

IAPMO IGC 283-2011ae1

# Electro-Pneumatic Backwater Prevention Systems



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## Electro-Pneumatic Backwater Prevention Systems

### 1 Scope and Purpose

- 1.1** This Standard covers electro-pneumatic backwater prevention systems and specifies minimum requirements for materials, physical characteristics, performance tests, and markings.
- 1.2** The purpose of this Standard is to enhance health and safety by:
- (a) specifying acceptable criteria for electro-pneumatic backwater prevention systems;
  - (b) serving as a guide for producers, distributors, architects, engineers, contractors, installers, inspectors and users; and
  - (c) promoting understanding regarding materials and manufacturing of electro-pneumatic backwater prevention systems.
- 1.3** The requirements of this Standard are not intended to prevent the use of alternate materials or methods of construction provided any such alternates meet the intent of this Standard.
- 1.4** Amendments to this Standard will be made after processing according to the standards writing procedures of IAPMO.
- 1.5** The user’s attention is called to the possibility that compliance with this Standard may require use of an invention covered by patent rights. By publication of this Standard, no position is taken with respect to the validity of any such claim(s) or of any patent rights in connection therewith. If a patent holder has filed a statement of willingness to grant a license under these rights on reasonable and nondiscriminatory terms and conditions to applicants desiring to obtain such a license, then details can be obtained from IAPMO.

### 2 Reference Publications

This Standard refers to the following publications, and where such reference is made, it shall be to the current edition of those publications, including all amendments published thereto.

|            |  |
|------------|--|
| ASTM A74   | Standard Specification for Cast Iron Soil Pipe and Fittings  |
| ASTM A888  | Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste, and Vent Piping Applications   |
| ASTM C564  | Standard Specification for Rubber Gaskets for Cast Iron Soil Pipe and Fittings   |
| ASTM C1440 | Standard Specification for Thermoplastic Elastomeric (TPE) Gasket Materials for Drain, Waste, and Vent (DWV), Sewer, Sanitary and Storm Plumbing Systems |
| ASTM D395  | Standard Test Methods for Rubber Property—Compression Set  |
| ASTM D412  | Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers—Tension   |
| ASTM D471  | Standard Test Method for Rubber Property—Effect of Liquids   |

|            |   |
|------------|---|
| ASTM D573  | Standard Test Method for Rubber—Deterioration in an Air Oven  |
| ASTM D2000 | Standard Classification System for Rubber Products in Automotive Applications   |
| ASTM D2122 | Standard Test Method for Determining Dimensions of Thermoplastic Pipe and Fittings  |
| ASTM D2137 | Standard Test Methods for Rubber Property—Brittleness Point of Flexible Polymers and Coated Fabrics                                   |
| ASTM D2240 | Standard Test Method for Rubber Property—Durometer Hardness   |
| ASTM D2661 | Standard Specification for Acrylonitrile-Butadiene-Styrene (ABS) Schedule 40 Plastic Drain, Waste, and Vent Pipe and Fittings         |
| ASTM D2665 | Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Drain, Waste, and Vent Pipe and Fittings                                |
| ASTM D3212 | Standard Specification for Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals                                  |
| ASTM D3568 | Standard Test Methods for Rubber—Evaluation of EPDM (Ethylene Propylene Diene Terpolymers) Including Mixtures with Oil                |
| CISPI 301  | Standard specification for hubless cast iron soil pipe and fittings for sanitary and storm drain, waste, and vent piping applications |
| CSA B70    | Cast iron soil pipe, fittings, and means of joining   |
| CSA B1800  | Thermoplastic nonpressure piping compendium   |
| CSA B181.0 | Definitions, general requirements, and methods of testing for thermoplastic nonpressure piping  |
| CSA B181.1 | Acrylonitrile-butadiene-styrene (ABS) drain, waste, and vent pipe and pipe fittings   |
| CSA B181.2 | Polyvinylchloride (PVC) and chlorinated polyvinylchloride (CPVC) drain, waste, and vent pipe and pipe fittings                        |
| CSA B182.1 | Plastic drain and sewer pipe and pipe fittings  |
| CSA B182.2 | Polyvinylchloride (PVC) sewer pipe and fittings (PSM type)  |
| CSA B602   | Mechanical couplings for drain, waste, and vent pipe and sewer pipe   |
| SAE J2000  | Classification System for Rubber Materials  |
| UL 157     | Gaskets and Seals   |

### 3 Abbreviations

The following abbreviations shall apply in this Standard:

|             |  |
|-------------|--|
| <b>ABS</b>  | — acrylonitrile-butadiene-styrene      |
| <b>EPDM</b> | — ethylene-propylene-diene-monomer     |
| <b>PVC</b>  | — polyvinylchloride                    |
| <b>RPSM</b> | — retractable pneumatic sealing module |