

PART 1—STANDARD SPECIFICATIONS AND STANDARD PRACTICES

Subject Sequence Table of Contents

Master List (All Release Groups)¹

STD. NO.	TITLE	GROUP (MONTH)
AGGREGATES		
M 6-13 (2018)	Fine Aggregate for Hydraulic Cement Concrete	3 (July)
M 17-11 (2019)	Mineral Filler for Bituminous Paving Mixtures	3 (July)
M 29-12 (2016)	Fine Aggregate for Bituminous Paving Mixtures	3 (July)
M 43-05 (2013)	Sizes of Aggregate for Road and Bridge Construction	3 (July)
M 45-16	Aggregate for Masonry Mortar	3 (July)
M 80-13 (2017)	Coarse Aggregate for Hydraulic Cement Concrete	3 (July)
M 195-11 (2019)	Lightweight Aggregates for Structural Concrete	3 (July)
M 327-19	Processing Additions for Use in the Manufacture of Hydraulic Cements	1 April
R 76-16	Reducing Samples of Aggregate to Testing Size	3 (July)
R 90-18	Sampling Aggregate Products	3 (July)
R 91-18	Determining Aggregate Source Shape Values from Digital Image Analysis Shape Properties	3 (July)

STD. NO.	TITLE	GROUP (MONTH)
BITUMINOUS MATERIALS		
M 81-92 (2017)	Cutback Asphalt (Rapid-Curing Type)	3 (July)
M 82-17	Cutback Asphalt (Medium-Curing Type)	3 (July)
M 140-18	Emulsified Asphalt	3 (July)
M 156-13 (2017)	Requirements for Mixing Plants for Hot-Mixed, Hot-Laid Bituminous Paving Mixtures	3 (July)
M 208-18	Cationic Emulsified Asphalt	3 (July)
M 226-80 (2017)	Viscosity-Graded Asphalt Cement	3 (July)
M 316-18	Polymer-Modified Emulsified Asphalt	3 (July)
M 320-17	Performance-Graded Asphalt Binder	3 (July)
M 323-13	Superpave Volumetric Mix Design	3 (July)
M 325-08 (2017)	Stone Matrix Asphalt (SMA)	3 (July)
M 327-19	Processing Additions for Use in the Manufacture of Hydraulic Cements	1 April
M 332-19	Performance-Graded Asphalt Binder Using Multiple Stress Creep Recovery (MSCR) Test	3 (July)
R 5-17	Selection and Use of Emulsified Asphalts	3 (July)
R 15-18	Asphalt Additives and Modifiers	3 (July)
R 26-01 (2018)	Certifying Suppliers of Performance-Graded Asphalt Binders	3 (July)
R 28-12 (2016)	Accelerated Aging of Asphalt Binder Using a Pressurized Aging Vessel (PAV)	3 (July)
R 29-15 (2019)	Grading or Verifying the Performance Grade (PG) of an Asphalt Binder	3 (July)
R 30-02 (2019)	Mixture Conditioning of Hot Mix Asphalt (HMA)	3 (July)
R 35-17	Superpave Volumetric Design for Asphalt Mixtures	3 (July)
R 46-08 (2017)	Designing Stone Matrix Asphalt (SMA)	3 (July)
R 47-19	Reducing Samples of Asphalt Mixtures to Testing Size	3 (July)

STD. NO.	TITLE	GROUP (MONTH)
BITUMINOUS MATERIALS		
R 49-09 (2018)	Determination of Low-Temperature Performance Grade (PG) of Asphalt Binders	3 (July)
R 59-11 (2019)	Recovery of Asphalt Binder from Solution by Abson Method	3 (July)
R 62-13 (2017)	Developing Dynamic Modulus Master Curves for Asphalt Mixtures	3 (July)
R 66-16	Sampling Asphalt Materials	3 (July)
R 67-16	Sampling Asphalt Mixtures after Compaction (Obtaining Cores)	3 (July)
R 68-15 (2019)	Preparation of Asphalt Mixtures by Means of the Marshall Apparatus	3 (July)
R 77-16	Certifying Suppliers of Emulsified Asphalt	3 (July)
R 78-16	Recovering Residue from Emulsified Asphalt Using Low-Temperature Evaporative Techniques	3 (July)
R 79-19	Vacuum Drying Compacted Asphalt Specimens	3 (July)
R 83-17	Preparation of Cylindrical Performance Test Specimens Using the Superpave Gyrotory Compactor (SGC)	3 (July)
R 84-17	Developing Dynamic Modulus Master Curves for Asphalt Mixtures Using the Asphalt Mixture Performance Tester (AMPT)	3 (July)
R 92-18	Evaluating the Elastic Behavior of Asphalt Binders Using the Multiple Stress Creep Recovery (MSCR) Test	3 (July)

STD. NO.	TITLE	GROUP (MONTH)
BOX CULVERT, CULVERT PIPE, AND DRAIN TILE		
M 36-16 (2020)	Corrugated Steel Pipe, Metallic-Coated, for Sewers and Drains	2 (June)
M 86M/M 86-20	Nonreinforced Concrete Sewer, Storm Drain, and Culvert Pipe	2 (June)
M 167M/M 167-17	Corrugated Steel Structural Plate, Zinc-Coated, for Field-Bolted Pipe, Pipe-Arches, and Arches	2 (June)
M 170-20	Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe	2 (June)
M 170M-20	Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe [Metric]	2 (June)
M 175M/M 175-05 (2020)	Perforated Concrete Pipe	2 (June)
M 176M/M 176-20	Porous Concrete Pipe	2 (June)
M 178M/M 178-20	Concrete Drain Tile	2 (June)
M 190-04 (2017)	Asphalt-Coated Corrugated Metal Culvert Pipe and Pipe-Arches	2 (June)
M 196-16	Corrugated Aluminum Pipe for Sewers and Drains	2 (June)
M 197-20	Aluminum Alloy Sheet for Corrugated Aluminum Pipe	2 (June)
M 199M/M 199-17	Precast Reinforced Concrete Manhole Sections	2 (June)
M 206M/M 206-20	Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe	2 (June)
M 207M/M 207-20	Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe	2 (June)
M 218-03 (2020)	Steel Sheet, Zinc-Coated (Galvanized), for Corrugated Steel Pipe	2 (June)
M 219-92 (2017)	Corrugated Aluminum Alloy Structural Plate for Field-Bolted Pipe, Pipe-Arches, and Arches	2 (June)
M 242M/M 242-20	Reinforced Concrete D-Load Culvert, Storm Drain, and Sewer Pipe	2 (June)
M 243-96 (2017)	Field-Applied Coating of Corrugated Metal Structural Plate for Pipe, Pipe-Arches, and Arches	2 (June)
M 245-20	Corrugated Steel Pipe, Polymer-Precoated, for Sewers and Drains	2 (June)

STD. NO.	TITLE	GROUP (MONTH)
BOX CULVERT, CULVERT PIPE, AND DRAIN TILE		
M 246-15 (2019)	Steel Sheet, Metallic-Coated and Polymer-Precoated, for Corrugated Steel Pipe	2 (June)
M 252-20	Corrugated Polyethylene Drainage Pipe	2 (June)
M 259-20	Precast Reinforced Concrete Box Sections for Culverts, Storm Drains, and Sewers	2 (June)
M 259M-17	<i>Discontinued</i> —Precast Reinforced Concrete Box Sections for Culverts, Storm Drains, and Sewers [Metric]	2 (June)
M 262-11 (2020)	Concrete Pipe and Related Products	2 (June)
M 273-20	Precast Reinforced Concrete Box Sections for Culverts, Storm Drains, and Sewers with Less Than 2 ft of Cover Subjected to Highway Loadings	2 (June)
M 273M-17	<i>Discontinued</i> —Precast Reinforced Concrete Box Sections for Culverts, Storm Drains, and Sewers with Less Than 0.6 m of Cover Subjected to Highway Loadings [Metric]	2 (June)
M 274-87 (2017)	Steel Sheet, Aluminum-Coated (Type 2), for Corrugated Steel Pipe	2 (June)
M 278-15	Class PS46 Poly(Vinyl Chloride) (PVC) Pipe	2 (June)
M 289-91 (2017)	Aluminum-Zinc Alloy Coated Sheet Steel for Corrugated Steel Pipe	2 (June)
M 294-18	Corrugated Polyethylene Pipe, 300- to 1500-mm (12- to 60-in.) Diameter	2 (June)
M 304-11 (2015)	Poly(Vinyl Chloride) (PVC) Profile Wall Drain Pipe and Fittings Based on Controlled Inside Diameter	2 (June)
M 306-10 (2019)	Drainage, Sewer, Utility, and Related Castings	2 (June)
M 326-18	Polyethylene (PE) Liner Pipe, 300- to 1600-mm Diameter, Based on Controlled Outside Diameter	2 (June)
M 330-20	Polypropylene Pipe, 300- to 1500-mm (12- to 60-in.) Diameter	2 (June)
M 335-19	Steel-Reinforced Polyethylene (PE) Ribbed Pipe, 300- to 1500-mm (12- to 60-in.) Diameter	2 (June)
R 63-13 (2017)	Solid Wall High-Density Polyethylene (HDPE) Conduit for Non-Pressure Applications Used for the Protection of Power and Telecommunications Cables	2 (June)
R 73-16 (2020)	Evaluation of Precast Concrete Drainage Products	2 (June)
R 82-17	Pipe Joint Selection for Highway Culvert and Storm Drains	2 (June)
R 93-19	Service Life Determination of Corrugated HDPE Pipes Manufactured with Recycled Content	2 (June)

STD. NO.	TITLE	GROUP (MONTH)
CONCRETE, CURING MATERIALS, AND ADMIXTURES		
M 154M/M 154-12 (2020)	Air-Entraining Admixtures for Concrete	1 (April)
M 157-13 (2017)	Ready-Mixed Concrete	1 (April)
M 182-05 (2017)	Burlap Cloth Made from Jute or Kenaf and Cotton Mats	1 (April)
M 194M/M 194-13 (2017)	Chemical Admixtures for Concrete	1 (April)
M 205M/M 205-11 (2019)	Molds for Forming Concrete Test Cylinders Vertically	1 (April)
M 233-86 (2014)	Boiled Linseed Oil Mixture for Treatment of Portland Cement Concrete	2 (June)
M 241M/M 241-13 (2017)	Concrete Made by Volumetric Batching and Continuous Mixing	1 (April)
M 295-19	Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete	1 (April)
M 302-19	Slag Cement for Use in Concrete and Mortars	1 (April)
R 39-19	Making and Curing Concrete Test Specimens in the Laboratory	1 (April)
R 60-12 (2020)	Sampling Freshly Mixed Concrete	1 (April)

STD. NO.	TITLE	GROUP (MONTH)
CONCRETE, CURING MATERIALS, AND ADMIXTURES		

R 64-17	Sampling and Fabrication of 50-mm (2-in.) Cube Specimens Using Grout (Non-Shrink) or Mortar	1 (April)
R 70M/R 70-18	Use of Apparatus for the Determination of Length Change of Hardened Cement Paste, Mortar, and Concrete	1 (April)
R 72-16 (2020)	Match Curing of Concrete Test Specimens	1 (April)
R 80-17	Determining the Reactivity of Concrete Aggregates and Selecting Appropriate Measures for Preventing Deleterious Expansion in New Concrete Construction	1 (April)
R 81-17	Static Segregation of Hardened Self-Consolidating Concrete (SCC) Cylinders	1 (April)

STD. NO.	TITLE	GROUP (MONTH)
ENVIRONMENTAL TESTS		

R 23-99 (2018)	Chemical, Biological, and Physical Analysis of Water	1 (April)
R 24-99 (2018)	Collection and Preservation of Water Samples	1 (April)

STD. NO.	TITLE	GROUP (MONTH)
GUARDRAIL AND FENCING		

M 180-12 (2017)	Corrugated Sheet Steel Beams for Highway Guardrail	2 (June)
M 181-10 (2019)	Chain-Link Fence	2 (June)
M 269-96 (2018)	Turnbuckles and Shackles	2 (June)
M 279-14 (2018)	Metallic-Coated, Steel Woven Wire Fence Fabric	2 (June)
M 280-20	Metallic-Coated (Carbon) Steel Barbed Wire	2 (June)
M 281-96 (2018)	Steel Fence Posts and Assemblies, Hot-Wrought	2 (June)

