



Standard Practice for Rubber—Preparation of Product Pieces for Test Purposes from Products¹

This standard is issued under the fixed designation D 3183; 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 practice covers methods for the preparation of pieces of a rubber vulcanizate that is not in the form of sheet. Such pieces are used as a source from which specimens are obtained for testing.

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

1.3 *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:*²

D 3182 Practice for Rubber—Materials, Equipment, and Procedures for Mixing Standard Compounds and Preparing Standard Vulcanized Sheets

3. Terminology

3.1 *Definitions of Terms Specific to This Standard:*

3.1.1 *piece, n*—a rubber vulcanizate of a geometry from which a specimen, suitable for testing, may be obtained.

4. Significance and Use

4.1 This practice is used when it is necessary to test a product from which specimens cannot be cut directly. Proce-

dures are given for preparing pieces suitable for preparing specimens of the product.

5. Conditioning

5.1 Pieces shall be prepared for specimen cutting and testing not sooner than 16 h after vulcanization and not later than 60 days after delivery to a purchaser.

5.2 Testing, for the purpose of production control, may require that the pieces be prepared and tested prior to 16 h as specified in 5.1. This practice shall be noted in the respective test report.

6. Pieces

6.1 Pieces shall be obtained, if possible, from the product to be tested in accordance with the specification for the particular product. The pieces shall be prepared in accordance with Section 7.

6.2 When it is not feasible to prepare suitable pieces from the product, specially molded pieces or sheets may be prepared from the same unvulcanized rubber compound used to prepare the product. The sheets shall be vulcanized in accordance with Practice **D 3182** and shall have an equivalent state of vulcanization judged from such properties as can be determined on the product. The sheets shall have one of the following thicknesses unless another thickness is technically necessary:

mm	in.
2 ± 0.2	(0.08 ± 0.008)
4 ± 0.2	(0.16 ± 0.008)
6.3 ± 0.3	(0.25 ± 0.12)
12.5 ± 0.5	(0.50 ± 0.02)

7. Preparation of Pieces

7.1 Rubber vulcanizates, particularly products, may not have a suitable form or size for use in cutting specimens for test. Procedures in this section describe the preparation of pieces from vulcanizates that are too thick, have uneven surfaces, or contain textiles.

¹ This practice is under the jurisdiction of ASTM Committee D11 on Rubber and is the direct responsibility of Subcommittee D11.10 on Physical Testing.

Current edition approved May 1, 2007. Published May 2007. Originally approved in 1973. Last previous edition approved in 2002 as D 3183 – 02.

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.