PART 1—STANDARD SPECIFICATIONS AND STANDARD PRACTICES

Subject Sequence Table of Contents — Release: Group 1 (April 2020)

STD. NO.	TITLE
R 10-06 (2020)	Definition of Terms Related to Quality and Statistics as Used in Highway Construction
R 25-19	Technician Training and Certification Programs
R 34-03 (2018)	Evaluating Deicing Chemicals
R 44-07 (2018)	Independent Assurance (IA) Programs
R 89-18	Accreditation Bodies Operating in the Fields of Construction Materials Testing and Inspection
	PAVEMENT SURFACE AND STRUCTURE CHARACTERISTICS
M 328-14 (2018)	Inertial Profiler
M 331-17	Smoothness of Pavement in Weigh-in-Motion (WIM) Systems
R 36-17	Evaluating Faulting of Concrete Pavements
R 37-04 (2018)	Application of Ground Penetrating Radar (GPR) to Highways
R 40-10 (2018)	Measuring Pavement Profile Using a Rod and Level
R 43-13 (2017)	Quantifying Roughness of Pavements
R 54-14 (2018)	Accepting Pavement Ride Quality When Measured Using Inertial Profiling Systems
R 56-14 (2018)	Certification of Inertial Profiling Systems
R 57-14 (2018)	Operating Inertial Profiling Systems
R 85-18	Quantifying Cracks in Asphalt Pavement Surfaces from Collected Pavement Images Utilizing Automated Methods
R 86-18	Collecting Images of Pavement Surfaces for Distress Detection
R 87-18	Determining Pavement Deformation Parameters and Cross Slope from Collected Transverse Profiles
R 88-18	Collecting the Transverse Pavement Profile
	QUALITY ASSURANCE
R 9-05 (2018)	Acceptance Sampling Plans for Highway Construction
R 18-18	Establishing and Implementing a Quality Management System for Construction Materials Testing Laboratories
R 20-99 (2017)	Procedures for Measuring Highway Noise
R 38-10 (2018)	Quality Assurance of Standard Manufactured Materials
R 42-06 (2020)	Developing a Quality Assurance Plan for Hot Mix Asphalt (HMA)
R 61-12 (2020)	Establishing Requirements for Equipment Calibrations, Standardizations, and Checks
R 65-14 (2018)	Evaluating the Engineering and Environmental Suitability of Recycled Materials
	SOILS AND STABILIZATION
M 216-13 (2017)	Quicklime and Hydrated Lime for Soil Stabilization
R 21-96 (2019)	Drilling for Subsurface Investigations—Unexpectedly Encountering Suspected Hazardous Material
R 22-97 (2015)	Decommissioning Geotechnical Exploratory Boreholes
	TESTING EQUIPMENT
M 152M/M 152-16 (2020)	Flow Table for Use in Tests of Hydraulic Cement
M 201-15 (2020)	Mixing Rooms, Moist Cabinets, Moist Rooms, and Water Storage Tanks Used in the Testing of Hydraulic Cements and Concretes
M 261-18	Rib-Tread Standard Tire for Special-Purpose Pavement Frictional-Property Tests

STD. NO.	TITLE
M 286-18	Smooth-Tread Standard Tire for Special-Purpose Pavement Frictional-Property Tests
R 32-20	Calibrating the Load Cell and Deflection Sensors for a Falling Weight Deflectometer
R 33-20	Calibrating the Reference Load Cell Used for Reference Calibrations for a Falling Weight Deflectometer
	DELETED STANDARD
R 41-05 (2015)	Measuring Pavement Profile Using a Dipstick®

PART 1—STANDARD SPECIFICATIONS AND STANDARD PRACTICES

Numerical Sequence Table of Contents — Release: Group 1 (April 2020)

STD. NO.	TITLE
R 34-03 (2018)	Evaluating Deicing Chemicals
R 36-17	Evaluating Faulting of Concrete Pavements
R 37-04 (2018)	Application of Ground Penetrating Radar (GPR) to Highways
R 38-10 (2018)	Quality Assurance of Standard Manufactured Materials
R 39-19	Making and Curing Concrete Test Specimens in the Laboratory
R 40-10 (2018)	Measuring Pavement Profile Using a Rod and Level
R 42-06 (2020)	Developing a Quality Assurance Plan for Hot Mix Asphalt (HMA)
R 43-13 (2017)	Quantifying Roughness of Pavements
R 44-07 (2018)	Independent Assurance (IA) Programs
R 54-14 (2018)	Accepting Pavement Ride Quality When Measured Using Inertial Profiling Systems
R 56-14 (2018)	Certification of Inertial Profiling Systems
R 57-14 (2018)	Operating Inertial Profiling Systems
R 60-12 (2020)	Sampling Freshly Mixed Concrete
R 61-12 (2020)	Establishing Requirements for Equipment Calibrations, Standardizations, and Checks
R 64-17	Sampling and Fabrication of 50-mm (2-in.) Cube Specimens Using Grout (Non-Shrink) or Mortar
R 65-14 (2018)	Evaluating the Engineering and Environmental Suitability of Recycled Materials
R 70M/R 70-18	Use of Apparatus for the Determination of Length Change of Hardened Cement Paste, Mortar, and Concrete
R 71-16 (2020)	Sampling and Amount of Testing of Hydraulic Cement
R 72-16 (2020)	Match Curing of Concrete Test Specimens
R 80-17	Determining the Reactivity of Concrete Aggregates and Selecting Appropriate Measures for Preventing Deleterious Expansion in New Concrete Construction
R 81-17	Static Segregation of Hardened Self-Consolidating Concrete (SCC) Cylinders
R 85-18	Quantifying Cracks in Asphalt Pavement Surfaces from Collected Pavement Images Utilizing Automated Methods
R 86-18	Collecting Images of Pavement Surfaces for Distress Detection
R 87-18	Determining Pavement Deformation Parameters and Cross Slope from Collected Transverse Profiles
R 88-18	Collecting the Transverse Pavement Profile
R 89-18	Accreditation Bodies Operating in the Fields of Construction Materials Testing and Inspection
	DELETED STANDARD
R 41-05 (2015)	Measuring Pavement Profile Using a Dipstick®

LIST OF TECHNICAL CHANGES—PART 1

The balloted technical changes listed below are also indicated in the specifications by a change bar in the left margin. Unballoted editorial changes do not receive the change bar; however, any standard that is neither revised nor reconfirmed but contains such changes does include an endnote stating that minor editorial revisions have been made.

Release: Group 1 (April 2020)

Designation Number	Title	Technical Subcommittee Number	Balloted Revisions
M 85-20	Portland Cement	3a	Changed Section 9.1.4 and a row heading in Table 4 from "false set" to "early stiffening" to more accurately reflect the results of T 186 testing.
M 152M/M 152-16 (2020)	Flow Table for Use in Tests of Hydraulic Cement	3a	Reconfirmed for 2020 publication.
M 154M/M 154-12 (2020)	Air-Entraining Admixtures for Concrete	3b	Reconfirmed for 2020 publication.
M 201-15 (2020)	Mixing Rooms, Moist Cabinets, Moist Rooms, and Water Storage Tanks Used in the Testing of Hydraulic Cements and Concretes	3a	Reconfirmed for 2020 publication.
M 216-13 (2017)	Quicklime and Hydrated Lime for Soil Stabilization	3a	Editorially revised: ASTM equivalency designation number updated to C977-18.
M 224-91 (2019)	Use of Protective Sealers for Portland Cement Concrete	5b	Administratively moved from TS 5b to TS 4b and thus from Group 1 to Group 2; no technical changes.
M 240M/M 240-20	Blended Hydraulic Cement	3a	Added language in Section 15.6 to note that the chloride content of a cement is available upon request.
M 302-19	Slag Cement for Use in Concrete and Mortars	3b	Editorially revised: Note 4 added for clarification and ASTM harmonization.
R 10-16 (2020)	Definition of Terms Related to Quality and Statistics as Used in Highway Construction	5c	Reconfirmed for 2020 publication.
R 32-20	Calibrating the Load Cell and Deflection Sensors for a Falling Weight Deflectometer	5a	Revised extensively to reflect current industry practice, incorporate new calibration software requirements, and incorporate feedback and recommendations from users of the standards.