STD. NO.	TITLE	GROUP (MONTH)
HYDRAULIC CEMENT		

M 85-20	Portland Cement	1 (April)
M 240M/M 240-20	Blended Hydraulic Cement	1 (April)
M 307-13 (2017)	Silica Fume Used in Cementitious Mixtures	1 (April)
M 321-04 (2017)	High-Reactivity Pozzolans for Use in Hydraulic-Cement Concrete, Mortar, and Grout	1 (April)
R 71-16 (2020)	Sampling and Amount of Testing of Hydraulic Cement	1 (April)

STD. NO.	TITLE	GROUP (MONTH)
JOINT FILLER AND ASPHALT PLANK		

M 33M/M 33-20	Preformed Expansion Joint Filler for Concrete (Bituminous Type)	2 (June)
M 153-20	Preformed Sponge Rubber, Cork, and Recycled Rubber Expansion Joint Fillers for Concrete Paving and Structural Construction	2 (June)
M 213-01 (2015)	Preformed Expansion Joint Fillers for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types)	2 (June)
M 251-06 (2020)	Plain and Laminated Elastomeric Bridge Bearings	2 (June)

STD. NO.	TITLE	GROUP (MONTH)
JOINT FILLER AND ASPHALT PLANK		

M 297-10 (2015)	Preformed Polychloroprene Elastomeric Joint Seals for Bridges	2 (June)
R 50-09 (2018)	Geosynthetic Reinforcement of the Aggregate Base Course of Flexible Pavement Structures	2 (June)
R 95-19	Accelerated Aging of Hot-Poured Asphalt Crack Sealant Using a Vacuum Oven	2 (June)

STD. NO.	TITLE	GROUP (MONTH)
METALLIC MATERIALS FOR BRIDGES		

M 102M/M 102-06 (2016)	Steel Forgings, Carbon and Alloy, for General Industrial Use	2 (June)
M 103M/M 103-12 (2016)	Steel Castings, Carbon, for General Application	2 (June)
M 105-09 (2018)	Gray Iron Castings	2 (June)
M 111M/M 111-15	Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products	2 (June)
M 163M/M 163-20	Castings, Iron-Chromium, Iron-Chromium-Nickel, Corrosion Resistant, for General Application	2 (June)
M 169-20	Steel Bars, Carbon and Alloy, Cold-Finished	2 (June)
M 202M/M 202-08 (2016)	Steel Sheet Piling	2 (June)
M 227M/M 227-13 (2017)	Steel Bars, Carbon, Merchant Quality, Mechanical Properties	2 (June)
M 232M/M 232-10 (2015)	Zinc Coating (Hot-Dip) on Iron and Steel Hardware	2 (June)
M 255M/M 255-05 (2018)	Steel Bars, Carbon, Hot-Wrought, Special Quality, Mechanical Properties	2 (June)
M 270M/M 270-20	Structural Steel for Bridges	2 (June)
M 277-06 (2015)	Wire Rope and Sockets for Movable Bridges	2 (June)
M 285M/M 285-11 (2015)	Castings, Iron-Chromium-Nickel, Corrosion Resistant, for Severe Service	2 (June)
M 292M/M 292-20	Carbon and Alloy Steel Nuts for Bolts for High-Pressure or High-Temperature Service, or Both	2 (June)
M 314-90 (2018)	Steel Anchor Bolts	2 (June)
M 334M/M 334-17	Uncoated, Corrosion-Resistant, Deformed and Plain Chromium Alloyed, Billet-Steel Bars for Concrete Reinforcement and Dowels	2 (June)
M 336M/M 336-20	Steel Wire and Welded Wire, Plain and Deformed, for Concrete Reinforcement	2 (June)

STD. NO.	TITLE	GROUP (MONTH)
MISCELLANEOUS		

M 143-14 (2018)	Sodium Chloride	2 (June)
M 144-14 (2018)	Calcium Chloride	2 (June)
M 230-07 (2020)	Expanded and Extruded Foam Board (Polystyrene)	2 (June)
M 235M/M 235-13 (2018)	Epoxy Resin Adhesives	2 (June)
M 333-20	Detectable Warning Surfaces	2 (June)
R 8-96 (2019)	Evaluation of Transportation-Related Earthborne Vibrations	1 (April)

STD. NO.	TITLE	GROUP (MONTH)
PAINTING AND TRAFFIC MARKING AND SIGNING		

M 224-91 (2019)	Use of Protective Sealers for Portland Cement Concrete	2 (June)
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STD. NO.	TITLE	GROUP (MONTH)
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PAINTING AND TRAFFIC MARKING AND SIGNING

M 237-96 (2014)	Epoxy Resin Adhesives for Bonding Traffic Markers to Hardened Portland Cement and Asphalt Concrete	2 (June)
M 247-13 (2018)	Glass Beads Used in Pavement Markings	2 (June)
M 249-12 (2020)	White and Yellow Reflective Thermoplastic Striping Material (Solid Form)	2 (June)
M 268-15	Retroreflective Sheeting for Flat and Vertical Traffic Control Applications	2 (June)
M 300-03 (2017)	Inorganic Zinc-Rich Primer	2 (June)
R 31-09 (2019)	Evaluation of Protective Coating Systems for Structural Steel	2 (June)
R 98-20	Determination of Size and Roundness of Glass Beads Used in Traffic Markings by Means of Computerized Optical Method	2 (June)

STD. NO.	TITLE	GROUP (MONTH)
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PAVEMENT SURFACE AND STRUCTURE CHARACTERISTICS

M 328-14 (2018)	Inertial Profiler	1 (April)
M 331-17	Smoothness of Pavement in Weigh-in-Motion (WIM) Systems	1 (April)
R 36-17	Evaluating Faulting of Concrete Pavements	1 (April)
R 37-04 (2018)	Application of Ground Penetrating Radar (GPR) to Highways	1 (April)
R 40-10 (2018)	Measuring Pavement Profile Using a Rod and Level	1 (April)
R 43-13 (2017)	Quantifying Roughness of Pavements	1 (April)
R 54-14 (2018)	Accepting Pavement Ride Quality When Measured Using Inertial Profiling Systems	1 (April)
R 56-14 (2018)	Certification of Inertial Profiling Systems	1 (April)
R 57-14 (2018)	Operating Inertial Profiling Systems	1 (April)
R 85-18	Quantifying Cracks in Asphalt Pavement Surfaces from Collected Pavement Images Utilizing Automated Methods	1 (April)
R 86-18	Collecting Images of Pavement Surfaces for Distress Detection	1 (April)
R 87-18	Determining Pavement Deformation Parameters and Cross Slope from Collected Transverse Profiles	1 (April)
R 88-18	Collecting the Transverse Pavement Profile	1 (April)

STD. NO.	TITLE	GROUP (MONTH)
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QUALITY ASSURANCE

R 9-05 (2018)	Acceptance Sampling Plans for Highway Construction	1 (April)
R 18-18	Establishing and Implementing a Quality Management System for Construction Materials Testing Laboratories	1 (April)
R 20-99 (2017)	Procedures for Measuring Highway Noise	1 (April)
R 38-10 (2018)	Quality Assurance of Standard Manufactured Materials	1 (April)
R 42-06 (2020)	Developing a Quality Assurance Plan for Hot Mix Asphalt (HMA)	1 (April)
R 61-12 (2020)	Establishing Requirements for Equipment Calibrations, Standardizations, and Checks	1 (April)
R 65-14 (2018)	Evaluating the Engineering and Environmental Suitability of Recycled Materials	1 (April)

STD. NO.	TITLE	GROUP (MONTH)
REINFORCING STEEL AND WIRE ROPE		
M 30-15	Metallic-Coated Steel Wire Rope and Fittings for Highway Guardrail	2 (June)
M 31M/M 31-17	Deformed and Plain Carbon and Low-Alloy Steel Bars for Concrete Reinforcement	2 (June)
M 54M/M 54-07 (2017)	Welded Deformed Steel Bar Mats for Concrete Reinforcement	2 (June)
M 203M/M 203-20	Steel Strand, Low-Relaxation Uncoated Seven-Wire for Concrete Reinforcement	2 (June)
M 204M/M 204-14 (2018)	Uncoated Stress-Relieved Steel Wire for Prestressed Concrete	2 (June)
M 254-06 (2015)	Corrosion-Resistant Coated Dowel Bars	2 (June)
M 275M/M 275-20	Uncoated High-Strength Steel Bars for Prestressing Concrete	2 (June)
M 322M/M 322-10 (2015)	Rail-Steel and Axle-Steel Deformed Bars for Concrete Reinforcement	2 (June)
M 329M/M 329-11 (2015)	Stainless Clad Deformed and Plain Round Steel Bars for Concrete Reinforcement	2 (June)

STD. NO.	TITLE	GROUP (MONTH)
SOILS AND STABILIZATION		
M 57-80 (2017)	Materials for Embankments and Subgrades	3 (July)
M 145-91 (2017)	Classification of Soils and Soil–Aggregate Mixtures for Highway Construction Purposes	3 (July)
M 146-91 (2017)	Terms Relating to Subgrade, Soil–Aggregate, and Fill Materials	3 (July)
M 147-17	Materials for Aggregate and Soil–Aggregate Subbase, Base, and Surface Courses	3 (July)
M 216-13 (2017)	Quicklime and Hydrated Lime for Soil Stabilization	1 (April)
M 288-17	Geosynthetic Specification for Highway Applications	2 (June)
M 318-02 (2019)	Glass Cullet Use for Soil–Aggregate Base Course	3 (July)
M 319-02 (2019)	Reclaimed Concrete Aggregate for Unbound Soil–Aggregate Base Course	3 (July)
R 13-12 (2016)	Conducting Geotechnical Subsurface Investigations	3 (July)
R 21-96 (2019)	Drilling for Subsurface Investigations—Unexpectedly Encountering Suspected Hazardous Material	1 (April)
R 22-97 (2015)	Decommissioning Geotechnical Exploratory Boreholes	1 (April)
R 27-01 (2019)	Assessment of Corrosion of Steel Piling for Non-Marine Applications	3 (July)
R 51-13 (2017)	Compost for Erosion/Sediment Control (Filter Berms and Filter Socks)	3 (July)
R 52-10 (2019)	Compost for Erosion/Sediment Control (Compost Blankets)	3 (July)
R 58-11 (2019)	Dry Preparation of Disturbed Soil and Soil–Aggregate Samples for Test	3 (July)
R 69-20	Determination of Long-Term Strength for Geosynthetic Reinforcement	2 (June)
R 74-16	Dry Preparation of Disturbed Soil and Soil–Aggregate Samples for Test	3 (July)
R 75-16	Developing a Family of Curves	3 (July)

STD. NO.	TITLE	GROUP (MONTH)
TESTING EQUIPMENT		
M 152M/M 152-16 (2020)	Flow Table for Use in Tests of Hydraulic Cement	1 (April)
M 201-15 (2020)	Mixing Rooms, Moist Cabinets, Moist Rooms, and Water Storage Tanks Used in the Testing of Hydraulic Cements and Concretes	1 (April)
M 231-95 (2019)	Weighing Devices Used in the Testing of Materials	3 (July)
M 261-18	Rib-Tread Standard Tire for Special-Purpose Pavement Frictional-Property Tests	1 (April)

STD. NO.	TITLE	GROUP (MONTH)
TESTING EQUIPMENT		

M 286-18	Smooth-Tread Standard Tire for Special-Purpose Pavement Frictional-Property Tests	1 (April)
R 32-20	Calibrating the Load Cell and Deflection Sensors for a Falling Weight Deflectometer	1 (April)
R 33-20	Calibrating the Reference Load Cell Used for Reference Calibrations for a Falling Weight Deflectometer	1 (April)
R 45-13 (2017)	Installing, Monitoring, and Processing Data of the Traveling Type Slope Inclinometer	3 (July)

STD. NO.	TITLE	GROUP (MONTH)
TIMBER AND PRESERVATIVES		

M 133-12 (2020)	Preservatives and Pressure Treatment Processes for Timber	2 (June)
M 168-07 (2020)	Wood Products	2 (June)

STD. NO.	TITLE	GROUP (MONTH)
DELETED STANDARDS²		

M 290-96 (2018)	Acrylic Prismatic Reflectors and Embossed Aluminum Frames for Signs	2 (June)
R 41-05 (2015)	Measuring Pavement Profile Using a Dipstick [®]	1 (April)

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Numerical Sequence Table of Contents

