

Council on Highways and Streets Summary of Ballots and Publications

Committee on Materials and Pavements

- **Ballot Number: COMP-19-01**
- **Ballot Name: Approval of the MEPDG Manual of Practice version 3**
- **Ballot Close Date: 8/2/2019**

Description:

The second version of the AASHTO ‘Mechanistic-Empirical Pavement Design Guide – Manual of Practice’ (2015), or MOP for short, has recently been revised. The revisions reflect improvements to pavement distress prediction models, advancements in material selection and characterization and more comprehensive weather data availability, in addition to basic edits and grammatical corrections. The draft of the new version was earlier reviewed by TS 5d.

Decision:

Do you approve proposed version 3 of the MEPDG Manual of Practice?

- Affirmative: 38 of 52
- Negative: 0 of 52
- No Vote: 14 of 52

Committee on Materials and Pavements 2019 Publications:

- **10 new standards**
- **66 revised standards**

NEW STANDARDS (10)			
MP 39-19	File Format of Intelligent Compaction Data	5c	New Provisional standard.
PP 97-19	Determination of Constant Mass	5c	New Provisional standard.
PP 98-19	Asphalt Surface Dielectric Profiling System Using Ground Penetrating Radar	5c	New Provisional standard.
R 93-19	Service Life Determination of Corrugated HDPE Pipes Manufactured with Recycled Content	4b	New full standard
MP 40-19	Steel-Reinforced Polyethylene (SRPE) Corrugated Pipe 300- to 1800-mm (12- to 72-in.) Diameter	4b	New provisional standard
R 96-19	Installation, Operation, and Maintenance of Ignition Furnaces	2c	New standard practice

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PP 99-19	Preparation of Small Cylindrical Performance Test Specimens Using the Superpave Gyrotory Compactor (SGC) or Field Cores	2d	New provisional standard
TP 132-19	Determining the Dynamic Modulus for Asphalt Mixtures Using Small Specimens in the Asphalt Mixture Performance Tester (AMPT)	2d	New provisional standard
TP 133-19	Determining the Damage Characteristic Curve and Failure Criterion Using Small	2d	New provisional standard
TP 134-19	Stress Sweep Rutting (SSR) Test Using Asphalt Mixture Performance Tester (AMPT)	2d	New provisional standard
REVISED STANDARDS (66)			
M 85-19	Portland Cement	3a	Replaced low-alkali definition, modified heat of hydration requirements, and removed reference to T 98M/T 98.
M 240M/M 240-19	Blended Hydraulic Cement	3a	Removed completion of Option R; revised Type MH and LH heat of hydration provisions; removed Sections 9.3 and 11.1.13; and removed referenced information in Table 4.
M 295-19	Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete	3b	Revised to maintain equivalency with ASTM C618.
M 302-19	Slag Cement for Use in Concrete and Mortars	3b	Revised to maintain equivalency with ASTM C989/C989M.
M 327-19	Processing Additions for Use in the Manufacture of Hydraulic Cements	3c	Modified fineness requirement for companion cements.
R 25-19	Technician Training and Certification Programs	5c	Revised extensively.
R 32-19	Calibrating the Load Cell and Deflection Sensors for a Falling Weight Deflectometer	5a	
R 39-19	Making and Curing Concrete Test Specimens in the Laboratory	3b	Revised extensively.
T 121M/T 121-19	Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete	3b	Revised internal vibrators in Section 4.3 to concur with T 23.
T 133-19	Density of Hydraulic Cement	3a	Revised to maintain equivalency with ASTM C188.