Designation Number	Title	Technical Subcommittee Number	Balloted Revisions
R 33-20	Calibrating the Reference Load Cell Used for Reference Calibrations for a Falling Weight Deflectometer	5a	Revised extensively to reflect current industry practice, incorporate new calibration software requirements, and incorporate feedback and recommendations from users of the standards.
R 42-06 (2020)	Developing a Quality Assurance Plan for Hot Mix Asphalt (HMA)	5c	Reconfirmed for 2020 publication.
R 60-12 (2020)	Sampling Freshly Mixed Concrete	3b	Reconfirmed for 2020 publication.
R 61-12 (2020)	Establishing Requirements for Equipment Calibrations, Standardizations, and Checks	5c	Reconfirmed for 2020 publication.
R 71-16 (2020)	Sampling and Amount of Testing of Hydraulic Cement	3a	Reconfirmed for 2020 publication.
R 72-16 (2020)	Match Curing of Concrete Test Specimens	3c	Reconfirmed for 2020 publication.

PART 2— STANDARD METHODS OF TEST

Subject Sequence Table of Contents **Release: Group 1 (April 2020)**

STD. NO.	TITLE
T 347-13 (2017)	Slump Flow of Self-Consolidating Concrete (SCC)
T 348-13 (2018)	Air-Void Characteristics of Freshly Mixed Concrete by Buoyancy Change
T 349-13 (2017)	Filling Capacity of Self-Consolidating Concrete Using the Caisson Test
T 351-14 (2018)	Visual Stability Index (VSI) of Self-Consolidating Concrete (SCC)
T 352-14 (2018)	Determining Formwork Pressure of Fresh Self-Consolidating Concrete (SCC) Using Pressure Transducers
T 356-15 (2019)	Determining Air Content of Hardened Portland Cement Concrete by High-Pressure Air Meter
T 357-15 (2019)	Predicting Chloride Penetration of Hydraulic Cement Concrete by the Rapid Migration Procedure
T 358-19	Surface Resistivity Indication of Concrete's Ability to Resist Chloride Ion Penetration
T 359M/T 359-18	Pavement Thickness by Magnetic Pulse Induction
T 363-17	Evaluating Stress Development and Cracking Potential due to Restrained Volume Change Using a Dual Ring Test
T 364-17	Determination of Composite Activation Energy of Aggregates due to Alkali–Silica Reaction (Chemical Method)
T 365-20	Quantifying Calcium Oxychloride Amounts in Cement Pastes Exposed to Deicing Salts
T 379-18	Nonlinear Impact Resonance Acoustic Spectroscopy (NIRAS) for Concrete Specimens with Damage from Alkali–Silica Reaction (ASR)
	HYDRAULIC CEMENT
T 98M/T 98-12 (2020)	Fineness of Portland Cement by the Turbidimeter
T 105-20	Chemical Analysis of Hydraulic Cement
T 106M/T 106-18	Compressive Strength of Hydraulic Cement Mortar (Using 50-mm or 2-in. Cube Specimens)
T 107M/T 107-18	Autoclave Expansion of Hydraulic Cement
T 129-14 (2018)	Amount of Water Required for Normal Consistency of Hydraulic Cement Paste
T 131-20	Time of Setting of Hydraulic Cement by Vicat Needle
T 132-87 (2018)	Tensile Strength of Hydraulic Cement Mortars
T 133-19	Density of Hydraulic Cement
T 137-12 (2020)	Air Content of Hydraulic Cement Mortar
T 153-20	Fineness of Hydraulic Cement by Air Permeability Apparatus
T 154-18	Time of Setting of Hydraulic Cement by Gillmore Needles
T 162-16 (2020)	Mechanical Mixing of Hydraulic Cement Pastes and Mortars of Plastic Consistency
T 185-15 (2020)	Early Stiffening of Hydraulic Cement (Mortar Method)
T 186-20	Early Stiffening of Hydraulic Cement (Paste Method)
T 188-05 (2017)	Evaluation by Freezing and Thawing of Air-Entraining Additions to Hydraulic Cement
T 192-19	Fineness of Hydraulic Cement by the 45-µm (No. 325) Sieve
T 323-03 (2020)	Determining the Shear Strength at the Interface of Bonded Layers of Portland Cement Concrete
T 353-14 (2018)	Particle Size Analysis of Hydraulic Cement and Related Materials by Light Scattering
	MISCELLANEOUS
T 256-01 (2020)	Pavement Deflection Measurements

STD. NO.	TITLE
	PAVEMENT SURFACE AND STRUCTURE CHARACTERISTICS
T 242-18	Frictional Properties of Paved Surfaces Using a Full-Scale Tire
T 278-90 (2017)	Surface Frictional Properties Using the British Pendulum Tester
T 282-01 (2019)	Calibrating a Wheel Force or Torque Transducer Using a Calibration Platform (User Level)
T 317-04 (2018)	Prediction of Asphalt-Bound Pavement Layer Temperatures
T 360-16 (2020)	Measurement of Tire/Pavement Noise Using the On-Board Sound Intensity (OBSI) Method
T 389-20	Determining the Influence of Road Surfaces on Vehicle Noise Using the Statistical Isolated Pass-By (SIP) Method
T 390-20	Determining the Influence of Road Surfaces on Traffic Noise Using the Continuous-Flow Traffic Time-Integrated Method (CTIM)
	SOILS AND STABILIZATION
T 218-86 (2018)	Sampling Hydrated Lime
T 219-87 (2018)	Testing Lime for Chemical Constituents and Particle Sizes
T 232-90 (2018)	Determination of Lime Content in Lime-Treated Soils by Titration
	DELETED STANDARD
None	

PART 2— STANDARD METHODS OF TEST

Numerical Sequence Table of Contents — Release: Group 1 (April 2020)

STD. NO.	TITLE
T 218-86 (2018)	Sampling Hydrated Lime
T 219-87 (2018)	Testing Lime for Chemical Constituents and Particle Sizes
T 231-17	Capping Cylindrical Concrete Specimens
T 232-90 (2018)	Determination of Lime Content in Lime-Treated Soils by Titration
T 242-18	Frictional Properties of Paved Surfaces Using a Full-Scale Tire
T 256-01 (2020)	Pavement Deflection Measurements
T 259-02 (2017)	Resistance of Concrete to Chloride Ion Penetration
T 260-97 (2020)	Sampling and Testing for Chloride Ion in Concrete and Concrete Raw Materials
T 276-17	Measuring Early-Age Compression Strength and Projecting Later-Age Strength
T 277-15 (2019)	Electrical Indication of Concrete's Ability to Resist Chloride Ion Penetration
T 278-90 (2017)	Surface Frictional Properties Using the British Pendulum Tester
T 279-18	Accelerated Polishing of Aggregates Using the British Wheel
T 282-01 (2019)	Calibrating a Wheel Force or Torque Transducer Using a Calibration Platform (User Level)
T 309-20	Temperature of Freshly Mixed Portland Cement Concrete
T 317-04 (2018)	Prediction of Asphalt-Bound Pavement Layer Temperatures
T 318-15 (2019)	Water Content of Freshly Mixed Concrete Using Microwave Oven Drying
T 323-03 (2020)	Determining the Shear Strength at the Interface of Bonded Layers of Portland Cement Concrete
T 325-04 (2020)	Estimating the Strength of Concrete in Transportation Construction by Maturity Tests
T 332-07 (2020)	Determining Chloride Ions in Concrete and Concrete Materials by Specific Ion Probe
T 334-08 (2020)	Estimating the Cracking Tendency of Concrete
T 336-15 (2019)	Coefficient of Thermal Expansion of Hydraulic Cement Concrete
T 345-12 (2020)	Passing Ability of Self-Consolidating Concrete (SCC) by J-Ring
T 347-13 (2017)	Slump Flow of Self-Consolidating Concrete (SCC)
T 348-13 (2018)	Air-Void Characteristics of Freshly Mixed Concrete by Buoyancy Change
T 349-13 (2017)	Filling Capacity of Self-Consolidating Concrete Using the Caisson Test
T 351-14 (2018)	Visual Stability Index (VSI) of Self-Consolidating Concrete (SCC)
T 352-14 (2018)	Determining Formwork Pressure of Fresh Self-Consolidating Concrete (SCC) Using Pressure Transducers
T 353-14 (2018)	Particle Size Analysis of Hydraulic Cement and Related Materials by Light Scattering
T 356-15 (2019)	Determining Air Content of Hardened Portland Cement Concrete by High-Pressure Air Meter
T 357-15 (2019)	Predicting Chloride Penetration of Hydraulic Cement Concrete by the Rapid Migration Procedure
T 358-19	Surface Resistivity Indication of Concrete's Ability to Resist Chloride Ion Penetration
T 359M/T 359-18	Pavement Thickness by Magnetic Pulse Induction
T 360-16 (2020)	Measurement of Tire/Pavement Noise Using the On-Board Sound Intensity (OBSI) Method
T 363-17	Evaluating Stress Development and Cracking Potential due to Restrained Volume Change Using a Dual Ring Test
T 364-17	Determination of Composite Activation Energy of Aggregates due to Alkali-Silica Reaction (Chemical Method)
T 365-20	Quantifying Calcium Oxychloride Amounts in Cement Pastes Exposed to Deicing Salts
T 379-18	Nonlinear Impact Resonance Acoustic Spectroscopy (NIRAS) for Concrete Specimens with Damage from Alkali–Silica Reaction (ASR)
T 380-19	Potential Alkali Reactivity of Aggregates and Effectiveness of ASR Mitigation Measures (Miniature Concrete Prism Test, MCPT)