Master List (All Release Groups)¹

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M 29-12 (2016)	Fine Aggregate for Bituminous Paving Mixtures	3 (July)
M 30-15 (2019)	Metallic-Coated Steel Wire Rope and Fittings for Highway Guardrail	2 (June)
M 31M/M 31-19	Deformed and Plain Carbon and Low-Alloy Steel Bars for Concrete Reinforcement	2 (June)
M 33M/M 33-20	Preformed Expansion Joint Filler for Concrete (Bituminous Type)	2 (June)
M 36-16 (2020)	Corrugated Steel Pipe, Metallic-Coated, for Sewers and Drains	2 (June)
M 43-05 (2013)	Sizes of Aggregate for Road and Bridge Construction	3 (July)
M 45-16	Aggregate for Masonry Mortar	3 (July)
M 54M/M 54-19	Welded Deformed Steel Bar Mats for Concrete Reinforcement	2 (June)
M 57-80 (2017)	Materials for Embankments and Subgrades	3 (July)
M 80-13 (2017)	Coarse Aggregate for Hydraulic Cement Concrete	3 (July)
M 81-92 (2017)	Cutback Asphalt (Rapid-Curing Type)	3 (July)
M 82-17	Cutback Asphalt (Medium-Curing Type)	3 (July)
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M 86M/M 86-20	Nonreinforced Concrete Sewer, Storm Drain, and Culvert Pipe	2 (June)
M 102M/M 102-19	Steel Forgings, Carbon and Alloy, for General Industrial Use	2 (June)
M 103M/M 103-19	Steel Castings, Carbon, for General Application	2 (June)
M 105-09 (2018)	Gray Iron Castings	2 (June)
M 111M/M 111-19	Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products	2 (June)
M 133-12 (2020)	Preservatives and Pressure Treatment Processes for Timber	2 (June)
M 140-18	Emulsified Asphalt	3 (July)
M 143-14 (2018)	Sodium Chloride	2 (June)
M 144-14 (2018)	Calcium Chloride	2 (June)
M 145-91 (2017)	Classification of Soils and Soil–Aggregate Mixtures for Highway Construction Purposes	3 (July)
M 146-91 (2017)	Terms Relating to Subgrade, Soil–Aggregate, and Fill Materials	3 (July)
M 147-17	Materials for Aggregate and Soil–Aggregate Subbase, Base, and Surface Courses	3 (July)
M 152M/M 152-16 (2020)	Flow Table for Use in Tests of Hydraulic Cement	1 (April)
M 153-20	Preformed Sponge Rubber, Cork, and Recycled Rubber Expansion Joint Fillers for Concrete Paving and Structural Construction	2 (June)
M 154M/M 154-12 (2020)	Air-Entraining Admixtures for Concrete	1 (April)
M 156-13 (2017)	Requirements for Mixing Plants for Hot-Mixed, Hot-Laid Bituminous Paving Mixtures	3 (July)
M 157-13 (2017)	Ready-Mixed Concrete	1 (April)
M 163M/M 163-20	Castings, Iron-Chromium, Iron-Chromium-Nickel, Corrosion Resistant, for General Application	2 (June)
M 167M/M 167-17	Corrugated Steel Structural Plate, Zinc-Coated, for Field-Bolted Pipe, Pipe-Arches, and Arches	2 (June)

STD. NO.	TITLE	GROUP (MONTH)
SPECIFICATIONS		
M 168-07 (2020)	Wood Products	2 (June)
M 169-20	Steel Bars, Carbon and Alloy, Cold-Finished	2 (June)
M 170-20	Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe	2 (June)
M 170M-20	Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe [Metric]	2 (June)
M 175M/M 175-05 (2020)	Perforated Concrete Pipe	2 (June)
M 176M/M 176-20	Porous Concrete Pipe	2 (June)
M 178M/M 178-20	Concrete Drain Tile	2 (June)
M 180-12 (2017)	Corrugated Sheet Steel Beams for Highway Guardrail	2 (June)
M 181-10 (2019)	Chain-Link Fence	2 (June)
M 182-05 (2017)	Burlap Cloth Made from Jute or Kenaf and Cotton Mats	1 (April)
M 190-04 (2017)	Asphalt-Coated Corrugated Metal Culvert Pipe and Pipe-Arches	2 (June)
M 194M/M 194-13 (2017)	Chemical Admixtures for Concrete	1 (April)
M 195-11 (2019)	Lightweight Aggregates for Structural Concrete	3 (July)
M 196-16	Corrugated Aluminum Pipe for Sewers and Drains	2 (June)
M 197-20	Aluminum Alloy Sheet for Corrugated Aluminum Pipe	2 (June)
M 199M/M 199-17	Precast Reinforced Concrete Manhole Sections	2 (June)
M 201-15 (2020)	Mixing Rooms, Moist Cabinets, Moist Rooms, and Water Storage Tanks Used in the Testing of Hydraulic Cements and Concretes	1 (April)
M 202M/M 202-19	Steel Sheet Piling	2 (June)
M 203M/M 203-20	Steel Strand, Low-Relaxation Uncoated Seven-Wire for Concrete Reinforcement	2 (June)
M 204M/M 204-19	Uncoated Stress-Relieved Steel Wire for Prestressed Concrete	2 (June)
M 205M/M 205-11 (2019)	Molds for Forming Concrete Test Cylinders Vertically	1 (April)
M 206M/M 206-20	Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe	2 (June)
M 207M/M 207-20	Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe	2 (June)
M 208-18	Cationic Emulsified Asphalt	3 (July)
M 213-01 (2019)	Preformed Expansion Joint Fillers for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types)	2 (June)
M 216-13 (2017)	Quicklime and Hydrated Lime for Soil Stabilization	1 (April)
M 218-03 (2020)	Steel Sheet, Zinc-Coated (Galvanized), for Corrugated Steel Pipe	2 (June)
M 219-92 (2017)	Corrugated Aluminum Alloy Structural Plate for Field-Bolted Pipe, Pipe-Arches, and Arches	2 (June)
M 224-91 (2019)	Use of Protective Sealers for Portland Cement Concrete	2 (June)
M 226-80 (2017)	Viscosity-Graded Asphalt Cement	3 (July)
M 227M/M 227-19	Steel Bars, Carbon, Merchant Quality, Mechanical Properties	2 (June)
M 230-07 (2020)	Expanded and Extruded Foam Board (Polystyrene)	2 (June)
M 231-95 (2019)	Weighing Devices Used in the Testing of Materials	3 (July)
M 232M/M 232-19	Zinc Coating (Hot-Dip) on Iron and Steel Hardware	2 (June)
M 233-86 (2019)	Boiled Linseed Oil Mixture for Treatment of Portland Cement Concrete	2 (June)
M 235M/M 235-13 (2018)	Epoxy Resin Adhesives	2 (June)
M 237-96 (2019)	Epoxy Resin Adhesives for Bonding Traffic Markers to Hardened Portland Cement and Asphalt Concrete	2 (June)

STD. NO.	TITLE	GROUP (MONTH)
SPECIFICATIONS		
M 240M/M 240-20	Blended Hydraulic Cement	1 (April)
M 241M/M 241-13 (2017)	Concrete Made by Volumetric Batching and Continuous Mixing	1 (April)
M 242M/M 242-20	Reinforced Concrete D-Load Culvert, Storm Drain, and Sewer Pipe	2 (June)
M 243-96 (2017)	Field-Applied Coating of Corrugated Metal Structural Plate for Pipe, Pipe-Arches, and Arches	2 (June)
M 245-20	Corrugated Steel Pipe, Polymer-Precoated, for Sewers and Drains	2 (June)
M 246-15 (2019)	Steel Sheet, Metallic-Coated and Polymer-Precoated, for Corrugated Steel Pipe	2 (June)
M 247-13 (2018)	Glass Beads Used in Pavement Markings	2 (June)
M 249-12 (2020)	White and Yellow Reflective Thermoplastic Striping Material (Solid Form)	2 (June)
M 251-06 (2020)	Plain and Laminated Elastomeric Bridge Bearings	2 (June)
M 252-20	Corrugated Polyethylene Drainage Pipe	2 (June)
M 254-06 (2019)	Corrosion-Resistant Coated Dowel Bars	2 (June)
M 255M/M 255-19	Steel Bars, Carbon, Hot-Wrought, Special Quality, Mechanical Properties	2 (June)
M 259-20	Precast Reinforced Concrete Box Sections for Culverts, Storm Drains, and Sewers	2 (June)
M 259M-17	<i>Discontinued</i> —Precast Reinforced Concrete Box Sections for Culverts, Storm Drains, and Sewers [Metric]	2 (June)
M 261-18	Rib-Tread Standard Tire for Special-Purpose Pavement Frictional-Property Tests	1 (April)
M 262-11 (2020)	Concrete Pipe and Related Products	2 (June)
M 268-15 (2019)	Retroreflective Sheeting for Flat and Vertical Traffic Control Applications	2 (June)
M 269-96 (2018)	Turnbuckles and Shackles	2 (June)
M 270M/M 270-20	Structural Steel for Bridges	2 (June)
M 273-20	Precast Reinforced Concrete Box Sections for Culverts, Storm Drains, and Sewers with Less Than 2 ft of Cover Subjected to Highway Loadings	2 (June)
M 273M-17	<i>Discontinued</i> —Precast Reinforced Concrete Box Sections for Culverts, Storm Drains, and Sewers with Less Than 0.6 m of Cover Subjected to Highway Loadings [Metric]	2 (June)
M 274-87 (2017)	Steel Sheet, Aluminum-Coated (Type 2), for Corrugated Steel Pipe	2 (June)
M 275M/M 275-20	Uncoated High-Strength Steel Bars for Prestressing Concrete	2 (June)
M 277-06 (2019)	Wire Rope and Sockets for Movable Bridges	2 (June)
M 278-15 (2019)	Class PS46 Poly(Vinyl Chloride) (PVC) Pipe	2 (June)
M 279-14 (2018)	Metallic-Coated, Steel Woven Wire Fence Fabric	2 (June)
M 280-20	Metallic-Coated (Carbon) Steel Barbed Wire	2 (June)
M 281-96 (2018)	Steel Fence Posts and Assemblies, Hot-Wrought	2 (June)
M 285M/M 285-19	Castings, Iron-Chromium-Nickel, Corrosion Resistant, for Severe Service	2 (June)
M 286-18	Smooth-Tread Standard Tire for Special-Purpose Pavement Frictional-Property Tests	1 (April)
M 288-17	Geosynthetic Specification for Highway Applications	2 (June)
M 289-91 (2017)	Aluminum-Zinc Alloy Coated Sheet Steel for Corrugated Steel Pipe	2 (June)
M 292M/M 292-20	Carbon and Alloy Steel Nuts for Bolts for High-Pressure or High-Temperature Service, or Both	2 (June)
M 294-18	Corrugated Polyethylene Pipe, 300- to 1500-mm (12- to 60-in.) Diameter	2 (June)
M 295-19	Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete	1 (April)
M 297-10 (2019)	Preformed Polychloroprene Elastomeric Joint Seals for Bridges	2 (June)

STD. NO.	TITLE	GROUP (MONTH)
SPECIFICATIONS		
M 300-03 (2017)	Inorganic Zinc-Rich Primer	2 (June)
M 302-19	Slag Cement for Use in Concrete and Mortars	1 (April)
M 303-89 (2019)	Lime for Asphalt Mixtures	1 (April)
M 304-11 (2019)	Poly(Vinyl Chloride) (PVC) Profile Wall Drain Pipe and Fittings Based on Controlled Inside Diameter	2 (June)
M 306-10 (2019)	Drainage, Sewer, Utility, and Related Castings	2 (June)
M 307-13 (2017)	Silica Fume Used in Cementitious Mixtures	1 (April)
M 314-90 (2018)	Steel Anchor Bolts	2 (June)
M 316-18	Polymer-Modified Emulsified Asphalt	3 (July)
M 318-02 (2019)	Glass Cullet Use for Soil-Aggregate Base Course	3 (July)
M 319-02 (2019)	Reclaimed Concrete Aggregate for Unbound Soil-Aggregate Base Course	3 (July)
M 320-17	Performance-Graded Asphalt Binder	3 (July)
M 321-04 (2017)	High-Reactivity Pozzolans for Use in Hydraulic-Cement Concrete, Mortar, and Grout	1 (April)
M 322M/M 322-10 (2019)	Rail-Steel and Axle-Steel Deformed Bars for Concrete Reinforcement	2 (June)
M 323-17	Superpave Volumetric Mix Design	3 (July)
M 325-08 (2017)	Stone Matrix Asphalt (SMA)	3 (July)
M 326-18	Polyethylene (PE) Liner Pipe, 300- to 1600-mm Diameter, Based on Controlled Outside Diameter	2 (June)
M 327-19	Processing Additions for Use in the Manufacture of Hydraulic Cements	1 (April)
M 328-14 (2018)	Inertial Profiler	1 (April)
M 329M/M 329-11 (2019)	Stainless Clad Deformed and Plain Round Steel Bars for Concrete Reinforcement	2 (June)
M 330-20	Polypropylene Pipe, 300- to 1500-mm (12- to 60-in.) Diameter	2 (June)
M 331-17	Smoothness of Pavement in Weigh-in-Motion (WIM) Systems	1 (April)
M 332-19	Performance-Graded Asphalt Binder Using Multiple Stress Creep Recovery (MSCR) Test	3 (July)
M 333-16 (2020)	Detectable Warning Surfaces	2 (June)
M 334M/M 334-17	Uncoated, Corrosion-Resistant, Deformed and Plain Chromium Alloyed, Billet-Steel Bars for Concrete Reinforcement and Dowels	2 (June)
M 335-19	Steel-Reinforced Polyethylene (PE) Ribbed Pipe, 300- to 1500-mm (12- to 60-in.) Diameter	2 (June)
M 336M/M336-20	Steel Wire and Welded Wire, Plain and Deformed, for Concrete Reinforcement	2 (June)

