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INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS

IAPMO GUIDE CRITERIA

FOR

VERTICAL PVC BACKWATER PREVENTERS

IAPMO IGC 229-2006

1. PURPOSE

- 1.1** The purpose of this standard is to establish a generally acceptable standard for Vertical PVC Backwater Preventers. It is intended to serve as a guide for producers, distributors, architects, engineers, contractors, installers, inspectors and users; to promote understanding regarding materials, manufacture, installation, and performance; and to identify Vertical PVC Backwater Preventers complying with this standard.
- 1.2** The provisions of this standard are not intended to prevent the use of any alternate material or method of construction, provided any such alternate meets the intent and requirements of this document and changes are amended to this standard.

2. SCOPE

- 2.1** This standard applies to Vertical PVC Backwater Preventers and covers general requirements, strength and performance tests for such products, in addition to method of markings and identification.

3. REFERENCED STANDARDS

- 3.1** All standards referenced herein shall be the current edition of those standards.
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| ASME A112.18.1/CSA B125.1 | Plumbing Supply Fittings |
| ASME A112.14.1 | Backwater Valves |
| ASTM D 2665 | Poly (Vinyl Chloride) (PVC) Plastic Drain, Waste, and Vent Pipe and Fittings |

4. GENERAL REQUIREMENTS

- 4.1** The preventers shall be designed to remain open but will close when fluid backflow occurs and shall be installed in vertical piping, such as downstream from a holding tank or upstream from the p-trap.

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- 4.2** The preventer shall not unduly restrict the flow capacity of the sewer or drainage line, offer abnormal obstruction to flow, produce excessive turbulence, have an excessive body enlargement, ledge, shoulder or chamber and shall present a smooth unobstructed interior surface permitting the proper flow of all matter normally expected to flow through the system in which it is used.
- 4.3 PVC Material.** The PVC material shall be comply with the requirements in Section 2.4.6, PVC, of ASME A112.14.1
- 4.4 Buoyant Ball.** The ball material shall be made of polypropylene comply with ASTM D 4101 and shall have an inner core which allows the ball to float on water.
- 4.5 Sealing Elements.** Parts used to affect sealing shall be secured in a manner that will maintain proper alignment of mating surfaces. Moving parts shall not loosen or become detached during handling or operation of the unit but shall be replaceable.
- 4.6 Means of Access.** A means of access to the operating elements shall be provided for repair and maintenance. The size of the access shall be determined by the size required to perform the repair and maintenance function. The means of access shall be water and gas tight once securely tightened.
- 4.7 Size.** Backwater preventers shall be sized according to the nominal size of the interconnecting pipe system.
- 4.8 Connections.** Inlet an outlet connections shall comply with the applicable requirements in Section 2.3, Connections, of ASME A112.14.1
- 4.9 Closet Flange.** When provided, PVC closet flange shall comply with the requirements in ASTM D 2665.
- 4.10 Bolting Materials.** Bolting materials shall comply with the requirements in Section 2.4.7, Bolting Materials, of ASME A112.18.1/CSA B125.1

5. PERFORMANCE TESTS

- 5.1 Water Flow Test.** The preventer shall comply with the performance requirements in Section 3.1, Water Flow, of ASME A112.14.1.
- 5.2 Watertightness Test.** The preventer shall comply with the performance requirements in Section 3.2, Water Flow, of ASME A112.14.1.