STD. NO.	TITLE
T 389-20	Determining the Influence of Road Surfaces on Vehicle Noise Using the Statistical Isolated Pass-By (SIP) Method
T 390-20	Determining the Influence of Road Surfaces on Traffic Noise Using the Continuous-Flow Traffic Time-Integrated Method (CTIM)

DELETED STANDARD
None

LIST OF TECHNICAL CHANGES—PART 2

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Release: Group 1 (April 2020)

Designation Number	Title	Technical Subcommittee Number	Balloted Revisions
T 22M/T 22-20	Compressive Strength of Cylindrical Concrete Specimens	3c	Revised extensively for equivalency with ASTM C39/C39M-18, including change to dual units.
T 98M/T 98-12 (2020)	Fineness of Portland Cement by the Turbidimeter	3a	Reconfirmed for 2020 publication.
T 105-20	Chemical Analysis of Hydraulic Cement	3a	Revised Sections 2.1, 3.1, 6.3.2, and 21.3.4 for equivalency with ASTM C114-18.
T 121M/T 121-19	Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete	3b	Editorially revised: Minor revisions to Section 8.
T 131-20	Time of Setting of Hydraulic Cement by Vicat Needle	3a	Revised Section 6.2 for equivalency with ASTM C191-18.
T 137-12 (2020)	Air Content of Hydraulic Cement Mortar	3a	Reconfirmed for 2020 publication.
T 140-20	Compressive Strength of Concrete Using Portions of Beams Broken in Flexure	3c	Revised Section 8.1.3 and Figure 1 for greater clarity.
T 153-20	Fineness of Hydraulic Cement by Air Permeability Apparatus	3a	Revised extensively for equivalency with ASTM C204-18.
T 157-12 (2020)	Air-Entraining Admixtures for Concrete	3b	Reconfirmed for 2020 publication.
T 162-16 (2020)	Mechanical Mixing of Hydraulic Cement Pastes and Mortars of Plastic Consistency	3a	Reconfirmed for 2020 publication.
T 185-15 (2020)	Early Stiffening of Hydraulic Cement (Mortar Method)	3a	Reconfirmed for 2020 publication.
T 186-20	Early Stiffening of Hydraulic Cement (Paste Method)	3a	Revised Sections 6.5 and 6.8 for equivalency with ASTM C451-18.
T 256-01 (2020)	Pavement Deflection Measurements	5a	Reconfirmed for 2020 publication.

Designation Number	Title	Technical Subcommittee Number	Balloted Revisions
T 260-97 (2020)	Sampling and Testing for Chloride Ion in Concrete and Concrete Raw Materials	3c	Reconfirmed for 2020 publication.
T 309-20	Temperature of Freshly Mixed Portland Cement Concrete	3b	Revised to move include information about larger-aggregate concrete from Section 8.4.1 to Section 3.2.1.
T 323-03 (2020)	Determining the Shear Strength at the Interface of Bonded Layers of Portland Cement Concrete	3c	Reconfirmed for 2020 publication.
T 325-04 (2020)	Estimating the Strength of Concrete in Transportation Construction by Maturity Tests	3b	Reconfirmed for 2020 publication.
T 332-07 (2020)	Determining Chloride Ions in Concrete and Concrete Materials by Specific Ion Probe	3c	Reconfirmed for 2020 publication.
T 334-08 (2020)	Estimating the Cracking Tendency of Concrete	3c	Reconfirmed for 2020 publication.
T 345-12 (2020)	Passing Ability of Self-Consolidating Concrete (SCC) by J-Ring	3b	Reconfirmed for 2020 publication.
T 360-16 (2020)	Measurement of Tire/Pavement Noise Using the On-Board Sound Intensity (OBSI) Method	5a	Reconfirmed for 2020 publication.
T 365-20	Quantifying Calcium Oxychloride Amounts in Cement Pastes Exposed to Deicing Salts	3c	Revised extensively.
T 389-20	Determining the Influence of Road Surfaces on Vehicle Noise Using the Statistical Isolated Pass-By (SIP) Method	5a	Adopted AASHTO Provisional standard TP 98 as a full standard method of test, T 389.
T 390-20	Determining the Influence of Road Surfaces on Traffic Noise Using the Continuous-Flow Traffic Time-Integrated Method (CTIM)	5a	Adopted AASHTO Provisional standard TP 99 as a full standard method of test, T 390.

PART 3—AASHTO PROVISIONAL STANDARDS

Subject Sequence Table of Contents **Release: Group 1 (April 2020)**

STD. NO.	TITLE
PP 90-18 (2020)	Sand Seal Design
PP 91-18 (2020)	Emulsified Asphalt Scrub Seal Design
TP 98-18	*Adopted*—Determining the Influence of Road Surfaces on Vehicle Noise Using the Statistical Isolated Pass-By Method (SIP)
TP 99-18	*Adopted*—Determining the Influence of Road Surfaces on Traffic Noise Using the Continuous-Flow Traffic Time-Integrated Method (CTIM)
	QUALITY ASSURANCE
MP 39-19	File Format of Intelligent Compaction Data
PP 97-19	Determination of Constant Mass
PP 98-20	Asphalt Surface Dielectric Profiling System Using Ground Penetrating Radar
	DELETED STANDARDS
None	

Note: For the disposition of provisional standards not listed above, see the Provisionals History.

PART 3—AASHTO PROVISIONAL STANDARDS

Numerical Sequence Table of Contents Release: Group 1 (April 2020)

STD. NO.	TITLE
	SPECIFICATIONS
MP 22-13 (2020)	Fiber-Reinforced Polymer Composite Materials for Highway and Bridge Structures
MP 27-16 (2020)	Materials for Emulsified Asphalt Chip Seals
MP 28-17 (2020)	Materials for Microsurfacing
MP 32-17	Materials for Slurry Seal
MP 33-17	Materials for Emulsified Asphalt Fog Seal
MP 34-18 (2020)	Materials for Sand Seals
MP 39-19	File Format of Intelligent Compaction Data
MP 43-20	Materials for Emulsified Asphalt Scrub Seal
MP 44-20	Materials for Ultrathin Bonded Wearing Course
MP 45-20	Materials for Full-Depth Reclamation Mixtures with Emulsified Asphalt
	PRACTICES
PP 80-20	Continuous Thermal Profile of Asphalt Mixture Construction
PP 81-18 (2020)	Intelligent Compaction Technology for Embankment and Asphalt Pavement Applications
PP 82-16 (2020)	Emulsified Asphalt Chip Seal Design
PP 83-16 (2020)	Microsurfacing Design
PP 84-20	Performance Engineered Concrete Pavement Mixtures
PP 87-20	Slurry Seal Design