STD. NO.	TITLE	GROUP (MONTH)
PRACTICES		
R 5-17	Selection and Use of Emulsified Asphalts	3 (July)
R 8-96 (2019)	Evaluation of Transportation-Related Earthborne Vibrations	1 (April)
R 9-05 (2018)	Acceptance Sampling Plans for Highway Construction	1 (April)
R 10-06 (2020)	Definition of Terms Related to Quality and Statistics as Used in Highway Construction	1 (April)
R 13-12 (2016)	Conducting Geotechnical Subsurface Investigations	3 (July)
R 15-18	Asphalt Additives and Modifiers	3 (July)
R 18-18	Establishing and Implementing a Quality Management System for Construction Materials Testing Laboratories	1 (April)

STD. NO.	TITLE	GROUP (MONTH)
PRACTICES		
R 20-99 (2017)	Procedures for Measuring Highway Noise	1 (April)
R 21-96 (2019)	Drilling for Subsurface Investigations—Unexpectedly Encountering Suspected Hazardous Material	1 (April)
R 22-97 (2015)	Decommissioning Geotechnical Exploratory Boreholes	1 (April)
R 23-99 (2018)	Chemical, Biological, and Physical Analysis of Water	1 (April)
R 24-99 (2018)	Collection and Preservation of Water Samples	1 (April)
R 25-19	Technician Training and Certification Programs	1 (April)
R 26-01 (2018)	Certifying Suppliers of Performance-Graded Asphalt Binders	3 (July)
R 27-01 (2019)	Assessment of Corrosion of Steel Piling for Non-Marine Applications	3 (July)
R 28-12 (2016)	Accelerated Aging of Asphalt Binder Using a Pressurized Aging Vessel (PAV)	3 (July)
R 29-15 (2019)	Grading or Verifying the Performance Grade (PG) of an Asphalt Binder	3 (July)
R 30-02 (2019)	Mixture Conditioning of Hot Mix Asphalt (HMA)	3 (July)
R 31-09 (2019)	Evaluation of Protective Coating Systems for Structural Steel	2 (June)
R 32-20	Calibrating the Load Cell and Deflection Sensors for a Falling Weight Deflectometer	1 (April)
R 33-20	Calibrating the Reference Load Cell Used for Reference Calibrations for a Falling Weight Deflectometer	1 (April)
R 34-03 (2018)	Evaluating Deicing Chemicals	1 (April)
R 35-17	Superpave Volumetric Design for Asphalt Mixtures	3 (July)
R 36-17	Evaluating Faulting of Concrete Pavements	1 (April)
R 37-04 (2018)	Application of Ground Penetrating Radar (GPR) to Highways	1 (April)
R 38-10 (2018)	Quality Assurance of Standard Manufactured Materials	1 (April)
R 39-19	Making and Curing Concrete Test Specimens in the Laboratory	1 (April)
R 40-10 (2018)	Measuring Pavement Profile Using a Rod and Level	1 (April)
R 42-06 (2020)	Developing a Quality Assurance Plan for Hot Mix Asphalt (HMA)	1 (April)
R 43-13 (2017)	Quantifying Roughness of Pavements	1 (April)
R 44-07 (2018)	Independent Assurance (IA) Programs	1 (April)
R 45-13 (2017)	Installing, Monitoring, and Processing Data of the Traveling Type Slope Inclinometer	3 (July)
R 46-08 (2017)	Designing Stone Matrix Asphalt (SMA)	3 (July)
R 47-19	Reducing Samples of Asphalt Mixtures to Testing Size	3 (July)
R 49-09 (2018)	Determination of Low-Temperature Performance Grade (PG) of Asphalt Binders	3 (July)
R 50-09 (2018)	Geosynthetic Reinforcement of the Aggregate Base Course of Flexible Pavement Structures	2 (June)
R 51-13 (2017)	Compost for Erosion/Sediment Control (Filter Berms and Filter Socks)	3 (July)
R 52-10 (2019)	Compost for Erosion/Sediment Control (Compost Blankets)	3 (July)
R 54-14 (2018)	Accepting Pavement Ride Quality When Measured Using Inertial Profiling Systems	1 (April)
R 56-14 (2018)	Certification of Inertial Profiling Systems	1 (April)
R 57-14 (2018)	Operating Inertial Profiling Systems	1 (April)
R 58-11 (2019)	Dry Preparation of Disturbed Soil and Soil–Aggregate Samples for Test	3 (July)
R 59-11 (2019)	Recovery of Asphalt Binder from Solution by Abson Method	3 (July)
R 60-12 (2020)	Sampling Freshly Mixed Concrete	1 (April)
R 61-12 (2020)	Establishing Requirements for Equipment Calibrations, Standardizations, and Checks	1 (April)

STD. NO.	TITLE	GROUP (MONTH)
PRACTICES		
R 62-13 (2017)	Developing Dynamic Modulus Master Curves for Asphalt Mixtures	3 (July)
R 63-13 (2017)	Solid Wall High-Density Polyethylene (HDPE) Conduit for Non-Pressure Applications Used for the Protection of Power and Communications Cables	2 (June)
R 64-17	Sampling and Fabrication of 50-mm (2-in.) Cube Specimens Using Grout (Non-Shrink) or Mortar	1 (April)
R 65-14 (2018)	Evaluating the Engineering and Environmental Suitability of Recycled Materials	1 (April)
R 66-16	Sampling Asphalt Mixtures	3 (July)
R 67-16	Sampling Asphalt Mixtures after Compaction (Obtaining Cores)	3 (July)
R 68-15 (2019)	Preparation of Asphalt Mixtures by Means of the Marshall Apparatus	3 (July)
R 69-20	Determination of Long-Term Strength for Geosynthetic Reinforcement	2 (June)
R 70M/R 70-18	Use of Apparatus for the Determination of Length Change of Hardened Cement Paste, Mortar, and Concrete	1 (April)
R 71-16 (2020)	Sampling and Amount of Testing of Hydraulic Cement	1 (April)
R 72-16 (2020)	Match Curing of Concrete Test Specimens	1 (April)
R 73-16 (2020)	Evaluation of Precast Concrete Drainage Products	2 (June)
R 74-16	Wet Preparation of Disturbed Soil Samples for Test	3 (July)
R 75-16	Developing a Family of Curves	3 (July)
R 76-16	Reducing Samples of Aggregate to Testing Size	3 (July)
R 77-16	Certifying Suppliers of Emulsified Asphalt	3 (July)
R 78-16	Recovering Residue from Emulsified Asphalt Using Low-Temperature Evaporative Techniques	3 (July)
R 79-19	Vacuum Drying Compacted Asphalt Specimens	3 (July)
R 80-17	Determining the Reactivity of Concrete Aggregates and Selecting Appropriate Measures for Preventing Deleterious Expansion in New Concrete Construction	1 (April)
R 81-17	Static Segregation of Hardened Self-Consolidating Concrete (SCC) Cylinders	1 (April)
R 82-17	Pipe Joint Selection for Highway Culvert and Storm Drains	2 (June)
R 83-17	Preparation of Cylindrical Performance Test Specimens Using the Superpave Gyratory Compactor (SGC)	3 (July)
R 84-17	Developing Dynamic Modulus Master Curves for Asphalt Mixtures Using the Asphalt Mixture Performance Tester (AMPT)	3 (July)
R 85-18	Quantifying Cracks in Asphalt Pavement Surfaces from Collected Pavement Images Utilizing Automated Methods	1 (April)
R 86-18	Collecting Images of Pavement Surfaces for Distress Detection	1 (April)
R 87-18	Determining Pavement Deformation Parameters and Cross Slope from Collected Transverse Profiles	1 (April)
R 88-18	Collecting the Transverse Pavement Profile	1 (April)
R 89-18	Accreditation Bodies Operating in the Fields of Construction Materials Testing and Inspection	1 (April)
R 90-18	Sampling Aggregate Products	3 (July)
R 91-18	Determining Aggregate Source Shape Values from Digital Image Analysis Shape Properties	3 (July)
R 92-18	Evaluating the Elastic Behavior of Asphalt Binders Using the Multiple Stress Creep Recovery (MSCR) Test	3 (July)
R 93-19	Service Life Determination of Corrugated HDPE Pipes Manufactured with Recycled Content	2 (June)

STD. NO.	TITLE	GROUP (MONTH)
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PRACTICES

R 94-19	Quality Assurance, Job Site Quality Control, and Reapplication of Protective Sealers for Portland Cement Concrete	2 (June)
R 95-19	Accelerated Aging of Hot-Poured Asphalt Crack Sealant Using a Vacuum Oven	2 (June)
R 96-19	Installation, Operation, and Maintenance of Ignition Furnaces	3 (July)
R 97-19	Sampling Asphalt Mixtures	3 (July)
R 98-20	Determination of Size and Roundness of Glass Beads Used in Traffic Markings by Means of Computerized Optical Method	2 (June)

STD. NO.	TITLE	GROUP (MONTH)
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DELETED STANDARDS²

M 290-96 (2018)	Acrylic Prismatic Reflectors and Embossed Aluminum Frames for Signs	2 (June)
R 41-05 (2015)	Measuring Pavement Profile Using a Dipstick [®]	1 (April)

¹ This master table of contents is as of Group 2 (June 2020).

² For the disposition of provisional standards not listed above, see the Provisionals History.

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 2 (June 2020)

Designation Number	Title	Technical Subcommittee Number	Balloted Revisions
M 33M/M 33-20	Preformed Expansion Joint Filler for Concrete (Bituminous Type)	4e	Changed to dual units for equivalency with ASTM D994/D994M-11(2016).
M 36-16 (2020)	Corrugated Steel Pipe, Metallic-Coated, for Sewers and Drains	4b	Reconfirmed for 2020 publication.
M 86M/M 86-20	Nonreinforced Concrete Sewer, Storm Drain, and Culvert Pipe	4a	<p>In Section 6.2, to make cementitious materials requirements consistent with ASTM C14 and C14M:</p> <ul style="list-style-type: none"> • Updated references to <i>slag-modified portland cement</i>. • Updated references to <i>ground granulated blast-furnace slag</i>. • Added references to <i>portland-limestone cements</i>. • Dropped limits on 25 percent fly ash and 25 percent slag cement in ternary combinations. • Added a permitted combination of portland-pozzolan cement with fly ash.
M 133-12 (2020)	Preservatives and Pressure Treatment Processes for Timber	4c	Reconfirmed for 2020 publication.
M 153-20	Preformed Sponge Rubber, Cork, and Recycled Rubber Expansion Joint Fillers for Concrete Paving and Structural Construction	4e	<p>Revised for equivalency with ASTM D1752-18 as follows:</p> <ul style="list-style-type: none"> • In Section 3.1, added strip sizes to ordering information. • In Section 5.4, added a comma for clarity. • In Section 6.1, changed <i>depth</i> to <i>width</i>.

