



Standard Specification for Corrugated Steel Structural Plate, Zinc-Coated, for Field- Bolted Pipe, Pipe-Arches, and Arches¹

This standard is issued under the fixed designation A761/A761M; 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 corrugated steel structural plate, zinc-coated, used in the construction of pipe, pipe-arches, arches, underpasses, and special shapes for field assembly. Appropriate fasteners and accessory materials are also described. The pipe, arches, and other shapes are generally used for drainage purposes, pedestrian and vehicular underpasses, and utility tunnels.

1.2 This specification does not include requirements for bedding, backfill, or the relationship between earth cover load and plate thickness of the pipe. Experience has shown that the successful performance of this product depends upon the proper selection of plate thickness, type of bedding and backfill, manufacture in the plant, and care in the installation. The purchaser must correlate the preceding factors and also the corrosion and abrasion requirements of the field installation with the plate thickness. The structural design of corrugated steel structural plate pipe and the proper installation procedures are described in Practices [A796/A796M](#) and [A807/A807M](#).

1.3 This specification is applicable to orders in either inch-pound units (as A761) or SI units (as A761M). Inch-pound units and SI units are not necessarily equivalent. SI units are shown in brackets in the text, but they are the applicable values when the material is ordered to A761M.

1.4 This specification references notes and footnotes which provide explanatory material. These notes and footnotes (excluding those in tables and figures) shall not be considered as requirements of this specification.

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 A05.17 on Corrugated Steel Pipe Specifications.

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2. Referenced Documents

2.1 ASTM Standards:²

- [A36/A36M](#) Specification for Carbon Structural Steel
- [A90/A90M](#) Test Method for Weight [Mass] of Coating on Iron and Steel Articles with Zinc or Zinc-Alloy Coatings
- [A123/A123M](#) Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
- [A153/A153M](#) Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware
- [A307](#) Specification for Carbon Steel Bolts, Studs, and Threaded Rod 60 000 PSI Tensile Strength
- [A370](#) Test Methods and Definitions for Mechanical Testing of Steel Products
- [A449](#) Specification for Hex Cap Screws, Bolts and Studs, Steel, Heat Treated, 120/105/90 ksi Minimum Tensile Strength, General Use
- [A563](#) Specification for Carbon and Alloy Steel Nuts
- [A563M](#) Specification for Carbon and Alloy Steel Nuts (Metric)
- [A751](#) Test Methods, Practices, and Terminology for Chemical Analysis of Steel Products
- [A754/A754M](#) Test Method for Coating Weight (Mass) of Metallic Coatings on Steel by X-Ray Fluorescence
- [A780](#) Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings
- [A796/A796M](#) Practice for Structural Design of Corrugated Steel Pipe, Pipe-Arches, and Arches for Storm and Sanitary Sewers and Other Buried Applications
- [A807/A807M](#) Practice for Installing Corrugated Steel Structural Plate Pipe for Sewers and Other Applications
- [A902](#) Terminology Relating to Metallic Coated Steel Products

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.