in Harrisburg, Pennsylvania, USA

## Asphalt Binder

### Standard:

### Accredited Since:

R28 Accelerated Aging of Asphalt Binder Using a Pressurized Aging Vessel	06/08/2004
R29 Grading or Verifying the Performance Grade of an Asphalt Binder	02/01/2016
T49 Penetration of Original Sample of Asphalt Cement	08/29/2011
T53 Softening Point of Bitumen (Ring-and-Ball Apparatus)	06/08/2004
T240 Rolling Thin-Film Oven Testing	08/29/2011
T301 Elastic Recovery Test of Bituminous Materials by Means of a Ductilometer	02/01/2016
T313 Determining the Flexural Creep Stiffness of Asphalt Binder Using the Bending Beam Rheometer (BBR)	08/29/2011
T315 Determining the Rheological Properties of Asphalt Binder Using a Dynamic Shear Rheometer (DSR)	06/08/2004
T316 Viscosity Determination of Asphalt Binder Using Rotational Viscometer	08/29/2011
T350 Multiple Stress Creep and Recovery (MSCR)	02/01/2016



# SCOPE OF AASHTO ACCREDITATION FOR:

Pennsylvania Department of Transportation  
in Harrisburg, Pennsylvania, USA

## Emulsified Asphalt

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

T59	Particle Charge	06/08/2004
T59	Residue by Distillation	06/08/2004
T59-T72	Saybolt Furol Viscosity at 25°C (77°F)	08/29/2011
T59-T72	Saybolt Furol Viscosity at 50°C (122°F)	08/29/2011



# SCOPE OF AASHTO ACCREDITATION FOR:

Pennsylvania Department of Transportation  
in Harrisburg, Pennsylvania, USA

## Asphalt Mixture

### Standard:

### Accredited Since:

T30	Mechanical Analysis of Extracted Aggregate	06/08/2004
T164	Quantitative Extraction of Asphalt Binder from Hot Mix Asphalt (HMA)	06/08/2004
T166	Bulk Specific Gravity of Compacted Hot Mix Asphalt Using Saturated Surface-Dry Specimens	06/08/2004
T209	Maximum Specific Gravity of Hot Mix Asphalt Paving Mixtures	06/08/2004
T269	Percent Air Voids in Compacted Dense and Open Bituminous Paving Mixtures	06/08/2004
T275	Bulk Specific Gravity of Compacted Bituminous Mixtures Using Paraffin-Coated Specimens	06/08/2004
T283	Resistance of Compacted Mixtures to Moisture Induced Damage	06/08/2004
T308	Determining the Asphalt Content of Hot Mix Asphalt (HMA) by the Ignition Method	06/08/2004
T312	Preparing and Determining the Density of Hot Mix Asphalt (HMA) Specimens by Means of the Superpave Gyratory Compactor	06/08/2004
T324	Hamburg Wheel-Track Testing of Compacted Hot-Mix Asphalt (HMA)	12/11/2017
D3549	Thickness or Height of Compacted Bituminous Paving Mixture Specimens	02/16/2021
D7906	Recovery of Asphalt Using Toluene and Rotavapor	11/30/2023



# SCOPE OF AASHTO ACCREDITATION FOR:

Pennsylvania Department of Transportation  
in Harrisburg, Pennsylvania, USA

## Soil

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

R58	Dry Preparation of Disturbed Soil and Soil Aggregate Samples for Test	01/01/1992
T88	Particle Size Analysis of Soils by Hydrometer	01/01/1992
T89	Determining the Liquid Limit of Soils (Atterberg Limits)	01/01/1992
T90	Plastic Limit of Soils (Atterberg Limits)	01/01/1992
T99	The Moisture-Density Relations of Soils Using a 5.5 lb [2.5 kg] Rammer and a 12 in. [305 mm] Drop	01/01/1992
T100	Specific Gravity of Soils	01/01/1992
T180	Moisture-Density Relations of Soils Using a 10 lb [4.54 kg] Rammer and an 18 in. [457 mm] Drop	01/01/1992
T193	The California Bearing Ratio	01/01/1992
T236	Direct Shear Test of Soils Under Consolidated Drained Conditions	01/01/1992
T265	Laboratory Determination of Moisture Content of Soils	01/01/1992
T267	Determination of Organic Content in Soils by Loss on Ignition	02/01/2016
T288	Minimum Soil Resistivity	12/11/2017
T289	pH of Soils for Corrosion Testing	02/01/2016
T290 (Method B)	Determining Water-Soluble Sulfate Ion Content in Soil	02/16/2021
T291	Determining Water-Soluble Chloride Ion Content in Soil	02/16/2021



