An Engineer's Guide to Quality Assurance of RCP

Full Suite of Inspection Standards

MANUFACTURING

ASTM C76 Standard Specification for Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe



PRE-INSTALLATION

AASHTO R 73 Standard Practice for Evaluation of Precast Concrete Drainage Products

INSTALLATION

ASTM C1479

Standard Practice for Installation of Precast Concrete Sewer, Storm Drain, and Culvert Pipe Using Standard Installations





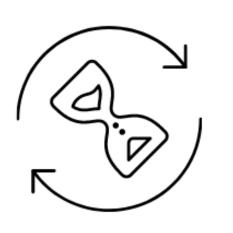
POST-INSTALLATION

ASTM C1840

Standard Practice for Inspection and Acceptance of Installed Reinforced Concrete Culvert, Storm Drain, and Storm Sewer Pipe

IN-SERVICE/ OPERATIONAL

AASHTO CULVERT & STORM DRAIN SYSTEM INSPECTION GUIDE







Designation: C 76

Standard Specification for Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe¹

This standard is issued under the fixed designation C 76; 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 (e) indicates an editorial change since the last revision or reapproval. This standard has been approved for use by agencies of the Department of Defense.

. Scope

1.1 This specification covers reinforced concrete pipe intended to be used for the conveyance of sewage, industrial wastes, and storm water, and for the construction of culverts. 1.2 A complete metric companion to Specification C 76 has been developed—C 76M; therefore, no metric equivalents are presented in this specification. Reinforced concrete pipe that conform to the requirements of C 76 M, are acceptable under this Specification C 76 unless prohibited by the Owner.

Norn 1—This specification is a manufacturing and purchase specification only, and does not include requirements for bedding, backfill, or the relationship between field load condition and the strength classification of pipe. However, experience has shown that the successful performance of

- C 33 Specification for Concrete Aggregates
- C 76M Specification for Reinforced Concrete Culvert,
- Storm Drain, and Sewer Pipe (Metric)
- C 150 Specification for Portland Cement C 260 Specification for Air-Entraining Admixtures for Con-
- crete C 309 Specification for Liquid Membrane-Forming Com-
- pounds for Curing Concrete C 494/C 494M Specification for Chemical Admixtures for
- Concrete C 497 Test Methods for Concrete Pipe, Manhole Sections,
- or Tile C 595 Specification for Blended Hydraulic Cements
- C 595 Specification for Coal Fly Ash and Raw or Calcined



Crack Evaluation

Cracks shall be evaluated based upon crack pattern (location and orientation in the wall), length, crack width, and environmental conditions.





Standard Practice for Evaluation of Precast Concrete Drainage Products

AASHTO Designation: R 73-16¹ Release: Group 2 (June 2016) Why Inspect at the project site before installing?









Multi-directional

ACPA

Circumferential

Hinge