



Designation: A924/A924M – 26

Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process¹

This standard is issued under the fixed designation A924/A924M; 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 the general requirements that, unless otherwise specified in the product specification, apply to steel sheet in coils and cut lengths, metallic-coated on continuous lines by the hot-dip process. The product is intended for applications requiring corrosion resistance. The product specifications contain requirements for specific strength levels, heat resistance, paintability, or formability, or a combination thereof.

1.2 Subject to individual product specification provisions, steel sheet is available as Commercial Steel (CS) Types A, B, and C, Forming Steel (FS), Drawing Steel (DS), Deep Drawing Steel (DDS), Extra Deep Drawing Steel (EDDS), High Temperature Steel (HTS), Structural Steel (SS), and High Strength Low Alloy Steel (HSLAS). Steel sheet is produced with the following metallic coatings. Specific information on each of the following is contained in the individual product specification:

- 1.2.1 Zinc or zinc-iron alloy coated,
- 1.2.2 Zinc-5 % aluminum alloy coated,
- 1.2.3 55 % aluminum-zinc alloy coated Type 1 and Type 2,
- 1.2.4 Aluminum or aluminum-silicon alloy coated,
- 1.2.5 Zinc-aluminum-magnesium alloy coated.

1.3 Products covered by this general requirements specification are described in the following product standards: Specifications [A463/A463M](#); [A653/A653M](#); [A755/A755M](#); [A792/A792M](#); [A875/A875M](#); [A929/A929M](#); [A1046/A1046M](#); [A1057/A1057M](#); [A1063/A1063M](#); and [A1079](#).

1.4 Metallic-coated steel sheet is produced to various coating designations, as shown in the individual product specifications. Except for differentially coated sheet, the coating is always expressed as the total coating of both surfaces.

1.5 In case of any conflict in requirements, the requirements of the individual product specifications shall prevail over those of this general specification.

¹ This specification is under the jurisdiction of ASTM Committee [A05](#) on Metallic-Coated Iron and Steel Products and is the direct responsibility of Subcommittee [A05.11](#) on Sheet Specifications.

Current edition approved July 1, 2026. Published July 2026. Originally approved in 1994. Last previous edition approved in 2025 as A924/A924M – 25a. DOI: 10.1520/A0924_A0924M-26.

1.6 The purchaser is permitted to specify additional requirements that do not negate any of the provisions of this general specification or of the individual product specifications. Such additional requirements, the acceptance of which are subject to negotiation with the supplier, shall be included in the order information.

1.7 For purposes of determining conformance with this specification and the various product specifications referenced in [1.3](#), measured values, calculated values, or observed values shall be rounded to the nearest unit in the right-hand place of figures used in expressing the limiting values (except to the nearest 5 MPa for SI strength values) in accordance with the rounding method of Practice [E29](#).

1.7.1 Ordered values, identified in tables, specified such as over 30 through 48 or 30 exclusive to 48 inclusive, cover all ordered values specified as 30.1, 30.01, 30.001 etc., up to and including 48.000 etc., but does not cover ordered values specified as 30.000 etc., or less, nor does it cover ordered values specified as 48.1, 48.01, 48.001 etc.

1.8 Metallic-coated steel sheet covered by this specification is produced to thickness requirements expressed to 0.001 in. [0.01 mm] for both coils and cut lengths. The thickness is the total of the base steel and the coating.

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

1.10 *Units*—The values stated in either SI units or inch-pound units are to be regarded separately as standard. The values stated in each system are not necessarily exact equivalents; therefore, to ensure conformance with the standard, each system shall be used independently of the other, and values from the two systems shall not be combined.

1.11 This specification and some of the applicable product specifications are expressed in both inch-pound and SI units. However, unless the order specifies the applicable “M” specification designation (SI units), the product shall be furnished to inch-pound units.

1.12 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the*

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

responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.

1.13 This international standard was developed in accordance with internationally recognized principles on standardization established in the *Decision on Principles for the Development of International Standards, Guides and Recommendations* issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.