Designation Number	Title	Technical Subcommittee Number	Balloted Revisions
M 163M/M 163-20	Castings, Iron-Chromium, Iron-Chromium-Nickel, Corrosion Resistant, for General Application	4f	Revised Table 2 extensively for equivalency with ASTM A743/A743M-19: <ul style="list-style-type: none"> • Combined <i>Grade and Type</i>. • Rearranged order of some chemicals. • Changed Columbium to Niobium. • Moved Selenium, Tungsten, and Vanadium to a column labeled “Other.” • Added note about ellipses. • Noted all values are a maximum except where a range is provided. • Added note that Columbium (Cb) and Niobium (Nb) are interchangeable names for the same element, 41. • Added maximum for Cu content on Grades CK35MN and HG10MNN. Added Section 8.3.3 for Grade HG10MNN. Revised Section S12.
M 168-07 (2020)	Wood Products	4e	Reconfirmed for 2020 publication.
M 169-20	Steel Bars, Carbon and Alloy, Cold-Finished	4f	Revised for equivalency with ASTM A108-18 as follows: <ul style="list-style-type: none"> • In Section 1.1, deleted “to cheemical Compositions” from first sentence. • In Section 3.1, added “the” before “purchaser” for clarity. • In Section 6.3, added Section 6.3.2.5, induction hardened, as a heat treatment process.
M 170-20	Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe	4a	In Section 6.2, to make cementitious materials requirements consistent with ASTM C76: <ul style="list-style-type: none"> • Updated references to <i>slag-modified portland cement</i>. • Updated references to <i>ground granulated blast-furnace slag</i>. • Added references to <i>portland-limestone cements</i>.

Designation Number	Title	Technical Subcommittee Number	Balloted Revisions
M 170M-20	Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe [Metric]	4a	<p>In Section 6.2, to make cementitious materials requirements consistent with ASTM C76M:</p> <ul style="list-style-type: none"> • Updated references to <i>slag-modified portland cement</i>. • Updated references to <i>ground granulated blast-furnace slag</i>. • Added references to <i>portland-limestone cements</i>.
M 175M/M 175-05 (2020)	Perforated Concrete Pipe	4a	Reconfirmed for 2020 publication.
M 176M/M 176-20	Porous Concrete Pipe	4a	<p>In Section 6.2, to make cementitious materials requirements consistent with ASTM C654:</p> <ul style="list-style-type: none"> • Updated references to <i>slag-modified portland cement</i>. • Updated references to <i>ground granulated blast-furnace slag</i>. • Added references to <i>portland-limestone cements</i>. • Dropped limits on 25 percent fly ash and 25 percent slag cement in ternary combinations, and 25 percent fly ash in Type IP cements. • Updated reference for portland blast-furnace slag cement to M 240 rather than M 302. • Added an option to use a combination of portland-pozzolan cement and fly ash.
M 178M/M 178-20	Concrete Drain Tile	4a	<p>In Section 6.2, to make cementitious materials requirements consistent with ASTM C412:</p> <ul style="list-style-type: none"> • Updated references to <i>slag-modified portland cement</i>. • Updated references to <i>ground granulated blast-furnace slag</i>. • Added references to <i>portland-limestone cements</i>. • Dropped limits on 25 percent fly ash and 25 percent slag cement in ternary combinations. • Revised reference from ASTM C989 to M 302. • Added an option to use a combination of portland-pozzolan cement and fly ash.
M 197-20	Aluminum Alloy Sheet for Corrugated Aluminum Pipe	4b	Minor revisions were made to Section 5.1 and Table 3.

Designation Number	Title	Technical Subcommittee Number	Balloted Revisions
M 203M/M 203-20	Steel Strand, Uncoated Seven-Wire for Concrete Reinforcement	4f	<ul style="list-style-type: none"> • Clarified portions of the standard related to splicing. • Revised Section 3, 4, 7, 8, 11.1, and 13.1 for equivalency with ASTM A416-18.
M 206M/M 206-20	Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe	4a	<p>In Section 6.2, to make cementitious materials requirements consistent with ASTM C506:</p> <ul style="list-style-type: none"> • Updated references to <i>slag-modified portland cement</i>. • Updated references to <i>ground granulated blast-furnace slag</i>. • Added references to <i>portland-limestone cements</i>.
M 207M/M 207-20	Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe	4a	<p>In Section 6.2, to make cementitious materials requirements consistent with ASTM C507:</p> <ul style="list-style-type: none"> • Updated references to <i>slag-modified portland cement</i>. • Updated references to <i>ground granulated blast-furnace slag</i>. • Added references to <i>portland-limestone cements</i>.
M 218-03 (2020)	Steel Sheet, Zinc-Coated (Galvanized), for Corrugated Steel Pipe	4b	Reconfirmed for 2020 publication.
M 230-07 (2020)	Expanded and Extruded Foam Board (Polystyrene)	4e	Reconfirmed for 2020 publication.
M 242M/M 242-20	Reinforced Concrete D-Load Culvert, Storm Drain, and Sewer Pipe	4a	<p>In Section 6.2, to make cementitious materials requirements consistent with ASTM C655 and C655M:</p> <ul style="list-style-type: none"> • Updated references to <i>slag-modified portland cement</i>. • Updated references to <i>ground granulated blast-furnace slag</i>. • Added references to <i>portland-limestone cements</i>. • Removed limitation on 25 percent fly ash in combinations with portland-pozzolan cement.

Designation Number	Title	Technical Subcommittee Number	Balloted Revisions
M 245-20	Corrugated Steel Pipe, Polymer-Precoated, for Sewers and Drains	4b	Revised the following for equivalency with ASTM A762/A762M-19: <ul style="list-style-type: none"> • In Section 2.2, updated ASTM references. • In Section 6.5, updated citation from ASTM C990 to ASTM C443. • In Section 7.1.2, added corrugations with pitches of 125 mm. • In Section 7.2, changed to pipe diameters smaller than 525 mm. • In Table 4, nominal size in last row corrected to 125 by 25. • In Table 8, extensive revisions made to match corresponding table in ASTM A762. • In Table 11, added 125 by 25 to table caption. • In Table 12, extensive revisions made to match corresponding table in ASTM A762. • In Table 13, value for <i>L</i> in second-to-last row changed from 338 to 336. • In Table 15, a number of 285 entries changed to 265.
M 249-12 (2020)	White and Yellow Reflective Thermoplastic Striping Material (Solid Form)	4c	Reconfirmed for 2020 publication.
M 251-06 (2020)	Plain and Laminated Elastomeric Bridge Bearings	4e	Reconfirmed for 2020 publication.
M 252-20	Corrugated Polyethylene Drainage Pipe	4b	In Section 9.1.1, specimen minimum size set at 300 mm (12 in.) and loading plate length requirement added.
M 259-20	Precast Reinforced Concrete Box Sections for Culverts, Storm Drains, and Sewers	4a	In Section 6.2, revised cementitious materials requirements as follows: <ul style="list-style-type: none"> • Included slag cement meeting M 302 as a permitted ingredient in combinations. • Added references to <i>portland-limestone cements</i>. • Dropped limits on 25 percent fly ash and 25 percent slag cement in ternary combinations. • Added option to use combinations of portland-limestone cement with fly ash, and portland or portland-limestone cement with slag and/or fly ash, portland-pozzolan cement and fly ash.

Designation Number	Title	Technical Subcommittee Number	Balloted Revisions
M 259M-17	Precast Reinforced Concrete Box Sections for Culverts, Storm Drains, and Sewers [Metric]	4a	Discontinued due to lack of use with metric values. Readers are directed to M 259 instead.
M 262-11 (2020)	Concrete Pipe and Related Products	4a	Reconfirmed for 2020 publication.
M 270M/M 270-20	Structural Steel for Bridges	4f	Revised for equivalency with ASTM A709-17 as follows:
M 273-20	Precast Reinforced Concrete Box Sections for Culverts, Storm Drains, and Sewers with Less Than 2 ft of Cover Subjected to Highway Loadings	4a	In Section 6.2, revised cementitious materials requirements as follows: <ul style="list-style-type: none"> • Included slag cement meeting M 302 as a permitted ingredient in combinations. • Added references to <i>portland-limestone cements</i>. • Dropped limits on 25 percent fly ash and 25 percent slag cement in ternary combinations. • Added option to use combinations of portland-limestone cement with fly ash, and portland or portland-limestone cement with slag and/or fly ash, portland-pozzolan cement and fly ash.
M 273M-17	Precast Reinforced Concrete Box Sections for Culverts, Storm Drains, and Sewers with Less Than 2 ft of Cover Subjected to Highway Loadings [Metric]	4a	Discontinued due to lack of use with metric values. Readers are directed to M 273 instead.
M 275M/M 275-20	Uncoated High-Strength Steel Bars for Prestressing Concrete	4f	Revised for equivalency with ASTM A722/A722M-18 as follows:
M 280-20	Metallic-Coated (Carbon) Steel Barbed Wire	4d	Revised to match ASTM A121 regarding the use of couplers.
M 292M/M 292-20	Carbon and Alloy Steel Nuts for Bolts for High-Pressure or High-Temperature Service, or Both	4f	Revised for equivalency with ASTM A194/A194M-18 as follows:
M 330-20	Polypropylene Pipe, 300- to 1500-mm (12- to 60-in.) Diameter	4b	<ul style="list-style-type: none"> • In Section 6.1.1, revised polypropylene property requirements for extruded pipe and fittings. • In Table 1, specified Procedure B of ASTM D790 and deleted Maximum Value column. • In Section 7.2.3, revised inside diameter tolerances.
M 333-16 (2020)	Detectable Warning Surfaces	4d	Reconfirmed for 2020 publication.
M 336M/M 336-20	Steel Wire and Welded Wire, Plain and Deformed, for Concrete Reinforcement	4f	Revised for equivalency with ASTM A1064/A1064M-18a as follows:

Designation Number	Title	Technical Subcommittee Number	Balloted Revisions
R 69-20	Determination of Long-Term Strength for Geosynthetic Reinforcement	4e	Revised to address both updates to non-aggressive environments to be consistent with the current <i>AASHTO LRFD Bridge Design Specifications</i> and proposed revisions for geostrips.
R 73-16 (2020)	Evaluation of Precast Concrete Drainage Products	4a	Reconfirmed for 2020 publication.
R 98-20	Determination of Size and Roundness of Glass Beads Used in Traffic Markings by Means of Computerized Optical Method	4c	Adopted AASHTO Provisional standard PP 74 as a full standard practice, R 98, with minor revisions as follows: <ul style="list-style-type: none"> In Table 1, last column, add “(minimum)” to heading and “.0” to each value. In Note 9, revised example weights to align with Section 11.1.1.

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.

Designation Number	Title	Technical Subcommittee Number	Balloted Revisions
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.
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

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Master List (All Release Groups)¹

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T 19M/T 19-14 (2018)	Bulk Density (“Unit Weight”) and Voids in Aggregate	3 (July)
T 21M/T 21-15 (2019)	Organic Impurities in Fine Aggregates for Concrete	3 (July)
T 27-14 (2018)	Sieve Analysis of Fine and Coarse Aggregates	3 (July)
T 30-19	Mechanical Analysis of Extracted Aggregate	3 (July)
T 37-07 (2016)	Sieve Analysis of Mineral Filler for Hot Mix Asphalt (HMA)	3 (July)
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STD. NO.	TITLE	GROUP (MONTH)
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STD. NO.	TITLE	GROUP (MONTH)
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STD. NO.	TITLE	GROUP (MONTH)
BOX CULVERT, CULVERT PIPE, AND DRAIN TILE		

