Designation: C 923M – 08

Standard Specification for Resilient Connectors Between Reinforced Concrete Manhole Structures, Pipes, and Laterals (Metric)[1]

This standard is issued under the fixed designation C 923M; 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.

1. Scope

1.1 This specification covers the minimum performance and material requirements for resilient connectors used for connections between precast reinforced concrete manholes conforming to Specification C 478 and pipes, and between precast reinforced concrete pipe and laterals.

1.1.1 These connectors are designed to minimize leakage between the pipe and manhole, and between the pipe and lateral.

1.2 This specification is the metric counterpart of Specification C 923.

NOTE 1—This specification covers the design, material, and performance of the resilient connection only. Connections covered by this specification are adequate for hydrostatic pressures up to 70 kPa (7.1 m) without leakage when tested in accordance with Section 7. Infiltration or exfiltration quantities for an installed system are dependent upon many factors other than the connections between manhole structures and pipe, and allowable quantities must be covered by other specifications and suitable testing of the installed pipeline and system.

1.3 The following precautionary caveat pertains only to the test methods portion, Section 7, 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.* For a specific precaution statement, see 7.2.5.

2. Referenced Documents

2.1 *ASTM Standards:* [2]

A 493 Specification for Stainless Steel Wire and Wire Rods for Cold Heading and Cold Forging
A 666 Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar
C 478 Specification for Precast Reinforced Concrete Manhole Sections
C 822 Terminology Relating to Concrete Pipe and Related Products
C 913 Specification for Precast Concrete Water and Wastewater Structures
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 543 Practices for Evaluating the Resistance of Plastics to Chemical Reagents
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 883 Terminology Relating to Plastics
D 1149 Test Methods for Rubber Deterioration—Cracking in an Ozone Controlled Environment
D 1566 Terminology Relating to Rubber
D 2137 Test Methods for Rubber Property—Brittleness Point of Flexible Polymers and Coated Fabrics
D 2240 Test Method for Rubber Property—Durometer Hardness

NOTE 2—For more information about wastewater structures, see Specification C 913.

3. Terminology

3.1 *Definitions:*

3.1.1 Terms relating to plastics and rubber shall be as defined in Terminologies D 883 and D 1566, respectively.

3.1.2 Terms relating to precast concrete pipe, manholes, and related products shall be as defined in Terminology C 822 and as modified in 3.1.3-3.1.6.

[1] This specification is under the jurisdiction of ASTM Committee C13 on Concrete Pipe and is the direct responsibility of Subcommittee C13.06 on Manholes and Specials.

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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.