



Standard Specification for Fusion Bonded Epoxy-Coated Pipe Piles¹

This standard is issued under the fixed designation A 972/A 972M; 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 pipe piles with protective fusion-bonded epoxy powder coating applied by the electrostatic spray, flocking, or fluidized bed process.

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

1.2 Other organic coatings may be used provided they meet the requirements of this specification.

1.3 Requirements for the powder coating are contained in Annex A1.

1.4 This specification is applicable for orders in either SI units (as Specification A 972M) or inch-pound units [as Specification A 972]. The values stated in either SI or inch-pound units are to be regarded as standard. Within the text, the inch-pound units are shown in brackets.

1.5 The following precautionary statement refers to the test method portion only, Section 8, of this standard: *This standard 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 standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:

A 252 Specification for Welded and Seamless Steel Pipe Piles²

B 117 Practice for Operating Salt Spray (Fog) Apparatus³

D 4060 Test Method for Abrasion Resistance of Organic Coatings by the Taber Abraser⁴

G 8 Test Method for Cathodic Disbonding of Pipeline Coatings⁵

G 12 Test Method for Nondestructive Measurement of Film Thickness of Pipeline Coatings on Steel⁵

G 14 Test Method for Impact Resistance of Pipeline Coatings (Falling Weight Test)⁵

G 20 Test Method for Chemical Resistance of Pipeline Coatings⁵

2.2 *American Petroleum Institute Specification:*

API RP 5L7 Recommended Practice for Internal Fusion-Bonded Epoxy Coating of Line Pipe⁶

2.3 *National Association of Corrosion Engineers Standards:*

TM0175 Visual Standard for Surfaces of New Steel Centrifugally Blast Cleaned with Steel Shot or Steel Grit (NACE No. 2)⁷

RP0490 Holiday Detection of Fusion-Bonded Epoxy External Pipeline Coatings of 250 to 750 μm (10 to 30 mils)⁷

2.4 *Steel Structures Painting Council Standards:*

SSPC VIS 1 Visual Standards⁸

SSPC-SP1 Surface Preparation Specification No. 1: Solvent Cleaning⁸

SSPC-SP10 Near White Blast Cleaning⁸

3. Ordering Information

3.1 Orders for pipe piles under this specification may include the following information:

3.1.1 Specification for designation and year of issue,

3.1.2 Size (pipe pile outside diameter and nominal wall thickness),

3.1.3 Quantity,

3.1.4 Length,

3.1.5 Portions to be coated (full length or distance from end),

3.1.6 Requirements for certifications (see 4.1 and 12.1),

3.1.7 Requirements for material samples (see 4.3),

3.1.8 Requirements for patching material (see 4.4),

3.1.9 Requirements for visual standards for surface cleaning comparison (see 5.1),

3.1.10 Requirements for test frequency (see 8.1, 8.2), and

3.1.11 Requirements for inspections at the manufacturing plant (see 10.1).

4. Materials and Manufacture

4.1 Steel pipe piles to be coated shall meet the requirements of Specification A 252 as ordered.

¹ This specification is under the jurisdiction of ASTM Committee A01 on Steel, Stainless Steel, and Related Alloys and is under the direct responsibility of Subcommittee A01.09 on Carbon Steel Tubular Products.

Current edition approved March 10, 2000. Published May 2000. Originally published as A 972/A 972M-97. Last previous edition A 972/A 972M-99.

² *Annual Book of ASTM Standards*, Vol 01.01.

³ *Annual Book of ASTM Standards*, Vol 03.02.

⁴ *Annual Book of ASTM Standards*, Vol 06.01.

⁵ *Annual Book of ASTM Standards*, Vol 06.02.

⁶ Available from the American Petroleum Institute, 1220 L St., Washington DC 20005.

⁷ Available from the National Association of Corrosion Engineers, 1440 South Creek, Houston, TX 77084.

⁸ Available from the Steel Structures Painting Council, 4400 5th Ave., Pittsburgh, PA 15213.