T 341-10 (2019)	Determination of Compression Capacity for Profile Wall Plastic Pipe by Stub Compression Loading	2 (June)
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STD. NO.	TITLE	GROUP (MONTH)
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T 23-18	Making and Curing Concrete Test Specimens in the Field	1 (April)
T 24M/T 24-15 (2019)	Obtaining and Testing Drilled Cores and Sawed Beams of Concrete	1 (April)
T 97-18	Flexural Strength of Concrete (Using Simple Beam with Third-Point Loading)	1 (April)
T 119M/T 119-18	Slump of Hydraulic Cement Concrete	1 (April)
T 121M/T 121-19	Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete	1 (April)
T 140-20	Compressive Strength of Concrete Using Portions of Beams Broken in Flexure	1 (April)
T 148-15 (2019)	Measuring Length of Drilled Concrete Cores	1 (April)
T 152-19	Air Content of Freshly Mixed Concrete by the Pressure Method	1 (April)
T 155-13 (2017)	Water Retention by Liquid Membrane-Forming Curing Compounds for Concrete	1 (April)
T 157-12 (2020)	Air-Entraining Admixtures for Concrete	1 (April)
T 158-11 (2019)	Bleeding of Concrete	1 (April)
T 160-17	Length Change of Hardened Hydraulic Cement Mortar and Concrete	1 (April)
T 161-17	Resistance of Concrete to Rapid Freezing and Thawing	1 (April)
T 177-17	Flexural Strength of Concrete (Using Simple Beam with Center-Point Loading)	1 (April)
T 178-15 (2019)	Portland-Cement Content of Hardened Hydraulic-Cement Concrete	1 (April)
T 196M/T 196-11 (2019)	Air Content of Freshly Mixed Concrete by the Volumetric Method	1 (April)
T 197M/T 197-11 (2019)	Time of Setting of Concrete Mixtures by Penetration Resistance	1 (April)
T 198-15 (2019)	Splitting Tensile Strength of Cylindrical Concrete Specimens	1 (April)
T 231-17	Capping Cylindrical Concrete Specimens	1 (April)
T 253-02 (2016)	Coated Dowel Bars	2 (June)
T 259-02 (2017)	Resistance of Concrete to Chloride Ion Penetration	1 (April)
T 260-97 (2020)	Sampling and Testing for Chloride Ion in Concrete and Concrete Raw Materials	1 (April)
T 276-17	Measuring Early-Age Compression Strength and Projecting Later-Age Strength	1 (April)
T 277-15 (2019)	Electrical Indication of Concrete's Ability to Resist Chloride Ion Penetration	1 (April)
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T 318-15 (2019)	Water Content of Freshly Mixed Concrete Using Microwave Oven Drying	1 (April)
T 325-04 (2020)	Estimating the Strength of Concrete in Transportation Construction by Maturity Tests	1 (April)
T 332-07 (2020)	Determining Chloride Ions in Concrete and Concrete Materials by Specific Ion Probe	1 (April)
T 334-08 (2020)	Estimating the Cracking Tendency of Concrete	1 (April)
T 336-15 (2019)	Coefficient of Thermal Expansion of Hydraulic Cement Concrete	1 (April)
T 345-12 (2020)	Passing Ability of Self-Consolidating Concrete (SCC) by J-Ring	1 (April)

STD. NO.	TITLE	GROUP (MONTH)
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T 348-13 (2018)	Air-Void Characteristics of Freshly Mixed Concrete by Buoyancy Change	1 (April)
T 349-13 (2017)	Filling Capacity of Self-Consolidating Concrete Using the Caisson Test	1 (April)
T 351-14 (2018)	Visual Stability Index (VSI) of Self-Consolidating Concrete (SCC)	1 (April)
T 352-14 (2018)	Determining Formwork Pressure of Fresh Self-Consolidating Concrete (SCC) Using Pressure Transducers	1 (April)
T 356-15 (2019)	Determining Air Content of Hardened Portland Cement Concrete by High-Pressure Air Meter	1 (April)
T 357-15 (2019)	Predicting Chloride Penetration of Hydraulic Cement Concrete by the Rapid Migration Procedure	1 (April)
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T 374M/T 374-17	Comparative Qualitative Corrosion Characterization of Uncoated Chromium-Alloyed Steel Bars Used for Concrete Reinforcement (Tombstone Test)	2 (June)
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STD. NO.	TITLE	GROUP (MONTH)
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HYDRAULIC CEMENT

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JOINT FILLER AND ASPHALT PLANK

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METALLIC MATERIALS FOR BRIDGES

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MISCELLANEOUS

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PART 2—STANDARD METHODS OF TEST

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T 368-17	Measuring Low-Temperature Flexural Creep Stiffness of Hot-Poured Asphalt Crack Sealant by Bending Beam Rheometer (BBR)	2 (June)
T 369-17	Evaluation of the Low-Temperature Tensile Property of Hot-Poured Asphalt Crack Sealant by Direct Tension Test	2 (June)
T 370-18	Measuring Adhesion of Hot-Poured Asphalt Crack Sealant Using Direct Adhesion Tester	2 (June)
T 371-17	Measuring Interfacial Fracture Energy of Hot-Poured Asphalt Crack Sealant Using a Blister Test	2 (June)
T 372M/T 372-17	Sensitivity of Stainless Steel to Intergranular Attack	2 (June)
T 373M/T 373-17	Comparative Qualitative Corrosion Characterization of Steel Bars Used for Concrete Reinforcement (Linear Polarization Resistance and Potentiodynamic Polarization Tests)	2 (June)
T 374M/T 374-17	Comparative Qualitative Corrosion Characterization of Uncoated Chromium-Alloyed Steel Bars Used for Concrete Reinforcement (Tombstone Test)	2 (June)
T 375M/T 375-17	Identification of Iron-Based Alloy Steel Bars for Concrete Reinforcement or Dowels by Handheld X-Ray Fluorescence (XRF) Spectrometer	2 (June)
T 376M/T 376-17	Microcell Slab Chloride Threshold	2 (June)
T 377-17	Detecting the Presence of Phosphorus in Asphalt Binder	3 (July)
T 378-17	Determining the Dynamic Modulus and Flow Number for Asphalt Mixtures Using the Asphalt Mixture Performance Tester (AMPT)	3 (July)
T 379-18	Nonlinear Impact Resonance Acoustic Spectroscopy (NIRAS) for Concrete Specimens with Damage from Alkali-Silica Reaction (ASR)	1 (April)
T 380-19	Potential Alkali Reactivity of Aggregates and Effectiveness of ASR Mitigation Measures (Miniature Concrete Prism Test, MCPT)	1 (April)
T 381-18	Determining Aggregate Shape Properties by Means of Digital Image Analysis	3 (July)
T 382-18	Determining the Viscosity of Emulsified Asphalt by a Rotational Paddle Viscometer	3 (July)
T 383-19	Evaluation of Asphalt Release Agents (ARAs)	3 (July)
T 384-19	Protective Sealers for Portland Cement Concrete	2 (June)
T 385-19	Deep Foundation Elements under Bidirectional Static Axial Compressive Load	3 (July)
T 386-19	Rapid Axial Compressive Load Testing of Deep Foundation Units	3 (July)
T 387-19	Determining the Cracking Temperature of Asphalt Binder Using the Asphalt Binder Cracking Device (ABCD)	3 (July)

STD. NO.	TITLE	GROUP (MONTH)
T 388-20	Detectable Warning Systems	2 (June)
T 389-20	Determining the Influence of Road Surfaces on Vehicle Noise Using the Statistical Isolated Pass-By (SIP) Method	1 (April)
T 390-20	Determining the Influence of Road Surfaces on Traffic Noise Using the Continuous-Flow Traffic Time-Integrated Method (CTIM)	1 (April)

STD. NO.	TITLE	GROUP (MONTH)
DELETED STANDARDS²		
T 367-17	Accelerated Aging of Hot-Poured Asphalt Crack Sealant Using a Vacuum Oven	2 (June)

¹ This master table of contents is as of June 2020.

² For the disposition of provisional standards not listed above, see the Provisionals History.

LIST OF TECHNICAL CHANGES—PART 2

The balloted technical changes listed below are also indicated in the specifications by a change bar in the left. 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 2 (June 2020)

Designation Number	Title	Technical Subcommittee Number	Balloted Revisions
T 244-20	Mechanical Testing of Steel Products	4f	Revised Sections 14, 19, 27, 30, 31, and 32; Table 12; and Annex C for equivalency with ASTM A370-18.
T 249-03 (2020)	Helical Lock Seam Corrugated Pipe	4b	Reconfirmed for 2020 publication.
T 253-02 (2020)	Coated Dowel Bars	4f	Reconfirmed for 2020 publication.
T 257-96 (2018)	Instrumental Photometric Measurements of Retroreflective Materials and Retroreflective Devices	4d	Discontinued [reason & alternative].
T 388-20	Detectable Warning Systems	4d	Adopted AASHTO Provisional standard TP 103 as a full standard method of test, T 388; no revisions made.

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.

Designation Number	Title	Technical Subcommittee Number	Balloted Revisions
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.
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.

Designation Number	Title	Technical Subcommittee Number	Balloted Revisions
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

Master List (All Release Groups)¹

STD. NO.	TITLE	RELEASE (MONTH)
AGGREGATES		
TP 120-16 (2018)	Pore Index for Carbonate Coarse Aggregate	July (3)
BITUMINOUS MATERIALS		
MP 23-15 (2018)	Reclaimed Asphalt Shingles for Use in Asphalt Mixtures	3 (July)
MP 25-18 (2019)	Performance-Graded Hot-Poured Asphalt Crack Sealant	2 (June)
MP 27-16 (2020)	Materials for Emulsified Asphalt Chip Seals	1 (April)
MP 28-17 (2020)	Materials for Microsurfacing	1 (April)
MP 31-17	Materials for Cold Recycled Mixtures with Emulsified Asphalt	3 (July)
MP 32-17 (2019)	Materials for Slurry Seal	1 (April)
MP 33-17 (2019)	Materials for Emulsified Asphalt Fog Seal	1 (April)
MP 36-18	Materials for Asphalt Tack Coat	3 (July)
MP 37-18	Performance-Graded Asphalt Binder for Surface Treatments	3 (July)
MP 38-18	Mix Design of Cold Recycled Mixture with Foamed Asphalt	3 (July)
PP 76-13 (2019)	Troubleshooting Asphalt Specimen Volumetric Differences between Superpave Gyrotory Compactors (SCGs) Used in the Design and the Field Management of Superpave Mixtures	3 (July)
PP 77-14 (2018)	Materials Selection and Mixture Design of Permeable Friction Courses (PFCs)	3 (July)
PP 78-17	Design Considerations When Using Reclaimed Asphalt Shingles (RAS) in Asphalt Mixtures	3 (July)
PP 82-16 (2020)	Emulsified Asphalt Chip Seal Design	1 (April)
PP 83-16 (2020)	Microsurfacing Design	1 (April)
PP 85-18 (2019)	Grading or Verifying the Sealant Grade (SG) of a Hot-Poured Asphalt Crack Sealant	2 (June)
PP 86-17	Emulsified Asphalt Content of Cold Recycled Mixture Designs	3 (July)
PP 87-20	Slurry Seal Design	1 (April)
PP 88-17 (2019)	Emulsified Asphalt Fog Seal Design	1 (April)
PP 93-18	Asphalt Tack Coat Design	3 (July)
PP 94-18	Determining Optimum Asphalt Content of Cold Recycled Mixture with Foamed Asphalt	3 (July)
PP 95-18	Preparation of Indirect Tension Performance Test Specimens	3 (July)
PP 96-18	Developing Dynamic Modulus Master Curves for Hot Mix Asphalt (HMA) Using the Indirect Tension Testing Method	3 (July)
PP 99-19	Preparation of Small Cylindrical Performance Test Specimens Using the Superpave Gyrotory Compactor (SGC) or Field Cores	3 (July)
TP 92-14 (2018)	<i>Adopted</i> —Determining the Cracking Temperature of Asphalt Binder Using the Asphalt Binder Cracking Device (ABCD)	3 (July)
TP 101-12 (2018)	Estimating Fatigue Resistance of Asphalt Binders Using the Linear Amplitude Sweep	3 (July)
TP 105-13 (2019)	Determining the Fracture Energy of Asphalt Mixtures Using the Semicircular Bend Geometry (SCB)	3 (July)
TP 107-18	Determining the Damage Characteristic Curve of Asphalt Mixtures from Direct Tension Cyclic Fatigue Tests	3 (July)

STD. NO.	TITLE	GROUP (MONTH)
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BITUMINOUS MATERIALS

TP 108-14 (2018)	Abrasion Loss of Asphalt Mixture Specimens	3 (July)
TP 113-15 (2019)	Determination of Asphalt Binder Resistance to Ductile Failure Using Double-Edge-Notched Tension (DENT) Test	3 (July)
TP 114-18 (2019)	Determining the Interlayer Shear Strength (ISS) of Asphalt Pavement Layers	3 (July)
TP 115-16 (2019)	Determining the Quality of Tack Coat Adhesion to the Surface of an Asphalt Pavement in the Field or Laboratory	3 (July)
TP 116-15 (2019)	Rutting Resistance of Asphalt Mixtures Using Incremental Repeated Load Permanent Deformation (iRLPD)	3 (July)
TP 117-15 (2019)	Determination of the Voids of Dry Compacted Filler	3 (July)
TP 122-16 (2018)	Determination of Performance Grade of Physically Aged Asphalt Binder Using Extended Bending Beam Rheometer (BBR) Method	3 (July)
TP 123-16 (2018)	Measuring Asphalt Binder Yield Energy and Elastic Recovery Using the Dynamic Shear Rheometer	3 (July)
TP 124-18	Determining the Fracture Potential of Asphalt Mixtures Using Semicircular Bend Geometry (SCB) at Intermediate Temperature	3 (July)
TP 125-16 (2018)	Determining the Flexural Creep Stiffness of Asphalt Mixtures Using the Bending Beam Rheometer (BBR)	3 (July)
TP 126-18 (2019)	Evaluation of the Tracking Resistance of Hot-Poured Asphalt Crack Sealant by Dynamic Shear Rheometer (DSR)	2 (June)
TP 127-17 (2019)	Determining the Fracture Energy Density of Asphalt Binder Using the Binder Fracture Energy (BFE) Test	3 (July)
TP 128-17 (2019)	Evaluation of Oxidation Level of Asphalt Mixtures by a Portable Infrared Spectrometer	3 (July)
TP 131-18	Determining Dynamic Modulus of Asphalt Concrete Using the Indirect Tension Test	3 (July)
TP 132-19	Determining the Dynamic Modulus for Asphalt Mixtures Using Small Specimens in the Asphalt Mixture Performance Tester (AMPT)	3 (July)
TP 133-19	Determining the Damage Characteristic Curve and Failure Criterion Using Small Specimens in the Asphalt Mixture Performance Tester (AMPT) Cyclic Fatigue Test	3 (July)
TP 134-19	Stress Sweep Rutting (SSR) Test Using Asphalt Mixture Performance Tester (AMPT)	3 (July)