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T 152-19	Air Content of Freshly Mixed Concrete by the Pressure Method	3b	Revised internal vibrators in Section 4.15 to concur with T 23.
T 192-19	Fineness of Hydraulic Cement by the 45- μ m (No. 325) Sieve	3a	Revised to maintain equivalency with ASTM C430.
T 358-19	Surface Resistivity Indication of Concrete's Ability to Resist Chloride Ion Penetration	3c	Revised precision statements.
T 380-19	Potential Alkali Reactivity of Aggregates and Effectiveness of ASR Mitigation Measures (Miniature Concrete Prism Test, MCPT)	3c	Revised a mold size in Section 4.1.1.
PP 84-19	Developing Performance Engineered Concrete Pavement Mixtures	3c	Removed restrained shrinkage language, edited SAM criteria, and made other editorial clarifications.
PP 89-19	Grinding the Ends of Cylindrical Concrete Specimens	3c	Revised Sections 1.2, 2.1, 3.4, 4.1, 5.1, 5.2, 5.3, 6.1, 6.5, and 6.6.
M 332-19	Performance-Graded Asphalt Binder Using Multiple Stress Creep Recovery (MSCR) Test	2b	Revised to incorporate several changes to Table 1.
R 47-19	Reducing Samples of Asphalt Mixtures to Testing Size	2c	Revised to change the maximum temperature for heating equipment in Section 8.1 to the maximum mixing temperature, add heating of equipment to Sections 10.1 and 12.1, and change "hot mix asphalt" and "HMA" to "asphalt mixtures" throughout the standard.
R 79-19	Vacuum Drying Compacted Asphalt Specimens	2c	Revised to remove the definition for constant mass, generalize the requirements for thermometric devices, and modify the procedure to require two drying cycles.
R 97-19	Sampling Asphalt Mixtures	2c	Revised AASHTO standard T 168 and reclassified from a standard method of test to a standard practice, R 97.
T 30-19	Mechanical Analysis of Extracted Aggregate	2c	Revised to move the information about overloading sieves and the minimum time

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			requirement to an annex and clarify the calculations section.
T 88-19	Particle Size Analysis of Soils	1a	Revised to move the first sentence in Note 6 to the last sentence in Section 12.1 to make it mandatory language and part of the procedure.
T 99-19	Moisture-Density Relations of Soils Using a 2.5-kg (5.5-lb) Rammer and a 305-mm (12-in.) Drop	1b	Revised Sections 5.4 and 9.4 to address extruder.
T 134-19	Moisture-Density Relations of Soil-Cement Mixtures	1b	Revised in multiple areas for clarification and to align with T 99 and T 180.
T 180-19	Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop	1b	Revised Sections 5.4 and 9.4 to address extruder.
T 206-19	Penetration Test and Split-Barrel Sampling of Soils	1b	Revised to harmonize with ASTM D1168.
T 209-19	Theoretical Maximum Specific Gravity (Gmm) and Density of Asphalt Mixtures	2c	Revised extensively to move the standardization procedure to an annex and eliminate the water temperature adjustment, among other changes.
T 252-19	Measurements of Pore Pressures in Soils	1b	Revised to add Reports section.
T 310-19	In-Place Density and Moisture Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)	1b	Revised to remove the requirement to record the actual date of last calibration or calibration verification on each report.
T 312-19	Preparing and Determining the Density of Asphalt Mixture Specimens by Means of the Superpave Gyrotory Compactor	2d	Revised Sections 8 and 9 for clarity.
T 313-19	Determining the Flexural Creep Stiffness of Asphalt Binder Using the Bending Beam Rheometer (BBR)	2b	Revised to update the precision estimates.
T 315-19	Determining the Rheological Properties of Asphalt Binder Using a Dynamic Shear Rheometer (DSR)	2b	Revised to update the precision estimates.
T 316-19	Viscosity Determination of Asphalt Binder Using Rotational Viscometer	2b	Revised to update the precision estimates.
T 324-19	Hamburg Wheel-Track Testing of Compacted Asphalt Mixtures	2c	Revised to add more detail on the device and impression measurement system requirements and to add an annex for measuring the width of the wheel.

