



Designation: C 920 – 05

Standard Specification for Elastomeric Joint Sealants¹

This standard is issued under the fixed designation C 920; 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 approval. 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 the properties of a cured single- or multicomponent cold-applied elastomeric joint sealant for sealing, caulking, or glazing operations on buildings, plazas, and decks for vehicular or pedestrian use, and types of construction other than highway and airfield pavements and bridges.

1.2 A sealant meeting the requirements of this specification shall be designated by the manufacturer to be one or more of the types, classes, grades, and uses defined in Section 7.

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

1.4 This standard is similar, but not identical, to ISO 11600.

2. Referenced Documents

2.1 *ASTM Standards:*²

C 510 Test Method for Staining and Color Change of Single- or Multicomponent Joint Sealants

C 639 Test Method for Rheological (Flow) Properties of Elastomeric Sealants

C 661 Test Method for Indentation Hardness of Elastomeric-Type Sealants by Means of a Durometer

C 679 Test Method for Tack-Free Time of Elastomeric Sealants

C 717 Terminology of Building Seals and Sealants

C 719 Test Method for Adhesion and Cohesion of Elastomeric Joint Sealants Under Cyclic Movement (Hockman Cycle)

C 793 Test Method for Effects of Accelerated Weathering on Elastomeric Joint Sealants

C 794 Test Method for Adhesion-in-Peel of Elastomeric Joint Sealants

C 1183 Test Method for Extrusion Rate of Elastomeric Sealants

C 1193 Guide for Use of Joint Sealants

C 1246 Test Method for Effects of Heat Aging on Weight Loss, Cracking and Chalking of Elastomeric Sealants After Cure

C 1247 Test Method for Durability of Sealants Exposed to Constant Immersion in Liquids

3. Terminology

3.1 *Definitions*—Refer to Terminology **C 717** for definitions of the following terms used in this specification: adhesive failure, caulking, chemically curing sealant, cohesive failure, cure, cured, elastomeric, glazing, joint, primer, seal, sealant.

4. Classification of Sealants

4.1 A sealant qualifying under this specification shall be classified as to type, grade, class, and use as follows:

4.1.1 *Type S*—A single-component sealant.

4.1.2 *Type M*—A multicomponent sealant.

4.1.3 *Grade P*—A pourable or selfleveling sealant that has sufficient flow to form a smooth, level surface when applied in a horizontal joint at 4.4°C (40°F).

4.1.4 *Grade NS*—A nonsag or gunnable sealant that permits application in joints on vertical surfaces without sagging or slumping when applied at temperatures between 4.4 and 50°C (40 and 122°F).

4.1.5 *Class 100/50*—A sealant that when tested for adhesion and cohesion under cyclic movement (8.8) shall withstand an increase of at least 100 % and a decrease of at least 50 % of the joint width as measured at the time of application, and, in addition, meet all the requirements of this specification.

4.1.6 *Class 50*—A sealant that when tested for adhesion and cohesion under cyclic movement (8.8) shall withstand an increase and decrease of at least 50 % of the joint width as measured at the time of application, and, in addition, meet all the requirements of this specification.

4.1.7 *Class 35*—A sealant that when tested for adhesion and cohesion under cyclic movement (8.8) shall withstand an increase and decrease of at least 35 % of the joint width as measured at the time of application, and, in addition, meet all the requirements of this specification.

¹ This specification is under the jurisdiction of ASTM Committee C24 on Building Seals and Sealants and is the direct responsibility of Subcommittee C24.10 on Specifications, Guides and Practices.

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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.