STD. NO.	TITLE	GROUP (MONTH)
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BOX CULVERT, CULVERT PIPE, AND DRAIN TILE

MP 22-13 (2020)	Fiber-Reinforced Polymer Composite Materials for Highway and Bridge Structures	1 (April)
MP 40-19	Steel-Reinforced Polyethylene (PE) Ribbed Pipe 1650- to 3000-mm (66- to 120-in.) Diameter	2 (June)
MP 42-20	Steel-Reinforced Polyethylene (SRPE) Corrugated Pipe	2 (June)

STD. NO.	TITLE	GROUP (MONTH)
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BRIDGE AND PAVEMENT PRESERVATION

PP 100-20	Ultrathin Bonded Wearing Course Design	1 (April)
PP 101-20	Emulsified Asphalt Content of Full-Depth Reclamation Mixture Design	1 (April)
MP 43-20	Materials for Emulsified Asphalt Scrub Seal	1 (April)
MP 44-20	Materials for Ultrathin Bonded Wearing Course	1 (April)
MP 45-20	Materials for Full-Depth Reclamation Mixtures with Emulsified Asphalt	1 (April)

STD. NO.	TITLE	GROUP (MONTH)
CONCRETE, CURING MATERIALS, AND ADMIXTURES		
PP 84-20	Performance Engineered Concrete Pavement Mixtures	1 (April)
PP 89-19 (2020)	Grinding the Ends of Cylindrical Concrete Specimens	1 (April)
TP 118-17 (2018)	Characterization of the Air-Void System of Freshly Mixed Concrete by the Sequential Pressure Method	1 (April)
TP 119-15 (2019)	Electrical Resistivity of a Concrete Cylinder Tested in a Uniaxial Resistance Test	1 (April)
TP 129-18 (2020)	Vibrating Kelly Ball (VKelly) Penetration in Fresh Portland Cement Concrete	1 (April)
TP 135-20	Determining the Total Pore Volume in Hardened Concrete Using Vacuum Saturation	1 (April)
TP 136-20	Determining the Degree of Saturation of Hydraulic-Cement Concrete	1 (April)
TP 137-20	Box Test in Slip Form Paving of Fresh Portland Cement Concrete	1 (April)

STD. NO.	TITLE	GROUP (MONTH)
METALLIC MATERIALS FOR BRIDGES		
TP 138-20	Weight and Diameter for Carbon-Steel for Steel Wire and Welded Wire Reinforcement for Concrete	2 (June)

STD. NO.	TITLE	GROUP (MONTH)
MISCELLANEOUS		
MP 26-15 (2020)	Cotton Duck Fabric Bridge Bearings	2 (June)
PP 80-20	Continuous Thermal Profile of Asphalt Mixture Construction	1 (April)
PP 81-18 (2020)	Intelligent Compaction Technology for Embankment and Asphalt Pavement Applications	1 (April)
TP 103-19	<i>Adopted</i> —Detectable Warning Systems	2 (June)

STD. NO.	TITLE	GROUP (MONTH)
PAINTING AND TRAFFIC MARKING AND SIGNING		
MP 24-15 (2020)	Waterborne White and Yellow Traffic Paints	2 (June)
PP 74-19	<i>Adopted</i> —Determination of Size and Shape of Glass Beads Used in Traffic Markings by Means of Computerized Optical Method	2 (June)
TP 106-20	Determination of Heavy Metal Content of Glass Beads Using X-Ray Fluorescence (XRF)	2 (June)
TP 111-14 (2020)	Measuring Retroreflectivity of Pavement Marking Materials Using a Mobile Retroreflectivity Unit	2 (June)
TP 130-18 (2020)	Producing Draw Down Panels and Measuring the Coefficient of Retroreflected Luminance (RL) of Pavement Markings in a Laboratory Panel	2 (June)

STD. NO.	TITLE	GROUP (MONTH)
PAVEMENT SURFACE AND STRUCTURE CHARACTERISTICS		
MP 34-18 (2020)	Materials for Sand Seals	1 (April)
MP 35-18 (2020)	Thin Overlay Treatments Using a Binder Resin System and Aggregate for Concrete Surfaces	2 (June)
MP 41-19	High Friction Surface Treatment for Asphalt and Concrete Pavements Using Calcined Bauxite	2 (June)

STD. NO.	TITLE	GROUP (MONTH)
PAVEMENT SURFACE AND STRUCTURE CHARACTERISTICS		

PP 90-18 (2020)	Sand Seal Design	1 (April)
PP 91-18 (2020)	Emulsified Asphalt Scrub Seal Design	1 (April)
TP 98-18	<i>Adopted</i> —Determining the Influence of Road Surfaces on Vehicle Noise Using the Statistical Isolated Pass-By Method (SIP)	1 (April)
TP 99-18	<i>Adopted</i> —Determining the Influence of Road Surfaces on Traffic Noise Using the Continuous-Flow Traffic Time-Integrated Method (CTIM)	1 (April)

STD. NO.	TITLE	GROUP (MONTH)
QUALITY ASSURANCE		

MP 39-19	File Format of Intelligent Compaction Data	1 (April)
PP 97-19	Determination of Constant Mass	1 (April)
PP 98-20	Asphalt Surface Dielectric Profiling System Using Ground Penetrating Radar	1 (April)

STD. NO.	TITLE	GROUP (MONTH)
SOILS AND STABILIZATION		

PP 92-19	Preparation of Test Specimens Using the Plastic Mold Compaction Device	3 (July)
TP 100-12 (2016)	<i>Adopted</i> —Deep Foundation Elements for Bi-Directional Static Axial Compressive Load	3 (July)
TP 104-13 (2015)	<i>Adopted</i> —Rapid Axial Compressive Load Testing of Deep Foundation Units	3 (July)
TP 112-19	Determining In-Place Density and Moisture Content of Soil and Soil-Aggregate Using Complex Impedance Methodology	3 (July)

STD. NO.	TITLE	GROUP (MONTH)
DELETED STANDARDS²		

PP 73-13 (2018)	Quality Assurance, Job Site Quality Control, and Reapplication of Protective Sealers for Portland Cement Concrete	2 (June)
PP 79-14 (2016)	High-Friction Surface Treatment for Asphalt and Concrete Pavements	2 (June)
TP 96-13 (2018)	Protective Sealers for Portland Cement Concrete	2 (June)

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MP 23-15 (2018)	Reclaimed Asphalt Shingles for Use in Asphalt Mixtures	3 (July)
MP 24-15 (2020)	Waterborne White and Yellow Traffic Paints	2 (June)
MP 25-18 (2019)	Performance-Graded Hot-Poured Asphalt Crack Sealant	2 (June)
MP 26-15 (2020)	Cotton Duck Fabric Bridge Bearings	2 (June)
MP 27-16 (2020)	Materials for Emulsified Asphalt Chip Seals	1 (April)
MP 28-17 (2020)	Materials for Microsurfacing	1 (April)
MP 31-17	Materials for Cold Recycled Mixtures with Emulsified Asphalt	3 (July)
MP 32-17	Materials for Slurry Seal	1 (April)
MP 33-17	Materials for Emulsified Asphalt Fog Seal	1 (April)
MP 34-18 (2020)	Materials for Sand Seals	1 (April)
MP 35-18 (2020)	Thin Overlay Treatments Using a Binder Resin System and Aggregate for Concrete Surfaces	2 (June)
MP 36-18	Materials for Asphalt Tack Coat	3 (July)
MP 37-18	Performance-Graded Asphalt Binder for Surface Treatments	3 (July)
MP 38-18	Mix Design of Cold Recycled Mixture with Foamed Asphalt	3 (July)
MP 39-19	File Format of Intelligent Compaction Data	1 (April)
MP 40-19	Steel-Reinforced Polyethylene (PE) Ribbed Pipe 1650- to 3000-mm (66- to 120-in.) Diameter	2 (June)
MP 41-19	High Friction Surface Treatment for Asphalt and Concrete Pavements Using Calcined Bauxite	2 (June)
MP 42-20	Steel-Reinforced Polyethylene (SRPE) Corrugated Pipe	2 (June)
MP 43-20	Materials for Emulsified Asphalt Scrub Seal	1 (April)
MP 44-20	Materials for Ultrathin Bonded Wearing Course	1 (April)
MP 45-20	Materials for Full-Depth Reclamation Mixtures with Emulsified Asphalt	1 (April)

STD. NO.	TITLE	GROUP (MONTH)
PRACTICES		
PP 74-19	<i>Adopted</i> —Determination of Size and Shape of Glass Beads Used in Traffic Markings by Means of Computerized Optical Method	2 (June)
PP 76-13 (2019)	Troubleshooting Asphalt Specimen Volumetric Differences between Superpave Gyrotory Compactors (SCGs) Used in the Design and the Field Management of Superpave Mixtures	3 (July)
PP 77-14 (2018)	Materials Selection and Mixture Design of Permeable Friction Courses (PFCs)	3 (July)
PP 78-17	Design Considerations When Using Reclaimed Asphalt Shingles (RAS) in Asphalt Mixtures	3 (July)
PP 80-20	Continuous Thermal Profile of Asphalt Mixture Construction	1 (April)
PP 81-18 (2020)	Intelligent Compaction Technology for Embankment and Asphalt Pavement Applications	1 (April)

STD. NO.	TITLE	GROUP (MONTH)
PRACTICES		
PP 82-16 (2020)	Emulsified Asphalt Chip Seal Design	1 (April)
PP 83-16 (2020)	Microsurfacing Design	1 (April)
PP 84-20	Performance Engineered Concrete Pavement Mixtures	1 (April)
PP 85-18 (2019)	Grading or Verifying the Sealant Grade (SG) of a Hot-Poured Asphalt Crack Sealant	2 (June)
PP 86-17	Emulsified Asphalt Content of Cold Recycled Mixture Designs	3 (July)
PP 87-20	Slurry Seal Design	1 (April)
PP 88-17	Emulsified Asphalt Fog Seal Design	1 (April)
PP 89-19 (2020)	Grinding the Ends of Cylindrical Concrete Specimens	1 (April)
PP 90-18 (2020)	Sand Seal Design	1 (April)
PP 91-18 (2020)	Emulsified Asphalt Scrub Seal Design	1 (April)
PP 92-19	Preparation of Test Specimens Using the Plastic Mold Compaction Device	3 (July)
PP 93-18	Asphalt Tack Coat Design	3 (July)
PP 94-18	Determining Optimum Asphalt Content of Cold Recycled Mixture with Foamed Asphalt	3 (July)
PP 95-18	Preparation of Indirect Tension Performance Test Specimens	3 (July)
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PP 97-19	Determination of Constant Mass	1 (April)
PP 98-20	Asphalt Surface Dielectric Profiling System Using Ground Penetrating Radar	1 (April)
PP 99-19	Preparation of Small Cylindrical Performance Test Specimens Using the Superpave Gyrotory Compactor (SGC) or Field Cores	3 (July)
PP 100-20	Ultrathin Bonded Wearing Course Design	1 (April)
PP 101-20	Emulsified Asphalt Content of Full-Depth Reclamation Mixture Design	1 (April)