STD. NO.	TITLE
PP 88-17	Emulsified Asphalt Fog Seal Design
PP 89-19 (2020)	Grinding the Ends of Cylindrical Concrete Specimens
PP 90-18 (2020)	Sand Seal Design
PP 91-18 (2020)	Emulsified Asphalt Scrub Seal Design
PP 97-19	Determination of Constant Mass
PP 98-20	Asphalt Surface Dielectric Profiling System Using Ground Penetrating Radar
PP 100-20	Ultrathin Bonded Wearing Course Design
PP 101-20	Emulsified Asphalt Content of Full-Depth Reclamation Mixture Design
	TESTS
TP 98-18	*Adopted*—Determining the Influence of Road Surfaces on Vehicle Noise Using the Statistical Isolated Pass-By Method (SIP)
TP 99-18	*Adopted*—Determining the Influence of Road Surfaces on Traffic Noise Using the Continuous-Flow Traffic Time-Integrated Method (CTIM)
TP 118-17 (2018)	Characterization of the Air-Void System of Freshly Mixed Concrete by the Sequential Pressure Method
TP 119-15 (2019)	Electrical Resistivity of a Concrete Cylinder Tested in a Uniaxial Resistance Test
TP 129-18 (2020)	Vibrating Kelly Ball (VKelly) Penetration in Fresh Portland Cement Concrete
TP 135-20	Determining the Total Pore Volume in Hardened Concrete Using Vacuum Saturation
TP 136-20	Determining the Degree of Saturation of Hydraulic-Cement Concrete
TP 137-20	Box Test in Slip Form Paving of Fresh Portland Cement Concrete
	DELETED STANDARDS
None	

Note: For the disposition of provisional standards not listed above, see the Provisionals History.

LIST OF TECHNICAL CHANGES—PART 3

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Release: Group 1 (April 2020)

Designation Number	Title	Technical Subcommittee Number	Balloted Revisions
MP 22-13 (2020)	Fiber-Reinforced Polymer Composite Materials for Highway and Bridge Structures	5b	Extended for 2020 publication; Year 8 of 8 in Provisional life cycle.
MP 27-16 (2020)	Materials for Emulsified Asphalt Chip Seals	5b	Reconfirmed for 2020 publication.
MP 28-17 (2020)	Materials for Microsurfacing	5b	Reconfirmed for 2020 publication. Title editorially revised from “Micro Surfacing” to “Microsurfacing.”
MP 34-18 (2020)	Materials for Sand Seals	5b	Reconfirmed for 2020 publication.
MP 35-18 (2020)	Thin Overlay Treatments Using a Binder Resin System and Aggregate for Concrete Surfaces	5b	Administratively moved from TS 5b to TS 4b and thus from Group 1 to Group 2; no technical changes. Reconfirmed for June 2020 publication.
MP 43-20	Materials for Emulsified Asphalt Scrub Seal	5b	New Provisional standard.
MP 44-20	Materials for Ultrathin Bonded Wearing Course	5b	New Provisional standard.
MP 45-20	Materials for Full-Depth Reclamation Mixtures with Emulsified Asphalt	5b	New Provisional standard.
PP 80-20	Continuous Thermal Profile of Asphalt Mixture Construction	5c	Revised temperature range in Table 1 to read 60 to 250°C (140 to 480°F).
PP 81-18 (2020)	Intelligent Compaction Technology for Embankment and Asphalt Pavement Applications	5c	Extended for 2020 publication; Year 7 of 8 in Provisional life cycle.
PP 82-16 (2020)	Emulsified Asphalt Chip Seal Design	5b	Reconfirmed for 2020 publication.
PP 83-16 (2020)	Microsurfacing Design	5b	Reconfirmed for 2020 publication.

PP 84-20	Developing Performance Engineered Concrete Pavement Mixtures	3c	Revised extensively, including removal of several appendixes: • Appendix X1 is addressed in Section 6.4.1.1. • Appendix X2 is addressed in Sections 6.6.1.2 and 6.6.2. • Appendix X3 has become a new Provisional method of test, TP 137. • Appendix X5 is included in Section 6.5.2.1. • Appendix X6 is now a PP 84 Guidance Document, which will be maintained until PP 84 is no longer a Provisional standard or it is no longer needed. • Section 6.5.2.1 references two new Provisional methods of test, TP 135 and TP 136.
PP 87-20	Slurry Seal Design	5b	Revisions to Sections 6.1, 9.1, and 11.2.
PP 89-19 (2020)	Grinding the Ends of Cylindrical Concrete Specimens	3c	Reconfirmed for 2020 publication.
PP 90-18 (2020)	Sand Seal Design	5b	Reconfirmed for 2020 publication.
PP 91-18 (2020)	Emulsified Asphalt Scrub Seal Design	5b	Reconfirmed for 2020 publication.
PP 98-20	Asphalt Surface Dielectric Profiling System Using Ground Penetrating Radar	5c	Revised in several sections to clarify equipment requirements.
PP 101-20	Emulsified Asphalt Content of Full-Depth Mixture Design	5b	New Provisional standard practice.
TP 98-18	Determining the Influence of Road Surfaces on Vehicle Noise Using the Statistical Isolated Pass-By (SIP) Method	5a	Adopted as full standard test T 389; no revisions made.
TP 99-18	Determining the Influence of Road Surfaces on Traffic Noise Using the Continuous-Flow Traffic Time-Integrated Method (CTIM)	5a	Adopted as full standard test T 390; no revisions made.
TP 129-18 (2020)	Vibrating Kelly Ball (VKelly) Penetration in Fresh Portland Cement Concrete	3c	Reconfirmed for 2020 publication.
TP 135-20	Total Pore Volume in Hardened Concrete Using Vacuum Saturation	3c	New Provisional standard method of test.
TP 136-20	Degree of Saturation of Hydraulic-Cement Concrete	3c	New Provisional standard method of test.
TP 137-20	Box Test in Slip Form Paving of Fresh Portland Cement Concrete	3b	New Provisional standard method of test.

COMPREHENSIVE HISTORY OF CURRENT AND FORMER AASHTO PROVISIONAL MATERIALS STANDARDS AND TEST METHODS

APRIL 2020

Provisional Standard Number	Title	First Publ. Year	Final Disposition	Disposit. Year	Full Std. No.
MP 1	Performance Graded Asphalt Binder	1994	Adopted	2002	M 320
MP 1a	Performance Graded Asphalt Binder	1996	Adopted	2005	
MP 2	Superpave Volumetric Mix Design	1996	Adopted	2004	M 323
MP 5	Bridge Deck Cathodic Protection	1996	Deleted	1999	—
MP 6	Corrugated Polyethylene Pipe, 1050 and 1200 mm Diameter	1996	Adopted	1999	M 294
MP 7	Corrugated Polyethylene Pipe, 1350 and 1500 mm Diameter	1998	Adopted	2003	
MP 8	Designing Stone Matrix Asphalt (SMA)	2000	Adopted	2008	M 325
MP 9	Compost for Erosion/Sediment Control (Filter Berms)	2003	Adopted	2010	R 51
MP 10	Compost for Erosion/Sediment Control (Compost Blankets)	2003	Adopted	2010	R 52
MP 11	Inertial Profiler	2003	Adopted	2010	M 328
MP 12	Detectable Warning Surfaces	2004	Adopted	2015	M 333
MP 13	Stainless Clad Deformed and Plain Round Steel Bars for Concrete Reinforcement	2004	Adopted	2011	M 329
MP 14	Smoothness of Pavement at the Approaches to Weight-in-Motion (WIM) Scales	2005	Adopted	2013	M 331
MP 15	Use of Reclaimed Asphalt Shingles as an Additive in Hot-Mix Asphalt	2006	Deleted	2014	—
MP 16	Reclaimed Concrete Aggregate for Use as Coarse Aggregate in Hydraulic Cement	2007	Adopted	2016 (August)	R 77
MP 17	Pavement Ride Quality When Measured Using Inertial Profiling Systems	2004	Adopted	2010	R 54
MP 18	Uncoated, Corrosion-Resistant, Deformed and Plain Chromium Alloyed, Billet-Steel Bars for Concrete Reinforcement and Dowels	2009	Adopted	2017 (June)	M 334M/M 334 and T 372M/T 372 through T 376M/T 376
MP 19	Performance-Graded Asphalt Binder Using Multiple Stress Creep Recovery (MSCR) Test	2010	Adopted	2014	M 332