# SCOPE OF AASHTO ACCREDITATION FOR:

Pennsylvania Department of Transportation  
in Harrisburg, Pennsylvania, USA

## Aggregate

### Standard:

### Accredited Since:

R76	Reducing Samples of Aggregate to Testing Size	12/01/1990
T11	Materials Finer Than 75-µm (No. 200) Sieve in Mineral Aggregates by Washing	12/01/1990
T19	Bulk Density ("Unit Weight") and Voids in Aggregate	12/01/1990
T21	Organic Impurities in Fine Aggregates for Concrete	12/01/1990
T27	Sieve Analysis of Fine and Coarse Aggregates	12/01/1990
T84	Specific Gravity (Relative Density) and Absorption of Fine Aggregate	12/01/1990
T85	Specific Gravity and Absorption of Coarse Aggregate	12/01/1990
T96	Resistance to Abrasion of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine	12/01/1990
T176	Plastic Fines in Graded Aggregates and Soils by Use of the Sand Equivalent Test	12/01/1990
T255	Total Moisture Content of Aggregate by Drying	12/01/1990
T304	Uncompacted Void Content of Fine Aggregate (Influenced by Shape, Texture, and Grading)	12/01/1990
T327	Resistance to Abrasion by Micro-Deval (Coarse Aggregate)	03/09/2016
D4791	Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate	02/01/2016
D5821	Determining the Percentage of Fractured Particles in Coarse Aggregate	01/07/2014



# SCOPE OF AASHTO ACCREDITATION FOR:

Pennsylvania Department of Transportation  
in Harrisburg, Pennsylvania, USA

## Iron and Steel

### Standard:

### Accredited Since:

M31-T244	Carbon-Steel Bars, Deformed and Plain: Tension (Elongation)	02/01/2016
M31-T244	Carbon-Steel Bars, Deformed and Plain: Tension (Ultimate Tensile Strength)	02/01/2016
M31-T244	Carbon-Steel Bars, Deformed and Plain: Tension (Yield Strength)	02/01/2016
M31-T285	Carbon-Steel Bars, Deformed and Plain: Bend Test	07/18/2007
M203-T244	Steel Strand, Uncoated Seven-Wire: Tension (Elongation)	02/16/2021
M203-T244	Steel Strand, Uncoated Seven-Wire: Tension (Ultimate Tensile Strength)	02/16/2021
M203-T244	Steel Strand, Uncoated Seven-Wire: Tension (Yield Strength)	02/16/2021
A775	Epoxy Coated Reinforcing Bars: Coating Flexibility (Bend Test)	01/07/2014
A775	Epoxy Coated Reinforcing Bars: Film Thickness	01/07/2014
A1064	Welded Deformed Steel Wire: Bend Test	07/18/2007
A1064	Welded Deformed Steel Wire: Weld Shear	02/01/2016
A1064	Welded Plain Steel Wire: Bend Test	07/18/2007
A1064	Welded Plain Steel Wire: Weld Shear	12/11/2017
A123-A90	Zinc Coatings on Iron and Steel: Thickness of Zinc (Stripping)	02/01/2016
A563-E18	Internally Threaded Fasteners (Nuts): Rockwell Hardness	02/01/2016
A775-G62	Epoxy Coated Reinforcing Bars: Coating Continuity (Holidays)	02/01/2016
A123-E376	Zinc Coatings on Iron and Steel: Thickness of Zinc (Magnetic)	08/29/2011
A615-A370	Carbon-Steel Bars, Deformed and Plain: Tension (Elongation)	02/01/2016
A615-A370	Carbon-Steel Bars, Deformed and Plain: Tension (Ultimate Tensile Strength)	02/01/2016
A615-A370	Carbon-Steel Bars, Deformed and Plain: Tension (Yield Strength)	02/01/2016
A615-E290	Carbon-Steel Bars, Deformed and Plain: Bend Test	07/18/2007
A1064-A370	Welded Deformed Steel Wire: Tension (Ultimate Tensile Strength)	02/01/2016
A1064-A370	Welded Deformed Steel Wire: Tension (Yield Strength)	02/01/2016



## SCOPE OF AASHTO ACCREDITATION FOR:

Pennsylvania Department of Transportation  
in Harrisburg, Pennsylvania, USA

### Iron and Steel (Continued)

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

A1064-A370 Welded Plain Steel Wire: Tension (Ultimate Tensile Strength)	12/11/2017
A615-A1034 Carbon-Steel Bars, Deformed and Plain: Testing Mechanical Splices	12/11/2017
F436-E18 Hardened Steel Washers: Rockwell Hardness	02/01/2016
F3125-E18 Externally Threaded Fasteners (Bolts): Rockwell Hardness	07/18/2007



