



Standard Specification for Rubber Gaskets for Cast Iron Soil Pipe and Fittings¹

This standard is issued under the fixed designation C 564; 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 preformed rubber gaskets used to seal joints in cast iron soil pipe and fittings.

1.2 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.

1.3 The following safety hazards caveat pertains only to the test methods section of this specification: *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.*

1.4 The committee with jurisdiction over this standard is not aware of another comparable standard for materials covered in this standard.

2. Referenced Documents

2.1 ASTM Standards:²

- A 644 Terminology Relating to Iron Castings
- D 395 Test Methods for Rubber Property—Compression Set
- D 412 Test Methods for Vulcanized Rubber and Thermoplastic Elastomers—Tension
- D 471 Test Method for Rubber Property—Effect of Liquids
- D 573 Test Method for Rubber—Deterioration in an Air Oven
- D 624 Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers
- D 1149 Test Methods for Rubber Deterioration—Cracking

in an Ozone Controlled Environment

D 1415 Test Method for Rubber Property—International Hardness

D 2240 Test Method for Rubber Property—Durometer Hardness

2.2 Other Documents

RMA Class 3 Dimensional Tolerances, RMA Manual³

3. Terminology

3.1 *Definitions*—For definitions of terms in this standard see Terminology C 717.

3.2 *Definitions of Terms Specific to This Standard:*

3.2.1 *flash*—the excess material protruding from the surface of a molded article at the mold junction.

3.2.2 *virgin rubber, n*—a term that may be used interchangeably with raw rubber (raw thermoset elastomer). A rubber or thermoset elastomer that has not had any additional work, diluents incorporated, processes performed on it, or any combination thereof. A rubber that is in an unmodified state or one in which no attempt has been made to alter it in any fashion as received from the manufacturer or supplier.

4. Materials and Manufacture

4.1 Gaskets shall be made of a properly vulcanized virgin compound containing virgin rubber as the sole elastomer with no scrap or reclaim.

5. Physical Requirements Physical Requirements

5.1 Sample gaskets selected as specified in Section 8 shall conform to the requirements for physical properties listed in Table 1 when tested in accordance with the methods specified in Section 9.

6. Dimensions and Permissible Variations

6.1 Gaskets shall conform to the dimensions specified by the manufacturer.

6.2 All cross-sectional dimensions shall have an RMA Class 3 tolerance as shown in Annex A1, and all diametral dimensions shall have a tolerance of ± 1 percent.

¹ This specification is under the jurisdiction of ASTM Committee A04 on Iron Castings and is the direct responsibility of Subcommittee A04.75 on Gaskets and Coupling for Plumbing and Sewer Piping.

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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.

³ Rubber Manufacturer's Association, 1400 K Street NW, No. 900, Washington, DC 20005 – 2455, http://www.rma.org.