Provisional Standard Number	Title	First Publ. Year	Final Disposition	Disposit. Year	Full Std. No.
MP 20	Steel-Reinforced Polyethylene (PE) Ribbed Pipe, 300- to 1500-mm (12- to 60-in.) Diameter	2010	Adopted	2018 (June)	M 335
MP 21	Polypropylene Pipe, 300- to 500-mm (12- to 60-in.)	2011	Adopted	2013	M 330
MP 22	Fiber-Reinforced Polymer Composite Materials for Highway and Bridge Structures	2013			
MP 23	Reclaimed Asphalt Shingles for Use in Asphalt Mixtures	2014			
MP 24	Waterborne White and Yellow Traffic Paints	2014			
MP 25	Performance-Graded Hot-Poured Asphalt Crack Sealant	2015			
MP 26	Cotton Duck Fabric Bridge Bearings	2015			
MP 27	Materials for Emulsified Asphalt Chip Seals	2016			
MP 28	Materials for Microsurfacing	2016			
MP 29	*This standard number was inadvertently skipped.*				
MP 30	Steel Wire and Welded Wire, Plain and Deformed, for Concrete Reinforcement	2017	Adopted	2018 (June)	M 336M/M 336
MP 31	Materials for Cold Recycled Mixtures with Emulsified Asphalt	2017			
MP 32	Materials for Slurry Seal	2017			
MP 33	Materials for Emulsified Asphalt Fog Seal	2017			
MP 34	Materials for Sand Seals	2018			
MP 35	Thin Overlay Treatments Using a Binder Resin System and Aggregate for Concrete Surfaces	2018			
MP 36	Materials for Asphalt Tack Coat	2018			
MP 37	Performance-Graded Asphalt Binder for Surface Treatments	2018			
MP 38	Mix Design of Cold Recycled Mixture with Foamed Asphalt	2018			
MP 39	File Format of Intelligent Construction Data	2019			
MP 40	Steel-Reinforced Polyethylene (PE) Ribbed Pipe 1650- to 3000-mm (66- to 120-in.) Diameter	2019			
MP 41	High Friction Surface Treatment for Asphalt and Concrete Pavements Using Calcined Bauxite	2019			

Provisional Standard Number	Title	First Publ. Year	Final Disposition	Disposit. Year	Full Std. No.
MP 42	*Preassigned to standard balloted in 2018; ballot comments now addressed, slated for June 2020 release.*				
MP 43	Materials for Emulsified Asphalt Scrub Seal	2020			
MP 44	Materials for Ultrathin Bonded Wearing Course	2020			
MP 45	Materials for Full-Depth Reclamation Mixtures with Emulsified Asphalt	2020			
PP 1	Accelerated Aging of Asphalt Binder Using a Pressurized Aging Vessel (PAV)	1994	Adopted	2002	R 28
PP 2	Mixture Conditioning of Hot-Mix Asphalt (HMA)	1995	Adopted	2002	R 30
PP 3	Preparing Hot Mix Asphalt (HMA) Specimens by Means of the Rolling Wheel Compactor	1995	Deleted	2003	—
PP 5	Laboratory Evaluation of Modified Asphalt Systems	1994	Deleted	1998	—
PP 6	Grading or Verifying the Performance Grade of an Asphalt Binder	1994	Adopted	2002	R 29
PP 7	Calibrating the Load Cell and Deflection Sensors for a Falling Weight Deflectometer	1995	Adopted	2003	R 32
PP 8	Calibrating the Reference Load Cell Used for reference Calibrations for Falling Weight Deflectometer	1995	Adopted	2003	R 33
PP 10	Operational Guidelines on Test Pits for Evaluating Pavement Performance	1994	Deleted	1995	—[a]
PP 19	Volumetric Analysis of Compacted Hot Mix Asphalt (HMA)	1994	Deleted	2002	—
PP 20	Evaluating the Performance of Crack Sealing Treatments on Asphalt Surfaced Pavement	1995	Deleted	2004	—
PP 21	Testing and Evaluating Cold Mix Patching Materials	1995	Deleted	2002	—
PP 22	Selecting and Specifying Crack Sealants for Asphalt Surfaced Pavement	1996	Deleted	2002	—
PP 23	Evaluating the Condition of Portland Cement Concrete Bridge Components	1996	Deleted	2003	—
PP 25	Evaluating the Performance of Joint Seals in Portland Cement Concrete Pavement	1996	Deleted	2002	—
PP 26	Certifying Suppliers of Performance Graded Asphalt Binders	1997	Adopted	2001	R 26
PP 28	Superpave Volumetric Design for Hot-Mix Asphalt (HMA)	1996	Adopted	2004	R 35

Provisional Standard Number	Title	First Publ. Year	Final Disposition	Disposit. Year	Full Std. No.
PP 29	Evaluating Deicing Chemicals	1996	Adopted	2003	R 34
PP 30	Evaluation of Coating Systems with Zinc Rich Primers	1996	Adopted	2002	R 31
PP 31	Measuring Pavement Profile Using a Rod and Level	1997	Adopted	2005	R 40
PP 32	Measuring Pavement Profile Using a Dipstick®	1997	Adopted	2005	R 41
PP 33	Decommissioning Geotechnical Exploratory Boreholes	1997	Adopted	1998	R 22
PP 34	Estimating the Cracking Tendency of Concrete	1998	Adopted	2008	T 334
PP 35	Evaluation of Superpave™ Gyratory Compactors (SGCs)	1998	Deleted	2007	—
PP 36	Assessment of Corrosion of Steel Piling for Non-Marine Applications	1998	Adopted	2002	R 27
PP 37	Determination of International Roughness Index (IRI) to Quantify Roughness of Pavements	1999	Combined and Adopted	2007	R 43M/ R 43
PP 37M	Quantifying Roughness of Pavements	1999			
PP 38	Determining Maximum Rut Depth in Asphalt Pavements	1999	Adopted	2008	R 48
PP 39	Estimating Faulting of Concrete Pavements	1999	Adopted	2004	R 36
PP 40	Application of Ground Penetrating Radar (GPR) to Highways	2000	Adopted	2004	R 37
PP 41	Designing Stone Matrix Asphalt (SMA)	2000	Adopted	2008	R 46
PP 42	Determination of Low-Temperature Performance Grade (PG) of Asphalt Binders	2001	Adopted	2009	R 49
PP 44	Quantifying Cracks in Asphalt Pavement Surface	2001	Adopted	2010	R 55
PP 45	Qualification of Deformed and Plain Steel Bar Producing Mills	2001	Adopted	2010	R 53
PP 46	Geosynthetic Reinforcement of the Aggregate Base Course of Flexible Pavement Structures	2001	Adopted	2009	R 50
PP 47	Evaluation of Different Superpave™ Gyratory Compactors (SGCs) Used in the Design and the Field Management of Superpave™ Mixtures	2002	Deleted	2009	—
PP 48	Evaluation of the Superpave™ Gyratory Compactor (SGC) Internal Angle of Gyration	2003	Deleted	2010	—
PP 49	Certification of Inertial Profiling Systems	2003	Adopted	2010	R 56
PP 50	Operating Inertial Profilers and Evaluating Pavement Profiles	2003	Adopted	2010	R 57

Provisional Standard Number	Title	First Publ. Year	Final Disposition	Disposit. Year	Full Std. No.
PP 51	Pavement Ride Quality When Measured Using Inertial Profiling Systems	2003	Adopted	2010	R 54[b]
PP 52	Developing a Quality Assurance Plan for Hot-Mix Asphalt (HMA)	2005	Adopted	2006	R 42
PP 53	Design Considerations When Using Reclaimed Asphalt Shingles (RAS) in New Hot Mix Asphalt (HMA)	2006	Deleted	2014	—
PP 54	Match Curing of Concrete Test Specimens	2006	Adopted	2016 (April)	R 72
PP 55	Overcoating Field Test Program for Evaluating Protective Coatings on Existing Bridges or Salvaged Beams	2006	Deleted	2012	—
PP 56	Evaluating the Engineering and Environmental Suitability of Recycled Materials	2006	Adopted	2014	R 65
PP 57	Establishing Requirements for and Performing Equipment Calibrations, Standardizations, and Checks	2006	Adopted	2012	R 61
PP 58	Static Segregation of Hardened Self-Consolidating Concrete (SCC) Cylinders	2008	Adopted	2017 (April)	R 81[c]
PP 59	Coal Combustion Fly Ash for Embankments	2009	Deleted	2016 (August)	—
PP 60	Preparation of Cylindrical Performance Test Specimens Using the Superpave Gyratory Compactor (SGC)	2009	Adopted	2017 (August)	R 83
PP 61	Developing Dynamic Modulus Master Curves for Asphalt Mixtures Using the Asphalt Mixture Performance Tester (AMPT)	2009	Adopted	2017 (August)	R 84
PP 62	Developing Dynamic Modulus Master Curves for Hot Mix Asphalt (HMA)	2009	Adopted	2013	R 62
PP 63	Pipe Joint Selection for Highway Culvert and Storm Drains	2009	Adopted	2017 (June)	R 82
PP 64	Determining Aggregate Source Shape Values from Digital Image Analysis Shape Properties	2010	Adopted	2018 (August)	R 91
PP 65	Determining the Reactivity of Concrete Aggregates and Selecting Appropriate Measures for Preventing Deleterious Expansion in New Concrete Construction	2010	Adopted	2016 (April)	R 80
PP 66	Determination of Long-Term Strength for Geosynthetic Reinforcement	2010	Adopted	2015	R 69
PP 67	Quantifying Cracks in Asphalt Pavement Surfaces from Collected Images Utilizing Automated Methods	2010	Adopted	2018 (April)	R 85