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T 350-19	Multiple Stress Creep Recovery (MSCR) Test of Asphalt Binder Using a Dynamic Shear Rheometer (DSR)	2b	Revised to add precision estimates in Section 10.
T 383-19	Evaluation of Asphalt Release Agents (ARAs)	2b	Revised to add new pictures as well as minor revisions throughout.
T 385-19	Deep Foundation Elements under Bidirectional Static Axial Compressive Load	1b	Adopted AASHTO Provisional standard TP 100 as a full standard method of test, T 385.
T 386-19	Rapid Axial Compressive Load Testing of Deep Foundation Units	1b	Adopted AASHTO Provisional standard TP 104 as a full standard method of test, T 386.
T 387-19	Determining the Cracking Temperature of Asphalt Binder Using the Asphalt Binder Cracking Device (ABCD)	2b	Adopted AASHTO Provisional standard TP 92 as a full standard method of test, T 387.
PP 92-19	Preparation of Test Specimens Using the Plastic Mold Compaction Device	1b	Revised extensively.
TP 112-19	Determining In-Place Density and Moisture Content of Soil and Soil-Aggregate Using Complex Impedance Methodology	1b	Revised extensively.
M 31M/M 31-19	Deformed and Plain Carbon and Low-Alloy Steel Bars for Concrete Reinforcement	4f	Removed Grades 280 and 520 for Type W, which were included by error.
M 54M/M 54-19	Welded Deformed Steel Bar Mats for Concrete Reinforcement	4f	Removed Grades 280 and 520 for Type W, which were included by error.
M 102M/M 102-19	Steel Forgings, Carbon and Alloy, for General Industrial Use	4f	Revised to maintain equivalency with ASTM A668/A668M.
M 103M/M 103-19	Steel Castings, Carbon, for General Application	4f	Revised to maintain equivalency with ASTM A27/A27M.
M 111M/M 111-19	Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products	4f	Revised to maintain equivalency with ASTM A123/A123M.
M 163M/M 163-19	Castings, Iron-Chromium, Iron-Chromium-Nickel, Corrosion Resistant, for General Application	4f	Revised to maintain equivalency with ASTM A743/A743M.
M 202M/M 202-19	Steel Sheet Piling	4f	Revised to maintain equivalency with ASTM A328/A328M.
M 204M/M 204-19	Stress-Relieved Steel Wire for Prestressed Concrete	4f	Revised to maintain equivalency with ASTM A421/A421M.
M 227M/M 227-19	Steel Bars, Carbon, Merchant Quality, Mechanical Properties	4f	Revised to maintain equivalency with ASTM A663/A663M.
M 232M/M 232-19	Zinc Coating (Hot-Dip) on Iron and Steel Hardware	4f	Revised to maintain equivalency with ASTM A153/A153M.

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M 255M/M 255-19	Steel Bars, Carbon, Hot-Wrought, Special Quality, Mechanical Properties	4f	Revised to maintain equivalency with ASTM A675/A675M.
M 270M/M 270-19	Structural Steel for Bridges	4f	Revised to maintain equivalency with ASTM A709/A709M.
M 275M/M 275-19	Uncoated High-Strength Steel Bars for Prestressing Concrete	4f	Revised to maintain equivalency with ASTM A722/A722M.
M 285M/M 285-19	Castings, Iron-Chromium-Nickel, Corrosion Resistant, for Severe Service	4f	Revised to maintain equivalency with ASTM A744/A744M.
M 292M/M 292-19	Carbon and Alloy Steel Nuts for Bolts for High-Pressure or High-Temperature Service, or Both	4f	Revised to maintain equivalency with ASTM A194/A194M.
M 330-19	Polypropylene Pipe, 300- to 1500-mm (12- to 60-in.) Diameter	4b	Revised to match the inside diameter tolerances for HDPE inside diameter tolerances.
M 335-19	Steel-Reinforced Polyethylene (PE) Ribbed Pipe, 300- to 1500-mm (12- to 60-in.) Diameter	4b	Revised thicknesses in the standard to match those currently produced in the United States.
R 94-19	Quality Assurance, Job Site Quality Control, and Reapplication of Protective Sealers for Portland Cement Concrete	4c	Adopted AASHTO Provisional standard PP 73 as a full standard practice, R 94.
R 95-19	Accelerated Aging of Hot-Poured Asphalt Crack Sealant Using a Vacuum Oven	4e	Revised AASHTO standard T 367 and reclassified from a standard method of test to a standard practice, R 95.
T 65M/T 65-19	Mass [Weight] of Coating on Iron and Steel Articles with Zinc or Zinc-Alloy Coatings	4f	Revised to maintain equivalency with ASTM A90/A90M.
T 243M/T 243-19	Sampling Procedure for Impact Testing of Structural Steel	4f	Revised to maintain equivalency with ASTM A673/A673M.
T 384-19	Protective Sealers for Portland Cement Concrete	4c	Adopted AASHTO Provisional standard TP 96 as a full standard method of test, T 384.
MP 41-19	High Friction Surface Treatment for Asphalt and Concrete Pavements Using Calcined Bauxite	4c	New provisional standard.
PP 74-19	Determination of Size and Roundness of Glass Beads Used in Traffic Markings by Means of Computerized Optical Method	4c	Revised extensively.
TP 103-19	Detectable Warning Systems	4d	Revised with NTPEP (the National Transportation Product Evaluation Program).