



Standard Specification for Steel Sheet, Zinc-5 % Aluminum Alloy-Coated by the Hot-Dip Process¹

This standard is issued under the fixed designation A875/A875M; 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 steel sheet, in coils and cut lengths, metallic-coated by the hot-dip process, with zinc-5 % aluminum alloy coating. The Zn-5Al alloy coating also contains small amounts of elements other than zinc and aluminum that are intended to improve processing and the characteristics of the coated product.

1.2 The coating is produced as two types: zinc-5 % aluminum-mischmetal alloy (Type I) and zinc-5 % aluminum-0.1 % magnesium alloy (Type II), and in two coating structures (classes). The coated sheet is produced in several coating designations (coating weight [mass]).

1.3 The material is intended for applications requiring corrosion resistance, formability, and paintability.

1.4 The steel sheet is produced in a number of designations, types, grades, and classes designed to be compatible with differing application requirements.

1.5 Coated sheet material furnished under this specification shall conform to the applicable requirements of the latest issue of Specification [A924/A924M](#), unless otherwise provided herein.

1.6 The text of this specification references notes and footnotes that provide explanatory material. These notes and footnotes, excluding tables and figures, shall not be considered as requirements of this specification.

1.7 This specification is applicable to orders in either inch-pound units (as A875) or metric (SI) units [as A875M]. Values in inch-pound and SI units are to be regarded separately as standard. Within the text, the SI units are shown in brackets. The values stated in each system are not exact equivalents. Therefore, each system shall be used independently of the other.

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 April 1, 2013. Published April 2013. Originally approved in 1987. Last previous edition approved in 2010 as A875/A875M - 10. DOI: 10.1520/A0875_A0875M-13.

1.8 Unless the order specifies the “M” specification designation (SI units), the material shall be furnished to inch-pound units.

1.9 *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:²

[A90/A90M](#) Test Method for Weight [Mass] of Coating on Iron and Steel Articles with Zinc or Zinc-Alloy Coatings
[A902](#) Terminology Relating to Metallic Coated Steel Products

[A924/A924M](#) Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process

[B750](#) Specification for GALFAN (Zinc-5 % Aluminum-Mischmetal) Alloy in Ingot Form for Hot-Dip Coatings

[E47](#) Test Methods for Chemical Analysis of Zinc Die-Casting Alloys (Withdrawn 1997)³

[E517](#) Test Method for Plastic Strain Ratio r for Sheet Metal

[E646](#) Test Method for Tensile Strain-Hardening Exponents (n -Values) of Metallic Sheet Materials

[E1277](#) Test Method for Chemical Analysis of Zinc-5 % Aluminum-Mischmetal Alloys by ICP Emission Spectrometry

2.2 ISO Standard:⁴

[ISO 14788](#) Continuous Hot-Dip Zinc-5 % Aluminum Alloy Coated Steel Sheet and Coils

2.3 Other Document:⁵

[GF-1](#) Standard Practice for Determination of Cerium and Lanthanum Compositions in Galfan Alloy (5 % Al-0.4 %

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 The last approved version of this historical standard is referenced on www.astm.org.

⁴ Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036, <http://www.ansi.org>.

⁵ Available from International Lead Zinc Research Organization, Inc., 2525 Meridian Parkway, P.O. Box 12036, Research Triangle Park, NC 27709-2036.

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