# SCOPE OF AASHTO ACCREDITATION FOR:

Pennsylvania Department of Transportation  
in Harrisburg, Pennsylvania, USA

## Cementitious Material - Chemical Tests

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

C114 Aluminum Oxide – X-Ray Fluorescence	11/01/1997
C114 Calcium Oxide – X-Ray Fluorescence	11/01/1997
C114 Chloride – X-Ray Fluorescence	<b>Suspended</b>
C114 Ferric Oxide – X-Ray Fluorescence	11/01/1997
C114 Loss on Ignition – Reference	11/01/1997
C114 Magnesium Oxide – X-Ray Fluorescence	11/01/1997
C114 Manganic Oxide – X-Ray Fluorescence	01/10/2013
C114 Phosphorus Pentoxide – X-Ray Fluorescence	11/01/1997
C114 Potassium Oxide – X-Ray Fluorescence	11/01/1997
C114 Silicon Dioxide – X-Ray Fluorescence	11/01/1997
C114 Sodium Oxide – X-Ray Fluorescence	11/01/1997
C114 Sulfur Trioxide – X-Ray Fluorescence	11/01/1997
C114 Titanium Dioxide – X-Ray Fluorescence	01/10/2013
C114 Zinc Oxide – X-Ray Fluorescence	11/01/1997



# SCOPE OF AASHTO ACCREDITATION FOR:

Pennsylvania Department of Transportation  
in Harrisburg, Pennsylvania, USA

## Cement - Physical Tests

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

C109	Compressive Strength of Hydraulic Cement Mortars (Using 2-in. Cube Specimens)	11/01/1997
C114 (Loss on Ignition - Reference)	Loss on Ignition – Reference	06/26/2017
C183	Sampling and the Amount of Testing of Hydraulic Cement	11/01/1997
C185	Air Content of Hydraulic Cement Mortar	11/01/1997
C187	Normal Consistency of Hydraulic Cement	11/01/1997
C188	Density of Hydraulic Cement	06/26/2017
C191	Time of Setting of Hydraulic Cement by Vicat Needle	11/01/1997
C204	Fineness of Hydraulic Cement by Air Permeability Apparatus	Suspended
C305	Mechanical Mixing of Hydraulic Cement Pastes and Mortars of Plastic Consistency	11/01/1997
C430	Fineness of Hydraulic Cement by the 45-µm (No. 325) Sieve	11/01/1997
C511	Moist Cabinets, Moist Rooms, and Water Storage Tanks Used in the testing of Hydraulic Cements and Concretes	01/10/2013
C1038	Expansion of Hydraulic Cement Mortar Bars Stored in Water	11/01/1997
C1437	Flow of Hydraulic Cement Mortar	11/01/1997



# SCOPE OF AASHTO ACCREDITATION FOR:

Pennsylvania Department of Transportation  
in Harrisburg, Pennsylvania, USA

## Concrete

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

C31 (Cylinders)	Making and Curing Concrete Test Specimens in the Field	12/01/1990
C39	Compressive Strength of Cylindrical Concrete Specimens	12/01/1990
C138	Density (Unit Weight), Yield, and Air Content of Concrete	12/01/1990
C143	Slump of Hydraulic Cement Concrete	12/01/1990
C172	Sampling Freshly Mixed Concrete	12/01/1990
C173	Air Content of Freshly Mixed Concrete by the Volumetric Method	12/01/1990
C192	Making and Curing Concrete Test Specimens in the Laboratory	12/01/1990
C231	Air Content of Freshly Mixed Concrete by the Pressure Method	12/01/1990
C305	Mechanical Mixing of Hydraulic Cement Pastes and Mortars of Plastic Consistency	04/06/2023
C511	Moist Cabinets, Moist Rooms, and Water Storage Tanks Used in the testing of Hydraulic Cements and Concretes	01/10/2013
C617 (6000 psi and below)	Capping Cylindrical Concrete Specimens	02/14/2023
C1064	Temperature of Freshly Mixed Portland Cement Concrete	12/01/1990
C1231 (7000 psi and below)	Use of Unbonded Caps in Determination of Compressive Strength of Hardened Concrete Cylinders	01/10/2013
C1260	Potential Alkali Reactivity of Aggregates (Mortar-Bar Method)	04/14/2015
C1293	Determination of Length Change of Concrete Due to Alkali-Silica Reaction	04/14/2015
C1567	Determining the Potential Alkali-Silica Reactivity of Combinations of Cementitious Materials and Aggregate (Accelerated Mortar-Bar Method)	04/14/2015



# SCOPE OF AASHTO ACCREDITATION FOR:

Pennsylvania Department of Transportation  
in Harrisburg, Pennsylvania, USA

## Pozzolan

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

C109	Compressive Strength of Hydraulic Cement Mortars (Using 2-in. Cube Specimens)	04/14/2015
C187	Normal Consistency of Hydraulic Cement	04/14/2015
C188	Density of Hydraulic Cement	04/14/2015
C305	Mechanical Mixing of Hydraulic Cement Pastes and Mortars of Plastic Consistency	04/14/2015
C311 (Loss on Ignition)	Sampling and Testing Fly Ash or Natural Pozzolans for Use in Portland-Cement Concrete (Loss on Ignition)	04/14/2015
C430	Fineness of Hydraulic Cement by the 45- $\mu$ m (No. 325) Sieve	04/14/2015
C511	Moist Cabinets, Moist Rooms, and Water Storage Tanks Used in the testing of Hydraulic Cements and Concretes	04/14/2015
C1437	Flow of Hydraulic Cement Mortar	04/14/2015