



Designation: A1055/A1055M – 16

Standard Specification for Zinc and Epoxy Dual-Coated Steel Reinforcing Bars¹

This standard is issued under the fixed designation A1055/A1055M; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope*

1.1 This specification covers deformed and plain steel reinforcing bars with a dual coating of zinc-alloy followed by an epoxy coating applied by the electrostatic spray method.

1.2 The zinc-alloy coating is produced as one of two types: zinc-alloy applied by the thermal spray method (Type I) or zinc-alloy applied in accordance with Specification A1094/A1094M (Type II).

NOTE 1—The coating applicator is identified throughout this specification as the manufacturer.

1.3 Requirements for the zinc coating are contained in Table 1.

1.4 Requirements for epoxy powder coatings are contained in Annex A1.

1.5 Guidelines for construction practices at the job-site are presented in Appendix X1.

1.6 The text of this specification references notes and footnotes which provide explanatory material. These notes and footnotes (excluding those in tables and figures) shall not be considered as requirements of the specification.

1.7 This specification is applicable for orders in either inch-pound units [as Specification A1055] or SI units [as Specification A1055M].

1.8 The values stated in either inch-pound units or SI units are to be regarded as standard. Within the text, the SI units are shown in brackets. The values stated in each system may not be exact equivalents; therefore, each system must be used independently of the other, except as specifically noted in Table 2. Combining values from the two systems may result in non-conformance with this specification.

1.9 *This specification does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this specification to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

¹ This specification is under the jurisdiction of ASTM Committee A01 on Steel, Stainless Steel and Related Alloys and is the direct responsibility of Subcommittee A01.05 on Steel Reinforcement.

Current edition approved Dec. 1, 2016. Published March 2017. Originally approved in 2008. Last previous edition approved in 2010 as A1055 – 10^{ε1}. DOI: 10.1520/A1055_A1055M-16.

2. Referenced Documents

2.1 ASTM Standards:²

A615/A615M Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement

A706/A706M Specification for Deformed and Plain Low-Alloy Steel Bars for Concrete Reinforcement

A775/A775M Specification for Epoxy-Coated Steel Reinforcing Bars

A944 Test Method for Comparing Bond Strength of Steel Reinforcing Bars to Concrete Using Beam-End Specimens

A996/A996M Specification for Rail-Steel and Axle-Steel Deformed Bars for Concrete Reinforcement

A1094/A1094M Specification for Continuous Hot-Dip Galvanized Steel Bars for Concrete Reinforcement

B117 Practice for Operating Salt Spray (Fog) Apparatus

B833 Specification for Zinc and Zinc Alloy Wire for Thermal Spraying (Metallizing) for the Corrosion Protection of Steel

D4060 Test Method for Abrasion Resistance of Organic Coatings by the Taber Abraser

D4417 Test Methods for Field Measurement of Surface Profile of Blast Cleaned Steel

E29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications

E527 Practice for Numbering Metals and Alloys in the Unified Numbering System (UNS)

G14 Test Method for Impact Resistance of Pipeline Coatings (Falling Weight Test)

G20 Test Method for Chemical Resistance of Pipeline Coatings

G62 Test Methods for Holiday Detection in Pipeline Coatings

2.2 American Welding Society:³

ANSI/AWS A5.33 Specification for Solid and Ceramic Wires and Ceramic Rods for Thermal Spraying

AWS C2.23M/C2.23 Specification for the Application of

² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

³ Available from American Welding Society (AWS), 8669 NW 36 St., #130, Miami, FL 33166-6672, <http://www.aws.org>.

*A Summary of Changes section appears at the end of this standard