



Designation: A 501 – 9901

An American National Standard

Standard Specification for Hot-Formed Welded and Seamless Carbon Steel Structural Tubing¹

This standard is issued under the fixed designation A 501; 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 Department of Defense.

1. Scope

1.1 This specification covers black and hot-dipped galvanized hot-formed welded and seamless carbon steel square, round, rectangular, or special shape structural tubing for welded, riveted, or bolted construction of bridges and buildings, and for general structural purposes.

1.2 Square and rectangular tubing is furnished in sizes 1 to 10 in. (25.4 to 254 mm) across flat sides with wall thicknesses 0.095 to 1.000 in. (2.41 to 25.40 mm), dependent upon size; round tubing is furnished in NPS ½ to NPS 24 (see Note 1) inclusive, with nominal (average) wall thicknesses 0.109 to 1.000 in. (2.77 to 25.40 mm), dependent upon size. Special shape tubing and tubing with other dimensions is permitted to be furnished, provided that such tubing complies with all other requirements of this specification.

NOTE 1—The dimensionless designator NPS (nominal pipe size) has been substituted in this standard for such traditional terms as “nominal diameter,” “size,” and “nominal size.”

1.3 The following precautionary statement pertains only to the test method portion of this specification: *This standard does not purport to address all 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.*

1.4 The values stated in inch-pound units are to be regarded as the standard. The values given in parentheses are mathematical conversions of the values in inch-pound units to SI units.

1.5 The text of this specification contains notes and footnotes that provide explanatory material. Such notes and footnotes, excluding those in tables and figures, do not contain any mandatory requirements.

2. Referenced Documents

2.1 ASTM Standards:

A 53/A 53M Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless²

¹ This specification is under the jurisdiction of ASTM Committee A-1 A01 on Steel, Stainless Steel, and Related Alloys, and is the direct responsibility of Subcommittee A01.09 on Carbon Steel Tubular Products.

Current edition approved March 10, 1999; 2001. Published May 1999; 2001. Originally published as A 501 – 64. Last previous edition A 501 – 989.