



Standard Specification for Corrugated Aluminum Pipe for Sewers and Drains¹

This standard is issued under the fixed designation B745/B745M; 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 corrugated aluminum pipe intended for use for storm water drainage, underdrains, the construction of culverts, and similar uses. Pipe covered by this specification is not normally used for the conveyance of sanitary or industrial wastes.

1.2 This specification does not include requirements for bedding, backfill, or the relationship between earth-cover load and sheet thickness of the pipe. Experience has shown that the successful performance of this product depends upon the proper selection of sheet thickness, type of bedding and backfill, controlled manufacture in the plant, and care in the installation. The purchaser must correlate the above factors and also the corrosion and abrasion requirements of the field installation with the sheet thickness. The structural design of corrugated aluminum pipe and the proper installation procedures are given in Practices **B790/B790M** and **B788/B788M**, respectively. A procedure for using life-cycle cost analysis techniques to evaluate alternative drainage system designs using corrugated metal pipe is given in Practice **A930**.

1.3 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.

1.4 *This standard does not purport to address all of 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 This specification is under the jurisdiction of ASTM Committee **B07** on Light Metals and Alloys and is the direct responsibility of Subcommittee **B07.08** on Corrugated Aluminum Pipe and Corrugated Aluminum Structural Plate.

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2. Referenced Documents

2.1 ASTM Standards:²

- 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
- A563** Specification for Carbon and Alloy Steel Nuts
- A563M** Specification for Carbon and Alloy Steel Nuts (Metric)
- A796/A796M** Practice for Structural Design of Corrugated Steel Pipe, Pipe-Arches, and Arches for Storm and Sanitary Sewers and Other Buried Applications
- A930** Practice for Life-Cycle Cost Analysis of Corrugated Metal Pipe Used for Culverts, Storm Sewers, and Other Buried Conduits
- B209** Specification for Aluminum and Aluminum-Alloy Sheet and Plate
- B209M** Specification for Aluminum and Aluminum-Alloy Sheet and Plate (Metric)
- B221** Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes
- B221M** Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes (Metric)
- B316/B316M** Specification for Aluminum and Aluminum-Alloy Rivet and Cold-Heading Wire and Rods
- B633** Specification for Electrodeposited Coatings of Zinc on Iron and Steel
- B666/B666M** Practice for Identification Marking of Aluminum and Magnesium Products
- B695** Specification for Coatings of Zinc Mechanically Deposited on Iron and Steel
- B744/B744M** Specification for Aluminum Alloy Sheet for Corrugated Aluminum Pipe
- B788/B788M** Practice for Installing Factory-Made Corrugated Aluminum Culverts and Storm Sewer Pipe

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.