



Designation: A 786/A 786M – 00

Standard Specification for Rolled Steel Floor Plates¹

This standard is issued under the fixed designation A 786/A 786M; 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 carbon, high-strength low-alloy, and alloy steel rolled floor plates for flooring, stairways, transportation equipment, and for general structural purposes. While it is generally provided in the as-rolled condition, it may also be provided in the heat-treated condition (see Appendix Table X1.1). Rolled floor plates have raised figures at regular intervals on one surface of the plate.

1.1.1 Carbon steel may be specified to chemical composition limits, the maximum carbon of which should not exceed 0.33 % or, an ASTM material specification with yield point or yield strength and tensile strength may be specified (see Appendix Table X1.1).

1.2 Rolled floor plate is customarily available in a limited number of gage numbers or thicknesses. Standard gage numbers and thicknesses are shown in Table 1. The maximum thickness to be delivered under this specification is 1 in. [25 mm].

1.3 When the steel is to be welded, it is presupposed that a welding procedure suitable for the grade of steel and intended use or service will be utilized. See Appendix X3 of Specification A 6/A 6M for information on weldability.

1.4 The values stated in either inch-pound units or SI units are to be regarded 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 must be used independently of the other. Combining values from the two systems may result in nonconformance with the specification.

2. Referenced Documents

2.1 ASTM Standards:

A 6/A 6M Specification for General Requirements for Rolled Structural Steel Bars, Plates, Shapes, and Sheet Piling²

A 36/A 36M Specification for Carbon Structural Steel²

A 131/A 131M Specification for Structural Steel for Ships²

A 242/A 242M Specification for High-Strength Low-Alloy Structural Steel²

A 283/A 283M Specification for Low and Intermediate

Tensile Strength Carbon Steel Plates²

A 284/A 284M Specification for Low and Intermediate Tensile Strength Carbon-Silicon Steel Plates for Machine Parts and General Construction³

A 370 Test Methods and Definitions for Mechanical Testing of Steel Products⁴

A 514/A 514M Specification for High-Yield-Strength, Quenched and Tempered Alloy Steel Plate, Suitable for Welding²

A 572/A 572M Specification for High-Strength Low-Alloy Columbium-Vanadium Structural Steel²

A 573/A 573M Specification for Structural Carbon Steel Plates of Improved Toughness²

A 588/A 588M Specification for High-Strength Low-Alloy Structural Steel with 50 ksi (345 MPa) Minimum Yield Point to 4 in. (100 mm) Thick²

A 656/A 656M Specification for Hot-Rolled Structural Steel, High-Strength Low-Alloy Plate with Improved Formability²

A 700 Practices for Packaging, Marking, and Loading Methods for Steel Products for Domestic Shipment⁵

A 709/A 709M Specification for Carbon and High-Strength Low-Alloy Structural Steel Shapes, Plates, and Bars and Quenched and Tempered Alloy Structural Steel Plates for Bridges²

E 30 Test Methods for Chemical Analysis of Steel, Cast Iron, Open-Hearth Iron, and Wrought Iron⁶

E 59 Practice for Sampling Steel and Iron for Determination of Chemical Composition⁶

E 350 Test Method for Chemical Analysis of Carbon Steel, Low-Alloy Steel, Silicon Electrical Steel, Ingot Iron, and Wrought Iron⁶

2.2 American Welding Society Standards:

A5.1 Mild Steel Covered Arc-Welding Electrodes⁷

A5.5 Low-Alloy Steel Covered Arc-Welding Electrodes⁷

2.3 Military Standards:

MIL-STD-129 Marking for Shipment and Storage⁸

¹ This specification is under the jurisdiction of ASTM Committee A-1 on Steel, Stainless Steel, and Related Alloys and is the direct responsibility of Subcommittee A01.02 on Structural Steel for Bridges, Buildings, Rolling Stock, and Ships.

Current edition approved March 10, 2000. Published May 2000. Originally published as A 786 – 81. Last previous edition A 786 – 93.

² *Annual Book of ASTM Standards*, Vol 01.04.

³ Discontinued. See 1994 *Annual Book of ASTM Standards*, Vol 01.04.

⁴ *Annual Book of ASTM Standards*, Vol 01.03.

⁵ *Annual Book of ASTM Standards*, Vol 01.05.

⁶ *Annual Book of ASTM Standards*, Vol 03.05.

⁷ Available from American Welding Society, 550 N. W. LaJeune Rd., Miami, FL 33135.

⁸ Available from Standardization Documents Order Desk, Bldg. 4 Section D, 700 Robbins Ave., Philadelphia, PA 19111-5094, Attn: NPODS.