2. Referenced Documents

2.1 ASTM Standards:²

- A90/A90M Test Method for Weight [Mass] of Coating on Iron and Steel Articles with Zinc or Zinc-Alloy Coatings
- A370 Test Methods and Definitions for Mechanical Testing of Steel Products
- A428/A428M Test Method for Weight [Mass] of Coating on Aluminum-Coated Iron or Steel Articles
- A463/A463M Specification for Steel Sheet, Aluminum-Coated, by the Hot-Dip Process
- A653/A653M Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process
- A700 Guide for Packaging, Marking, and Loading Methods for Steel Products for Shipment
- A751 Test Methods and Practices for Chemical Analysis of Steel Products
- A754/A754M Test Method for Coating Weight [Mass] of Metallic Coatings on Steel by X-Ray Fluorescence
- A755/A755M Specification for Steel Sheet, Metallic Coated by the Hot-Dip Process and Prepainted by the Coil-Coating Process for Exterior Exposed Building Products
- A792/A792M Specification for Steel Sheet, 55 % Aluminum-Zinc Alloy-Coated by the Hot-Dip Process
- A875/A875M Specification for Steel Sheet, Zinc-5 % Aluminum Alloy-Coated by the Hot-Dip Process
- A902 Terminology Relating to Metallic Coated Steel Products
- A929/A929M Specification for Steel Sheet, Metallic-Coated by the Hot-Dip Process for Corrugated Steel Pipe
- A1030/A1030M Practice for Measuring Flatness Characteristics of Steel Sheet Products
- A1046/A1046M Specification for Steel Sheet, Zinc-Aluminum-Magnesium Alloy-Coated by the Hot-Dip Process
- A1057/A1057M Specification for Steel, Structural Tubing, Cold Formed, Welded, Carbon, Zinc-Coated (Galvanized) by the Hot-Dip Process
- A1063/A1063M Specification for Steel Sheet, Twin-Roll Cast, Zinc-Coated (Galvanized) by the Hot-Dip Process
- A1073/A1073M Practice for Using Hand Micrometers to Measure the Thickness of Uncoated Steel Sheet and Nonmetallic and Metallic-Coated Steel Sheet

A1079 Specification for Steel Sheet, Complex Phase (CP), Dual Phase (DP) and Transformation Induced Plasticity (TRIP), Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process

A1087/A1087M Practice for Using Hand Calipers to Measure the Width of Steel Sheet

A1122/A1122M Test Method for Bend Testing of Metallic-Coated Steel Sheet to Evaluate Coating Adhesion

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

E376 Practice for Measuring Coating Thickness by Magnetic-Field or Eddy Current (Electromagnetic) Testing Methods

2.2 Federal Standard:³

Fed. Std. No. 123 Marking for Shipment (Civil Agencies)

3. Terminology

3.1 *Definitions*—For definitions of items used in this specification, refer to Terminology A902.

4. Ordering Information

4.1 Ordering information for all products is shown in the individual product specifications.

5. Materials and Manufacture

5.1 Hot-dip metallic coatings are used to provide corrosion protection to steel sheets. Hot-dip metallic coatings are available in five different types: zinc and zinc-iron alloy, aluminum, 55 % aluminum-zinc alloy, zinc-5 % aluminum alloy, and zinc-aluminum-magnesium alloy. Each coating type is available in various coating weights which provide varying degrees of corrosion protection and the consumer should consult the individual producers for applicability to the intended application and to obtain product information.

5.2 Hot-dip metallic coated products may be subject to changes in mechanical properties after coating. As such changes are functions of the chemistry and processing history of the material, the consumer should consult the individual producers for applicability to the intended application.

6. Chemical Composition

6.1 Base Steel:

6.1.1 Chemical composition requirements of the base steel are shown in the individual product specifications.

6.1.2 An analysis of each heat shall be made by the manufacturer to determine the percentage of carbon, manganese, phosphorus, sulfur, and any other elements specified or restricted by the individual product specification.

6.1.3 When desired, product analysis shall be made by the purchaser on finished product. The product analysis so determined shall meet the tolerances shown in Table 1.

6.1.3.1 Capped or rimmed steels are not technologically suited to product analysis due to the nonuniform character of their chemical composition, and therefore, the tolerances in

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

³ Available from Standardization Documents Order Desk, Bldg. 4 Section D, 700 Robbins Ave., Philadelphia, PA 19111-5094, Attn: NPODS.