
Standard Specification for

Joints for Concrete Pipe, Manholes, and Precast Box Sections Using Preformed Flexible Joint Sealants

AASHTO Designation: M 198-10

ASTM Designation: C 990-09



AASHTO M 198-10 is identical to ASTM C 990-09 except that references to the ASTM standards contained in ASTM C 990-09, listed in the following table, shall be replaced with the corresponding AASHTO standard:

<i>Referenced Documents</i>					
ASTM	AASHTO	ASTM	AASHTO	ASTM	AASHTO
C 14	M 86M/M 86	C 507	M 207M/M 207	D 92	T 48
C 76	M 170	C 655	M 242M/M 242	D 113	T 51
C 478	M 199M/M 199	C 822	M 262		
C 506	M 206M/M 206	C 1433	M 259 and M 273		



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This standard is issued under the fixed designation C990; 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 joints for precast concrete pipe and box, and other sections using preformed flexible joint sealants for use in storm sewers and culverts which are not intended to operate under internal pressure, or are not subject to infiltration or exfiltration limits. Joint material used in horizontal applications is intended to prevent the flow of solids through the joint.

1.2 For precast concrete manhole sections and other vertical structures, which are subject to internal or external pressure, infiltration or exfiltration limits are not prohibited from being specified. Joints in vertical structures covered by this specification are intended mainly to prevent the flow of solids or fluids through the joint.

1.3 This specification is to be used with pipe and structures conforming in all respects to Specifications C14, C76, C478, C506, C507, C655, C985, C1433, C1504, and C1577, provided that if there is a conflict in permissible variations in dimensions, the requirements of this specification shall govern.

1.4 This specification is the inch-pound companion to C990M; therefore, no SI equivalents are presented in the specification.

NOTE 1—This specification covers the material and performance of the joint and sealant only. Infiltration and exfiltration quantities for installed sections are dependent on factors other than the joints which must be covered by other specifications and suitable testing of the installed pipeline.

1.5 *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 This specification is under the jurisdiction of ASTM Committee C13 on Concrete Pipe and is the direct responsibility of Subcommittee C13.08 on Joints for Precast Concrete Structures.

Current edition approved June 1, 2009. Published June 2009. Originally approved in 1991. Last previous edition approved in 2008 as C990 – 08. DOI: 10.1520/C0990-09.

2. Referenced Documents

2.1 ASTM Standards:²

- C14 Specification for Nonreinforced Concrete Sewer, Storm Drain, and Culvert Pipe
- C76 Specification for Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
- C478 Specification for Precast Reinforced Concrete Manhole Sections
- C506 Specification for Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe
- C507 Specification for Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe
- C655 Specification for Reinforced Concrete D-Load Culvert, Storm Drain, and Sewer Pipe
- C822 Terminology Relating to Concrete Pipe and Related Products
- C972 Test Method for Compression-Recovery of Tape Sealant
- C985 Specification for Nonreinforced Concrete Specified Strength Culvert, Storm Drain, and Sewer Pipe
- C1433 Specification for Precast Reinforced Concrete Monolithic Box Sections for Culverts, Storm Drains, and Sewers
- C1504 Specification for Manufacture of Precast Reinforced Concrete Three-Sided Structures for Culverts and Storm Drains
- C1577 Specification for Precast Reinforced Concrete Monolithic Box Sections for Culverts, Storm Drains, and Sewers Designed According to AASHTO LRFD
- D4 Test Method for Bitumen Content
- D6 Test Method for Loss on Heating of Oil and Asphaltic Compounds
- D36 Test Method for Softening Point of Bitumen (Ring-and-Ball Apparatus)

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.