



## Standard Specification for Asbestos-Cement Pressure Pipe<sup>1</sup>

This standard is issued under the fixed designation C 296; 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 asbestos-cement pressure pipe for use in supply lines and distribution systems that carry water under pressure. The specification also covers asbestos-cement pressure pipe for use in sewer force mains which carry sewage under pressure.

1.2 The text of this standard references notes and footnotes which provide explanatory material. Those notes and footnotes (excluding those in tables and figures) shall not be considered as requirements of the standard.

1.3 The values stated in SI units are to be regarded as the standard. The values stated in parentheses are for information only.

1.4 *This standard does not purport to address all of the safety problems, 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.*

### 2. Referenced Documents

#### 2.1 ASTM Standards:

- C 150 Specification for Portland Cement<sup>2</sup>
- C 458 Test Method for Organic Fiber Content of Asbestos-Cement Products<sup>3</sup>
- C 500 Test Methods for Asbestos-Cement Pipe<sup>3</sup>
- C 595 Specification for Blended Hydraulic Cements<sup>2</sup>
- C 618 Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use as a Mineral Admixture in Concrete<sup>4</sup>
- D 1869 Specification for Rubber Rings for Asbestos-Cement Pipe<sup>5</sup>
- D 2946 Terminology for Asbestos and Asbestos-Cement Products<sup>3</sup>

#### 2.2 Federal Standard:

Fed. Std. No. 123 Marking for Domestic Shipment (Civilian Agencies)<sup>6</sup>

#### 2.3 Military Standard:

MIL-STD-129 Marking for Shipment and Storage<sup>6</sup>

#### 2.4 Other Documents:

- AWWA C401 Standard Practice for the Selection of Asbestos-Cement Water Pipe<sup>7</sup>
- Uniform Freight Classification Rules<sup>8</sup>
- Motor Freight Classification Rules<sup>9</sup>

### 3. Terminology

#### 3.1 Definitions:

3.1.1 *coupling*—section for joining asbestos-cement pipe that, when properly installed with the proper accessories, develops a joint equivalent in strength and serviceability to the pipe sections.

3.1.2 *lot*—for pipe sizes 525 mm (21 in.) in diameter and smaller, each 300 lengths of pipe or less, of identical class and size manufactured on each machine during a 24-h period. For pipe larger than 525 mm (21 in.) each 300 lengths of pipe or less, of identical class and size manufactured on each machine during a period of consecutive working days not exceeding seven days.

3.2 Definitions for the following terms are presented in Terminology D 2946: accessories, crushing strength, cure, flexural strength (in pipes), free lime, hydrostatic strength, organic fiber content, purchaser, silica, supplier, and uncombined calcium.

### 4. Classification

4.1 Asbestos-cement pipe furnished under this specification shall conform to Classes 100, 150, and 200. These nominal designations in psi are equivalent to nominal SI units of 7, 10, and 14 kPa, respectively.

NOTE 1—The purchaser shall determine the proper class of pipe to be used under the installation and operation conditions anticipated. For this purpose refer to Standard Practice AWWA C401 – 83.

<sup>1</sup> This specification is under the jurisdiction of ASTM Committee C17 on Fiber-Cement Products and is the direct responsibility of C17.03 on Asbestos-Cement Sheet Products and Accessories.

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<sup>2</sup> *Annual Book of ASTM Standards*, Vol 04.01.

<sup>3</sup> *Annual Book of ASTM Standards*, Vol 04.05.

<sup>4</sup> *Annual Book of ASTM Standards*, Vol 04.02.

<sup>5</sup> *Annual Book of ASTM Standards*, Vol 09.02.

<sup>6</sup> Available from Standardization Documents Order Desk, Bldg. 4 Section D, 700 Robbins Ave., Philadelphia, PA 19111-5094, Attn: NPODS.

<sup>7</sup> Available from American Water Works Association, 6666 West Quincey Avenue, Denver, CO 80235.

<sup>8</sup> Available from the Uniform Classification Commission, Room 1106, 222 S. Riverside Plaza, Chicago, IL 60606.

<sup>9</sup> Available from National Motor Freight Inc., 1616 “P” St. NW, Washington, DC 20036.