



Designation: A568/A568M – 19a

Standard Specification for Steel, Sheet, Carbon, Structural, and High-Strength, Low- Alloy, Hot-Rolled and Cold-Rolled, General Requirements for¹

This standard is issued under the fixed designation A568/A568M; 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.

This standard has been approved for use by agencies of the U.S. Department of Defense.

1. Scope*

1.1 This specification covers the general requirements for steel sheet in coils and cut lengths. It applies to the following specifications that describe carbon steel, structural steel, and high-strength, low-alloy steel (HSLA) furnished as hot-rolled sheet and cold-rolled sheet: Specifications [A414/A414M](#), [A424/A424M](#), [A606/A606M](#), [A659/A659M](#), [A794/A794M](#), [A1008/A1008M](#), [A1011/A1011M](#), and [A1039/A1039M](#).

1.2 This specification is not applicable to hot-rolled heavy-thickness carbon sheet coils (Specification [A635/A635M](#)).

1.3 In case of any conflict in requirements, the requirements of the individual material specification shall prevail over those of this general specification.

1.4 For the purposes of determining conformance with this and the appropriate product specification referenced in [1.1](#), 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 in accordance with the rounding method of Practice [E29](#).

1.4.1 Ordered values, identified in tables, specified such as over 30 through 48 or 30 exclusive to 48 inclusive, covers 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.

1.5 [Annex A1](#) lists permissible variations in dimensions and mass (see [Note 1](#)) in SI [metric] units. The values listed are not exact conversions of the values listed in the inch-pound tables, but instead are rounded or rationalized values. Conformance to [Annex A1](#) is mandatory when the “M” specification is used.

NOTE 1—The term *weight* is used when inch-pound units are the

standard. However, under SI the preferred term is *mass*.

1.6 The values stated in either SI units or inch-pound units are to be regarded separately as standard. The values stated in each system may not be exact equivalents; therefore, each system shall be used independently of the other. Combining values from the two systems may result in non-conformance with the standard.

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

1.8 *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

- [A370 Test Methods and Definitions for Mechanical Testing of Steel Products](#)
- [A414/A414M Specification for Steel, Sheet, Carbon, and High-Strength, Low-Alloy for Pressure Vessels](#)
- [A424/A424M Specification for Steel, Sheet, for Porcelain Enameling](#)
- [A606/A606M Specification for Steel, Sheet and Strip, High-Strength, Low-Alloy, Hot-Rolled and Cold-Rolled, with Improved Atmospheric Corrosion Resistance](#)
- [A635/A635M Specification for Steel, Sheet and Strip, Heavy-Thickness Coils, Hot-Rolled, Alloy, Carbon, Structural, High-Strength Low-Alloy, and High-Strength Low-Alloy with Improved Formability, General Requirements for](#)

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 [A01.19](#) on Steel Sheet and Strip.

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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.

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