Provisional Standard Number	Title	First Publ. Year	Final Disposition	Disposit. Year	Full Std. No.
PP 68	Collecting Images of Pavement Surfaces for Distress Detection	2010	Adopted	2018 (April)	R 86
PP 69	Determining Pavement Deformation Parameters and Cross Slope from Collected Transverse Profiles	2010	Adopted	2018 (April)	R 87
PP 70	Collecting the Transverse Pavement Profile	2010	Adopted	2018 (April)	R 88
PP 71	Certifying Suppliers of Emulsified Asphalt	2011	Adopted	2016 (August)	R 77
PP 72	Recovering Residue from Emulsified Asphalt Using Low-Temperature Evaporative Techniques	2011	Adopted	2016 (August)	R 78
PP 73	Quality Assurance, Job Site Quality Control, and Reapplication of Protective Sealers for Portland Cement Concrete	2011	Adopted	2019 (June)	R 94
PP 74	Determination of Size and Shape of Glass Beads Used in Traffic Markings by Means of Computerized Optical Method	2011			
PP 75	Vacuum Drying Compacted Asphalt Specimens	2013	Adopted	2016 (August)	R 79
PP 76	Troubleshooting Asphalt Specimen Volumetric Differences between Superpave Gyratory Compactors (SGCs) Used in the Design and the Field Management of Superpave Mixtures	2013			
PP 77	Materials Selection and Mixture Design of Permeable Friction Courses (PFCs)	2014			
PP 78	Design Considerations When Using Reclaimed Asphalt Shingles (RAS) in Asphalt Mixtures	2014			
PP 79	High Friction Surface Treatment for Asphalt and Concrete Pavements	2014	Renumbered	2019 (June)	MP 41
PP 80	Continuous Thermal Profile of Asphalt Mixture Construction	2014			
PP 81	Intelligent Compaction Technology for Embankment and Asphalt Pavement Applications	2014			
PP 82	Emulsified Asphalt Chip Seal Design	2016			
PP 83	Microsurfacing Design	2016			
PP 84	Performance Engineered Concrete Pavement Mixtures	2017			
PP 85	Grading or Verifying the Sealant Grade (SG) of a Hot-Poured Asphalt Crack Sealant	2017			

Provisional Standard Number	Title	First Publ. Year	Final Disposition	Disposit. Year	Full Std. No.
PP 86	Emulsified Asphalt Content of Cold Recycled Mixture Designs	2017			
PP 87	Slurry Seal Design	2017			
PP 88	Emulsified Asphalt Fog Seal Design	2017			
PP 89	Grinding the Ends of Cylindrical Concrete Specimens	2018			
PP 90	Sand Seal Design	2018			
PP 91	Emulsified Asphalt Scrub Seal Design	2018			
PP 92	Preparation of Test Specimens Using the Plastic Mold Compaction Device	2018			
PP 93	Asphalt Tack Coat Design	2018			
PP 94	Determining Optimum Asphalt Content of Cold Recycled Mixture with Foamed Asphalt	2018			
PP 95	Preparation of Indirect Tension Performance Test Specimens	2018			
PP 96	Developing Dynamic Modulus Master Curves for Hot Mix Asphalt (HMA) Using the Indirect Tension Testing Method	2018			
PP 97	Determination of Constant Mass	2019			
PP 98	Asphalt Surface Dielectric Profiling System Using Ground Penetrating Radar	2019			
PP 99	Preparation of Small Cylindrical Performance Test Specimens Using the Superpave Gyratory Compactor (SGC) or Field Cores	2019			
PP 100	Ultrathin Bonded Wearing Course Design	2020			
PP 101	Emulsified Asphalt Content of Full-Depth Reclamation Mixture Design	2020			
TP 1	Determining the Flexural Creep Stiffness of Asphalt Binder Using the Bending Beam Rheometer (BBR)	1994	Adopted	2002	T 313
TP 2	Quantitative Extraction and Recovery of Asphalt Binder from Hot Mix Asphalt (HMA)	1995	Adopted	2003	T 319
TP 3	Determining the Fracture Properties of Asphalt Binder in Direct Tension (DT)	1994	Adopted	2002	T 314
TP 4	Preparing and Determining the Density of Hot-Mix Asphalt (HMA) Specimens by Means of the Superpave Gyratory Compactor	1994	Adopted	2001	T 312

Provisional Standard Number	Title	First Publ. Year	Final Disposition	Disposit. Year	Full Std. No.
TP 5	Determining the Rheological Properties of Asphalt Binder Using a Dynamic Shear Rheometer (DSR)	1995	Adopted	2002	T 315
TP 6	Measurement of Initial Asphalt Adsorption and Desorption in the Presence of Moisture	1994	Deleted	1999	—
TP 7	Determining the Permanent Deformation and Fatigue Cracking Characteristics of Hot Mix Asphalt (HMA) Using the Simple Shear Test (SST) Device	1995	Adopted	2003	T 320
TP 8	Determining the Fatigue Life of Compacted Hot Mix Asphalt (HMA) Subjected to Repeated Flexural Bending	1995	Adopted	2003	T 321
TP 9	Determining the Creep Compliance and Strength of Hot Mix Asphalt (HMA) Using the Indirect Tensile Test Device	1995	Adopted	2003	T 322
TP 10	Thermal Stress Restrained Specimen Tensile Strength	1994	Deleted	2002	—
TP 11	Rapid Determination of Corrosion Rate of Uncoated Steel in Reinforced Concrete	1996	Deleted	2004	—
TP 12	Determining the Hydraulic Fracture of Coarse Aggregate	1994	Deleted	2001	—
TP 14	Accelerated Detection of Potentially Deleterious Expansion of Mortar Bars Due to Alkali-Silica Reaction	1994	Adopted	1996	T 303
TP 17	Resistance of Concrete to Rapid Freezing and Thawing	1994	Deleted	2002	—
TP 18	Method for Determining the Fundamental Transverse Frequency and Quality Factor of Concrete Prism Specimens	1995	Deleted	2003	—
TP 19	Flexural Strength of Concrete (Using Simple Beam with Third-Point Loading)	1994	Deleted	2002	—
TP 20	Compressive Strength of Cylindrical Concrete Specimens	1994	Adopted	1997	T 22
TP 22	Rapid Determination of the Chloride Penetrability of Concrete Using AC Impedance	1995	Deleted	2003	—
TP 23	Water Content of Freshly Mixed Concrete Using Microwave Oven Drying	1994	Adopted	2002	T 318
TP 24	Determining the Density of Freshly Mixed Concrete in Place Using a Twin-Probe Nuclear Density Gauge	1995	Deleted	2003	—
TP 26	Determining the Relative Permeability of Concrete by Surface Air Flow	1995	Deleted	2003	—
TP 28	Detection of Voids under Rigid Pavement	1995	Deleted	2003	—
TP 29	Determining the Shear Strength at the Interface of Bonded Layers of Portland Cement Concrete	1995	Adopted	2003	T 323