STD. NO.	TITLE	GROUP (MONTH)
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TP 98-18	<i>Adopted</i> —Determining the Influence of Road Surfaces on Vehicle Noise Using the Statistical Isolated Pass-By Method (SIP)	1 (April)
TP 99-18	<i>Adopted</i> —Determining the Influence of Road Surfaces on Traffic Noise Using the Continuous-Flow Traffic Time-Integrated Method (CTIM)	1 (April)
TP 100-12 (2018)	<i>Adopted</i> —Deep Foundation Elements for Bi-Directional Static Axial Compressive Load	3 (July)
TP 101-12 (2018)	Estimating Fatigue Resistance of Asphalt Binders Using the Linear Amplitude Sweep	3 (July)
TP 103-19	<i>Adopted</i> —Detectable Warning Systems	2 (June)
TP 104-13 (2015)	<i>Adopted</i> —Rapid Axial Compressive Load Testing of Deep Foundation Units	3 (July)
TP 105-13 (2019)	Determining the Fracture Energy of Asphalt Mixtures Using the Semicircular Bend Geometry (SCB)	3 (July)
TP 106-20	Determination of Heavy Metal Content of Glass Beads Using X-Ray Fluorescence (XRF)	2 (June)
TP 107-18	Determining the Damage Characteristic Curve of Asphalt Mixtures from Direct Tension Cyclic Fatigue Tests	3 (July)
TP 108-14 (2018)	Abrasion Loss of Asphalt Mixture Specimens	3 (July)

STD. NO.	TITLE	GROUP (MONTH)
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TP 112-19	Determining In-Place Density and Moisture Content of Soil and Soil-Aggregate Using Complex Impedance Methodology	3 (July)
TP 113-15 (2019)	Determination of Asphalt Binder Resistance to Ductile Failure Using Double-Edge-Notched Tension (DENT) Test	3 (July)
TP 114-18 (2019)	Determining the Interlayer Shear Strength (ISS) of Asphalt Pavement Layers	3 (July)
TP 115-16 (2019)	Determining the Quality of Tack Coat Adhesion to the Surface of an Asphalt Pavement in the Field or Laboratory	3 (July)
TP 116-15 (2019)	Rutting Resistance of Asphalt Mixtures Using Incremental Repeated Load Permanent Deformation (iRLPD)	3 (July)
TP 117-15 (2019)	Determination of the Voids of Dry Compacted Filler	3 (July)
TP 118-17 (2018)	Characterization of the Air-Void System of Freshly Mixed Concrete by the Sequential Pressure Method	1 (April)
TP 119-15 (2019)	Electrical Resistivity of a Concrete Cylinder Tested in a Uniaxial Resistance Test	1 (April)
TP 120-16 (2018)	Pore Index for Carbonate Coarse Aggregate	3 (July)
TP 122-16 (2018)	Determination of Performance Grade of Physically Aged Asphalt Binder Using Extended Bending Beam Rheometer (BBR) Method	3 (July)
TP 123-16 (2018)	Measuring Asphalt Binder Yield Energy and Elastic Recovery Using the Dynamic Shear Rheometer	3 (July)
TP 124-18	Determining the Fracture Potential of Asphalt Mixtures Using Semicircular Bend Geometry (SCB) at Intermediate Temperature	3 (July)
TP 125-16 (2018)	Determining the Flexural Creep Stiffness of Asphalt Mixtures Using the Bending Beam Rheometer (BBR)	3 (July)
TP 126-18 (2019)	Evaluation of the Tracking Resistance of Hot-Poured Asphalt Crack Sealant by Dynamic Shear Rheometer (DSR)	2 (June)
TP 127-17 (2019)	Determining the Fracture Energy Density of Asphalt Binder Using the Binder Fracture Energy (BFE) Test	3 (July)
TP 128-17 (2019)	Evaluation of Oxidation Level of Asphalt Mixtures by a Portable Infrared Spectrometer	3 (July)
TP 129-18 (2020)	Vibrating Kelly Ball (VKelly) Penetration in Fresh Portland Cement Concrete	1 (April)
TP 130-18 (2020)	Producing Draw Down Panels and Measuring the Coefficient of Retroreflected Luminance (RL) of Pavement Markings in a Laboratory Panel	2 (June)
TP 131-18	Determining Dynamic Modulus of Asphalt Concrete Using the Indirect Tension Test	3 (July)
TP 132-19	Determining the Dynamic Modulus for Asphalt Mixtures Using Small Specimens in the Asphalt Mixture Performance Tester (AMPT)	3 (July)
TP 133-19	Determining the Damage Characteristic Curve and Failure Criterion Using Small Specimens in the Asphalt Mixture Performance Tester (AMPT) Cyclic Fatigue Test	3 (July)
TP 134-19	Stress Sweep Rutting (SSR) Test Using Asphalt Mixture Performance Tester (AMPT)	3 (July)
TP 135-20	Determining the Total Pore Volume in Hardened Concrete Using Vacuum Saturation	1 (April)
TP 136-20	Determining the Degree of Saturation of Hydraulic-Cement Concrete	1 (April)
TP 137-20	Box Test in Slip Form Paving of Fresh Portland Cement Concrete	1 (April)
TP 138-20	Weight and Diameter for Carbon-Steel for Steel Wire and Welded Wire Reinforcement for Concrete	2 (June)

STD. NO.	TITLE	GROUP (MONTH)
DELETED STANDARDS²		
PP 73-13 (2018)	Quality Assurance, Job Site Quality Control, and Reapplication of Protective Sealers for Portland Cement Concrete	2 (June)
PP 79-14 (2016)	High-Friction Surface Treatment for Asphalt and Concrete Pavements	2 (June)
TP 96-13 (2018)	Protective Sealers for Portland Cement Concrete	2 (June)

¹ This master table of contents is as of Group 2 (June 2020).

² For the disposition of provisional standards not listed above, see the Provisionals History.

LIST OF TECHNICAL CHANGES—PART 3

The balloted technical changes listed below are also indicated in the specifications by a change bar in the left. 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 2 (June 2020)

Designation Number	Title	Technical Subcommittee Number	Balloted Revisions
MP 24-15 (2020)	Waterborne White and Yellow Traffic Paints	4c	Extended one year for 2020 publication; Year 7 of 8 in Provisional life cycle.
MP 26-15 (2020)	Cotton Duck Fabric Bridge Bearings	4e	Reconfirmed for 2020 publication.
MP 35-18 (2020)	Thin Overlay Treatments Using a Binder Resin System and Aggregate for Concrete Surfaces	4c	Reconfirmed for 2020 publication.
MP 42-20	Steel-Reinforced Polyethylene (SRPE) Corrugated Pipe	4b	New Provisional standard specification.
PP 74-19	Determination of Size and Shape of Glass Beads Used in Traffic Markings by Means of Computerized Optical Method	4c	Adopted as full standard practice R 98, with minor revisions as follows: <ul style="list-style-type: none"> • In Table 1, last column, add “(minimum)” to heading and “.0” to each value. • In Note 9, revised example weights to align with Section 11.1.1.1.
TP 103-19	Detectable Warning Systems	4d	Adopted as full standard test T 388; no revisions made.

Designation Number	Title	Technical Subcommittee Number	Balloted Revisions
TP 106-20	Determination of Heavy Metal Content of Glass Beads Using X-Ray Fluorescence (XRF)	4c	Extensively revised as follows: <ul style="list-style-type: none"> In Section 3, updated to refer to using a handheld XRF and helium flush. In Note 1, deleted mention of laboratory model XRF. In Section 5, revised all apparatus descriptions and added a ring or puck mill. In Section 6.1.1, revised to accept any thin film, including 12-μm thick polypropylene. In Section 7.2, revised sample preparation of loose glass beads in sample cup, including use of thin film. In Section 7.3, added a ring or puck mill as apparatus for pulverizing and blending. In Section 8, revised calibration and standardization to simply calibration and moved standardless or manufacturer-built program option from Section 9. In Section 9, revised procedure regarding type of XRF and recommendation for determining heavy metal concentration. In Section 10, clarified interpretation of results.
TP 111-14 (2020)	Measuring Retroreflectivity of Pavement Marking Materials Using a Mobile Retroreflectivity Unit	4c	Extended one year for 2020 publication; Year 7 of 8 in Provisional life cycle.
TP 130-18 (2020)	Producing Draw Down Panels and Measuring the Coefficient of Retroreflected Luminance (RL) of Pavement Markings in a Laboratory Panel	4c	Reconfirmed for 2020 publication.
TP 138-20	Weight and Diameter for Carbon-Steel for Steel Wire and Welded Wire Reinforcement for Concrete	4f	New Provisional standard method of test.

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: <ul style="list-style-type: none"> • 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

JUNE 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	<i>This standard number was inadvertently skipped.</i>				
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			
MP 42	Steel-Reinforced Polyethylene (SRPE) Corrugated Pipe	2020			

Provisional Standard Number	Title	First Publ. Year	Final Disposition	Disposit. Year	Full Std. No.
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
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

Provisional Standard Number	Title	First Publ. Year	Final Disposition	Disposit. Year	Full Std. No.
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
PP 51	Pavement Ride Quality When Measured Using Inertial Profiling Systems	2003	Adopted	2010	R 54 ^b

Provisional Standard Number	Title	First Publ. Year	Final Disposition	Disposit. Year	Full Std. No.
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
PP 68	Collecting Images of Pavement Surfaces for Distress Detection	2010	Adopted	2018 (April)	R 86

Provisional Standard Number	Title	First Publ. Year	Final Disposition	Disposit. Year	Full Std. No.
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	Adopted	2020 (June)	R 98
PP 75	Vacuum Drying Compacted Asphalt Specimens	2013	Adopted	2016 (August)	R 79
PP 76	Troubleshooting Asphalt Specimen Volumetric Differences between Superpave Gyrotory 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			
PP 86	Emulsified Asphalt Content of Cold Recycled Mixture Designs	2017			
PP 87	Slurry Seal Design	2017			

Provisional Standard Number	Title	First Publ. Year	Final Disposition	Disposit. Year	Full Std. No.
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 Gyrotory 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 Gyrotory Compactor	1994	Adopted	2001	T 312
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	—

Provisional Standard Number	Title	First Publ. Year	Final Disposition	Disposit. Year	Full Std. No.
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
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

Provisional Standard Number	Title	First Publ. Year	Final Disposition	Disposit. Year	Full Std. No.
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
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	—

Provisional Standard Number	Title	First Publ. Year	Final Disposition	Disposit. Year	Full Std. No.
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 Gyrotory Compactor (SGC) Internal Angle of Gyration Using Simulated Loading	2007	Adopted	2012	T 344
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

Provisional Standard Number	Title	First Publ. Year	Final Disposition	Disposit. Year	Full Std. No.
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
TP 89	Measuring Adhesion of Hot-Poured Crack Sealant Using Direct Adhesion Tester	2010	Adopted	2017 (June)	T 370

Provisional Standard Number	Title	First Publ. Year	Final Disposition	Disposit. Year	Full Std. No.
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	Adopted	2020 (June)	T 388
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			
TP 107	Determining the Damage Characteristic Curve of Asphalt Mixtures from Direct Tension Cyclic Fatigue Tests	2014			

Provisional Standard Number	Title	First Publ. Year	Final Disposition	Disposit. Year	Full Std. No.
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			
TP 124	Determining the Fracture Potential of Asphalt Mixtures Using Semicircular Bend Geometry (SCB) at Intermediate Temperature	2016			

Provisional Standard Number	Title	First Publ. Year	Final Disposition	Disposit. Year	Full Std. No.
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			
TP 138	Weight and Diameter for Carbon-Steel for Steel Wire and Welded Wire Reinforcement for Concrete	2020			

^a Adopted in 1995 as R 19. R 19 was discontinued in 2004.

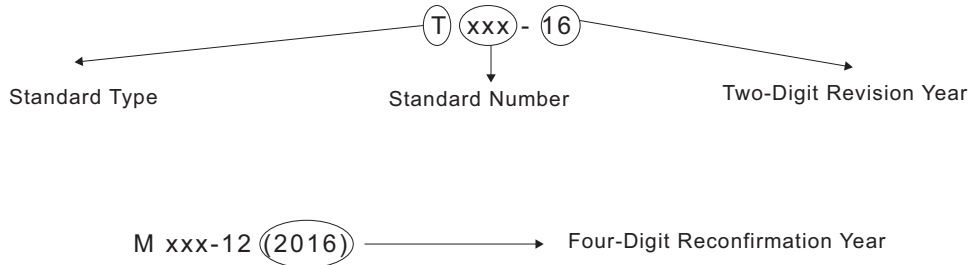
^b Reclassified as a provisional specification MP 17 in 2007 then reclassified again as a practice when adopted as a full standard.

^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 Highways Subcommittee on Materials. 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 Subcommittee 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.