



Standard Specification for Steel Sheet, Coated by the Electrolytic Process for Applications Requiring Designation of the Coating Mass on Each Surface (General Requirements)¹

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1. Scope

1.1 This specification covers hot-rolled and cold-rolled steel sheet coated by the electrolytic process. Coatings can be comprised of pure metals or metal alloys. For specific coatings, refer to Specifications A 879 and A 918.

1.2 The product shall be coated on one or both surfaces with equal or differential coating masses on the two surfaces. Sheet-coated with equal coating masses on each surface has similar levels of corrosion protection on each surface. Often, however, a higher level of corrosion protection is required on one surface than is required on the other. In these situations, one surface shall be specified with a heavier coating mass than the other. Either surface, when specified to be painted, will provide additional corrosion protection as compared to an unpainted surface.

1.3 This coating process has essentially no effect on the base metal mechanical properties, and use is permitted on any grade of hot-rolled or cold-rolled steel sheet. The coated sheet is available as Commercial Steel (CS), Drawing Steel (DS), Deep Drawing Steel (DDS), Extra-Deep Drawing Steel (EDDS), Structural Steel (SS) High-Strength Low-Alloy Steel (HSLAS), or High-Strength Low-Alloy Steel with Improved Formability (HSLAS-F).

1.4 The values stated in SI units are to be regarded as the standard.

2. Referenced Documents

2.1 ASTM Standards:

- A 90/A 90M Test Method for Weight [Mass] of Coatings on Iron and Steel Articles with Zinc or Zinc-Alloy Coatings²
- A 366/A 366M Specification for Commercial Steel (CS) Sheet, Carbon, (0.15 Maximum Percent) Cold-Rolled³
- A 370 Test Methods and Definitions for Mechanical Testing of Steel Products³
- A 568/A 568M Specification for Steel, Sheet, Carbon, and

High-Strength, Low-Alloy, Hot-Rolled, and Cold-Rolled, General Requirements for³

A 569/A 569M Specification for Steel, Carbon (0.15 Maximum, Percent), Hot-Rolled Sheet and Strip Commercial³

A 570/A 570M Specification for Steel, Sheet and Strip, Carbon, Hot-Rolled, Structural Steel³

A 591/A 591M Specification for Steel Sheet, Electrolytic Zinc-Coated, for Light Coating Mass Applications²

A 607 Specification for Steel, Sheet and Strip, High-Strength, Low-Alloy, Columbium or Vanadium, or Both, Hot-Rolled and Cold-Rolled³

A 611 Specification for Structural Steel (SS), Sheet, Carbon, Cold-Rolled³

A 620/A 620M Specification for Drawing Steel (DS), Sheet, Carbon, Cold-Rolled³

A 621/A 621M Specification for Forming Steel (FS), Sheet and Strip, Carbon, Hot-Rolled⁴

A 622/A 622M Specification for Drawing Steel (DS), Sheet and Strip, Carbon, Hot-Rolled³

A 715 Specification for Steel Sheet and Strip, High-Strength, Low-Alloy, Hot-Rolled, and Steel Sheet, Cold-Rolled, High-Strength, Low-Alloy, with Improved Formability³

A 754/A 754M Test Method for Coating Weight [Mass] by X-Ray Fluorescence²

A 879 Specification for Steel Sheet, Zinc-Coated by the Electrolytic Process for Applications Requiring Designation of the Coating Mass on Each Surface²

A 902 Terminology Relating to Metallic-Coated Steel Products²

A 918 Specification for Steel Sheet, Zinc-Nickel Alloy Coated by the Electrolytic Process for Applications Requiring Designation of the Coating Mass on Each Surface²

A 963/A 963M Specification for Deep Drawing Steel (DDS), Sheet, Carbon, Cold-Rolled³

A 969/A 969M Specification for Extra-Deep Drawing Steel (EDDS), Sheet, Carbon, Cold-Rolled³

B 504 Test Method for Measurement of Thickness of Metallic Coatings by the Coulometric Method⁵

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.

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² *Annual Book of ASTM Standards*, Vol 01.06.

³ *Annual Book of ASTM Standards*, Vol 01.03.

⁴ Discontinued; See 1996 *Annual Book of ASTM Standards*, Vol 01.03.

⁵ *Annual Book of ASTM Standards*, Vol 02.05.