Provisional Standard Number	Title	First Publ. Year	Final Disposition	Disposit. Year	Full Std. No.
TP 31	Determining the Resilient Modulus of Bituminous Mixtures by Indirect Tension	1995	Deleted	2003	—
TP 33	Uncompacted Void Content of Fine Aggregate (As Influenced by Particle Shape, Surface Texture, and Grading)	1994	Adopted	1996	T 304
TP 34	Determining Moisture Sensitivity Characteristics of Compacted Bituminous Mixtures Subjected to Hot and Cold Climate Conditions	1994	Deleted	1999	—
TP 35	Determining the Relative Effectiveness of Penetrating Concrete Sealers by Electrical Resistance	1994	Deleted	2002	—
TP 36	Evaluating Asphalt-Covered Concrete Bridge Decks Using Pulsed Radar	1994	Deleted	2002	—
TP 37	Determining the Condition Rating of Preformed Membranes on Concrete Bridge Decks Using Pulse Velocity	1994	Deleted	2002	—
TP 39	Determining the Maximum Specific Gravity of Bituminous Paving Mixtures	1995	Adopted	1999	T 209
TP 40	Determining the Percent Asphalt Required for Coating Aggregates Used in Cold Mix Patching Materials	1995	Deleted	2002	—
TP 41	Determining the Percent Asphalt Required Based on Stripping of Aggregates Used in Cold Mix Patching Materials	1995	Deleted	2002	—
TP 42	Percent Asphalt Based on Drainability of Aggregates Used in Cold Mix Patching Materials	1995	Deleted	2002	—
TP 43	Workability of Cold Mix Patching Materials	1995	Deleted	2002	—
TP 44	Cohesion of Cold Mix Patching Materials	1995	Deleted	2002	—
TP 46	Determining the Resilient Modulus of Soils and Aggregate Materials	1995	Adopted	1999	T 307
TP 47	Determining the Ecological Effects of Deicing Chemicals	1995	Deleted	2002	—
TP 48	Viscosity Determination of Asphalt Binder Using Rotational Viscometer	1995	Adopted	2002	T 316
TP 50	Determining the Relative Effectiveness of Penetrating Concrete Sealers by Water Absorption	1996	Deleted	2004	—
TP 51	Testing Cathodic Protection Materials and Systems for Bridge Decks	1996	Deleted	2004	—
TP 52	Estimating the Strength of Concrete in Transportation Construction by Maturity Tests	1996	Adopted	2004	T 325

Provisional Standard Number	Title	First Publ. Year	Final Disposition	Disposit. Year	Full Std. No.
TP 53	Determining the Asphalt Content of Hot Mix Asphalt (HMA) by the Ignition Method	1996	Adopted	1999	T 308
TP 54	Determining Early Stiffening Characteristics of Portland Cement Paste (Mini Slump Cone Method)	1997	Deleted	2004	—
TP 55	Determining Chloride Ions in Concrete and Concrete Materials by Specific Ion Probe	1998	Adopted	2007	T 332
TP 56	Uncompacted Void Content of Coarse Aggregate (As Influenced by Particle Shape, Surface Texture, and Grading)	1998	Adopted	2005	T 326
TP 57	Methylene Blue Value of Clays, Mineral Fillers, and Fines	1998	Adopted	2007	T 330
TP 58	Resistance of Coarse Aggregate to Degradation by Abrasion in the Micro-Deval Apparatus	1999	Adopted	2005	T 327
TP 59	Determining Air Content of Hardened Portland Cement Concrete by High-Pressure Air Meter	1999	Adopted	2015	T 356
TP 60	Coefficient of Thermal Expansion of Hydraulic Cement Concrete	2000	Adopted	2009	T 336
TP 61	Determining the Percentage of Fracture in Coarse Aggregate	2002	Adopted	2009	T 335
TP 62	Determining Dynamic Modulus of Hot-Mix Asphalt Concrete Mixtures	2003	Adopted	2011	T 342
TP 63	Determining Rutting Susceptibility of Asphalt Paving Mixtures Using the Asphalt Pavement Analyzer (APA)	2003	Adopted	2010	T 340
TP 64	Predicting Chloride Penetration of Hydraulic Cement Concrete by the Rapid Migration Procedure	2003	Adopted	2015	T 357
TP 65	Non-Instrumental Determination of Metallic Zinc in Zinc-Rich Primers	2003	Adopted	2009	T 337
TP 66	Analysis of Structural Steel Coatings for Hindered Amine Light Stabilizer (HALS)	2003	Adopted	2009	T 338
TP 67	Analysis of Structural Steel Coatings for Isocyanate Content	2003	Adopted	2009	T 339
TP 68	Density of In-Place Hot-Mix Asphalt (HMA) Pavement by Electronic Surface Contact Devices	2004	Adopted	2012	T 343
TP 69	Bulk Specific Gravity and Density of Compacted Asphalt Mixtures Using Automatic Vacuum Sealing Method	2004	Adopted	2007	T 331
TP 70	Multiple Stress Creep Recovery (MSCR) Test of Asphalt Binder Using a Dynamic Shear Rheometer (DSR)	2007	Adopted	2014	T 350
TP 71	Evaluation of Superpave Gyratory Compactor (SGC) Internal Angle of Gyration Using Simulated Loading	2007	Adopted	2012	T 344

Provisional Standard Number	Title	First Publ. Year	Final Disposition	Disposit. Year	Full Std. No.
TP 72	Quantitative Determination of the Percentage of Lime in Hot Mix Asphalt (HMA)	2008	Adopted	2016 (August)	T 362
TP 73	Slump Flow of Self-Consolidating Concrete (SCC)	2008	Adopted	2013	T 347
TP 74	Passing Ability of Self-Consolidating Concrete (SCC) by J-Ring	2008	Adopted	2012	T 345
TP 75	Air-Void Characteristics of Freshly Mixed Concrete by Buoyancy Change	2008	Adopted	2013	T 348
TP 76	Measurement of Tire/Pavement Noise Using the On-Board Sound Intensity (OBSI) Method	2008	Adopted	2016 (April)	T 360
TP 77	Specific Gravity and Absorption of Aggregate by Volumetric Immersion Method	2009	Adopted	2015	T 354
TP 78	Detecting the Presence of Phosphorous in Asphalt Binder	2009	Adopted	2017 (August)	T 377[c]
TP 79	Determining the Dynamic Modulus and Flow Number for Asphalt Mixtures Using the Asphalt Mixture Performance Tester (AMPT)	2009	Adopted	2017 (August)	T 378
TP 80	Visual Stability Index (VSI) of Self-Consolidating Concrete (SCC)	2009	Adopted	2014	T 351
TP 81	Determining Aggregate Shape Properties by Means of Digital Image Analysis	2010	Adopted	2018 (August)	T 381
TP 82	Bulk Specific Gravity (G_{mb}) of Compacted Bituminous Mixtures Using Water Displacement Measured by Pressure Sensor	2010	Deleted	2018 (August)	—
TP 83	Sampling and Fabrication of 50-mm (2-in.) Cube Specimens Using Grout (Non-Shrink) or Mortar	2010	Adopted	2014	R 64
TP 84	Evaluation of Adhesive Anchors in Concrete Under Sustained Loading Conditions	2010	Deleted	2018 (June)	—
TP 85	Apparent Viscosity of Hot-Poured Bituminous Crack Sealant Using Brookfield Rotational Viscometer RV Series Instrument	2010	Adopted	2017 (June)	T 366
TP 86	Accelerated Aging of Bituminous Sealants and Fillers with a Vacuum Oven	2010	Adopted	2017 (June)	T 367
TP 87	Measure Low Temperature Flexural Creep Stiffness of Bituminous Sealants and Fillers by Bending Beam Rheometer (BBR)	2010	Adopted	2017 (June)	T 368
TP 88	Evaluation of the Low-Temperature Tensile Property of Bituminous Sealants by Direct Tension Test	2010	Adopted	2017 (June)	T 369

