



Designation: C 864 – 99 (Reapproved 2005)

## Standard Specification for Dense Elastomeric Compression Seal Gaskets, Setting Blocks, and Spacers<sup>1</sup>

This standard is issued under the fixed designation C 864; 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 ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

### 1. Scope

1.1 This specification covers preformed dense elastomeric compression gaskets and accessories for use in sealing and glazing applications. These materials are generally used to seal or serve as components of compression sealing systems between mechanically restrained surfaces in building constructions.

1.2 *Test Method C 1166, as referenced in this specification, should be used to measure and describe the properties of materials, products, or assemblies in response to heat and flame under controlled laboratory conditions and should not be used to describe or appraise the fire hazard or fire risk of materials, products, or assemblies under actual fire conditions. However, results of this test may be used as elements of a fire risk assessment which takes into account all of the factors which are pertinent to an assessment of the fire hazard of a particular end use.*

1.3 The following precautionary statement pertains only to the test method portion, Section 9, 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.*

### 2. Referenced Documents

#### 2.1 ASTM Standards:<sup>2</sup>

- C 717 Terminology of Building Seals and Sealants
- C 1166 Test Method for Flame Propagation of Dense and Cellular Elastomeric Gaskets and Accessories
- D 395 Test Methods for Rubber Property—Compression Set
- D 412 Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers—Tension

- 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 746 Test Method for Brittleness Temperature of Plastics and Elastomers by Impact
- D 925 Test Methods for Rubber Property—Staining of Surfaces (Contact, Migration, and Diffusion)
- D 1149 Test Method for Rubber Deterioration—Surface Ozone Cracking in a Chamber
- D 1566 Terminology Relating to Rubber
- D 2240 Test Method for Rubber Property—Durometer Hardness
- D 3182 Practice for Rubber—Materials, Equipment, and Procedures for Mixing Standard Compounds and Preparing Standard Vulcanized Sheets

### 3. Terminology

#### 3.1 Definitions:

- 3.1.1 For the definition of elastomer, and other definitions of terms used in this specification, see Terminology C 717.
- 3.2 Definitions of Terms Specific to This Standard:
  - 3.2.1 *compression seal*—a type of joint seal in which weathertightness is maintained by the exertion of compressive pressure on the gasket or sealing material.
  - 3.2.2 *gasket*—a resilient preformed and precured shape intended for use in providing a compression seal.
  - 3.2.3 *spacer*—a material used to maintain space between a glass or panel and its surrounding frame.
  - 3.2.4 *setting block*—a block of resilient material used to support a pane of glass or a panel within a frame.

### 4. Materials and Manufacture

- 4.1 The elastomeric materials shall be manufactured from a high-quality ozone-resistant compound that, when properly cured, will comply with this specification.
- 4.2 The cured compound shall be suitable for use where resistance to sunlight, weathering, oxidation, and permanent deformation under load are of prime importance.
- 4.3 The preformed gaskets or shapes shall be free of porosity, surface defects, and dimensional irregularities that may affect serviceability.

<sup>1</sup> This specification is under the jurisdiction of ASTM Committee C24 on Building Seals and Sealants and is the direct responsibility of Subcommittee C24.73 on Compression Seal and Lock-Strip Gaskets.

Current edition approved Feb. 1, 2005. Published March 2005. Originally approved in 1977. Last previous edition approved in 1999 as C 864 – 99.

<sup>2</sup> 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.