Provisional Standard Number	Title	First Publ. Year	Final Disposition	Disposit. Year	Full Std. No.
TP 89	Measuring Adhesion of Hot-Poured Crack Sealant Using Direct Adhesion Tester	2010	Adopted	2017 (June)	T 370
TP 90	Measuring Interfacial Fracture Energy of Hot-Poured Crack Sealant Using a Blister Test	2010	Adopted	2017 (June)	T 371
TP 91	Determining Asphalt Binder Bond Strength by Means of the Asphalt Bond Strength (ABS) Test	2011	Adopted	2016 (August)	T 361
TP 92	Determining the Cracking Temperature of Asphalt Binder Using the Asphalt Binder Cracking Device (ABCD)	2011	Adopted	2019 (July)	T 387
TP 93	Determining Formwork Pressure of Fresh Self-Consolidating Concrete Using Pressure Transducers	2011	Adopted	2014	T 352
TP 94	Filling Capacity of Self-Consolidating Concrete Using the Caisson Test	2011	Adopted	2013	T 349
TP 95	Surface Resistivity Indication of Concrete's Ability to Resist Chloride Ion Penetration	2011	Adopted	2015	T 358
TP 96	Protective Sealers for Portland Cement Concrete	2011	Adopted	2019 (June)	T 384
TP 97	Glass Beads Used in Pavement Markings	2011	Adopted	2012	T 346
TP 98	Determining the Influence of Road Surfaces on Vehicle Noise Using the Statistical Isolated Pass-By (SIP) Method	2011	Adopted	2020 (April)	T 389
TP 99	Determining the Influence of Road Surfaces on Traffic Noise Using the Continuous-Flow Traffic Time-Integrated Method (CTIM)	2011	Adopted	2020 (April)	T 390
TP 100	Deep Foundation Elements under Bidirectional Static Axial Compressive Load	2012	Adopted	2019 (July)	T 385
TP 101	Estimating Fatigue Resistance of Asphalt Binders Using the Linear Amplitude Sweep	2012			
TP 102	Evaluation of Asphalt Release Agents	2012	Adopted	2018 (August)	T 383
TP 103	Detectable Warning Systems	2012			
TP 104	Rapid Axial Compressive Load Testing of Deep Foundation Units	2013	Adopted	2019 (July)	T 386
TP 105	Determining the Fracture Energy of Asphalt Mixtures Using the Semicircular Bend Geometry (SCB)	2013			
TP 106	Determination of Heavy Metal Content of Glass Beads Using X-Ray Fluorescence (XRF)	2013			

Provisional Standard Number	Title	First Publ. Year	Final Disposition	Disposit. Year	Full Std. No.
TP 107	Determining the Damage Characteristic Curve of Asphalt Mixtures from Direct Tension Cyclic Fatigue Tests	2014			
TP 108	Determining the Abrasion Loss of Asphalt Mixture Specimens	2014			
TP 109	Nonlinear Impact Resonance Acoustic Spectroscopy (NIRAS) for Concrete Specimens with Damage from the Alkali-Silica Reaction (ASR)	2014	Adopted	2018 (April)	T 379
TP 110	Potential Alkali Reactivity of Aggregates and Effectiveness of ASR Mitigation Measures (Miniature Concrete Prism Test, MCPT)	2014	Adopted	2018 (April)	T 380
TP 111	Measuring Retroreflectivity of Pavement Marking Materials Using a Mobile Retroreflectivity Unit	2014			
TP 112	Determining In-Place Density and Moisture Content of Soil and Soil-Aggregate Using Complex Impedance Methodology	2014			
TP 113	Determination of Asphalt Binder Resistance to Ductile Failure Using Double-Edge-Notched Tension (DENT) Test	2015			
TP 114	Determining the Interlayer Shear Strength (ISS) of Asphalt Pavement Layers	2015			
TP 115	Determining the Quality of Tack Coat Adhesion to the Surface of an Asphalt Pavement in the Field or Laboratory	2015			
TP 116	Rutting Resistance of Asphalt Mixtures Using Incremental Repeated Load Permanent Deformation (iRLPD)	2015			
TP 117	Determination of the Voids of Dry Compacted Filler	2015			
TP 118	Characterization of the Air-Void System of Freshly Mixed Concrete by the Sequential Pressure Method	2015			
TP 119	Electrical Resistivity of a Concrete Cylinder Tested in a Uniaxial Resistance Test	2015			
TP 120	Pore Index for Carbonate Coarse Aggregate	2016			
TP 121	Determining the Viscosity of Emulsified Asphalt by a Rotational Paddle Viscometer	2016	Adopted	2018 (August)	T 382
TP 122	Determination of Performance Grade of Physically Aged Asphalt Binder Using Extended Bending Beam Rheometer (BBR) Method	2016			
TP 123	Measuring Asphalt Binder Yield Energy and Elastic Recovery Using the Dynamic Shear Rheometer	2016			

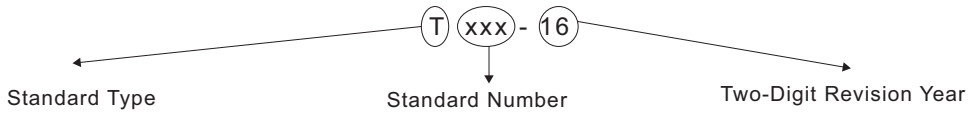
Provisional Standard Number	Title	First Publ. Year	Final Disposition	Disposit. Year	Full Std. No.
TP 124	Determining the Fracture Potential of Ashalt Mixtures Using Semicircular Bend Geometry (SCB) at Intermediate Temperature	2016			
TP 125	Determining the Flexural Creep Stiffness of Asphalt Mixtures Using the Bending Beam Rheometer (BBR)	2016			
TP 126	Evaluation of the Tracking Resistance of Hot-Poured Asphalt Crack Sealant by Dynamic Shear Rheometer (DSR)	2017			
TP 127	Determining the Fracture Energy Density of Asphalt Binder Using the Binder Fracture Energy (BFE) Test	2017			
TP 128	Evaluation of Oxidation Level of Asphalt Mixtures by a Portable Infrared Spectrometer	2017			
TP 129	Vibrating Kelly Ball (VKelly) Penetration in Fresh Portland Cement Concrete	2018			
TP 130	Producing Draw Down Panels and Measuring the Coefficient of Retroreflected Luminance (RL) of Pavement Markings in a Laboratory Panel	2018			
TP 131	Determining Dynamic Modulus of Asphalt Concrete Using the Indirect Tension Test	2018			
TP 132	Determining the Dynamic Modulus for Asphalt Mixtures Using Small Specimens in the Asphalt Mixture Performance Tester (AMPT)	2019			
TP 133	Determining the Damage Characteristic Curve and Failure Criterion Using Small Specimens in the Asphalt Mixture Performance Tester (AMPT)	2019			
TP 134	Stress Sweep Rutting (SSR) Test Using Asphalt Mixture Performance Tester (AMPT)	2019			
TP 135	Determining the Total Pore Volume in Hardened Concrete Using Vacuum Saturation	2020			
TP 136	Determining the Degree of Saturation of Hydraulic-Cement Concrete	2020			
TP 137	Box Test in Slip Form Paving of Fresh Portland Cement Concrete	2020			

[a] Adopted in 1995 as R 19. R 19 was discontinued in 2004.
[b] Reclassified as a provisional specification MP 17 in 2007 then reclassified again as a practice when adopted as a full standard.
[c] Discontinued in 2016 then adopted in 2017.

ABOUT AASHTO DESIGNATION NUMBERS

Anatomy of a Designation Number

Components



Standard Types

Standard types are represented by a one-letter abbreviation for full standards. The letter "P" is added for provisional standards. The standard type abbreviations are as follows:

- M (Materials, full)
- T (Test, full)
- R (PRactice, full)
- MP (Materials, provisional)
- TP (Test, provisional)
- PP (Practice, provisional)

Standard Numbers

Standard numbers are sequential within standard type. Thus, a provisional that is subsequently adopted as a full standard will receive a new number.

Revised vs. Reconfirmed and Discontinued vs. Deleted

A full or provisional standard is designated as *revised* if technical changes have been balloted and approved by AASHTO's Committee on Materials and Pavements. A standard is designated as *reconfirmed* if it has undergone technical review to determine that it is up to date and in use and that it does not require revision; such a review is required:

- every four years for a full standard, and
- every one or two years for a provisional standard, depending on its progress through its 8-year provisional life cycle.

If a standard is no longer used, it may be *discontinued* by Committee vote, in which case the standard header will be published that year with a notice saying that the standard has been discontinued and giving a brief explanation as to why. In subsequent years, the standard will be *deleted* from the book, meaning that it is no longer maintained.