

**INTERNATIONAL ASSOCIATION OF PLUMBING
AND MECHANICAL OFFICIALS**

STANDARD FOR

**TERMINATION VALVES FOR USE
IN RECREATIONAL VEHICLES**

IAPMO TS 30-97^{e1}

1. PURPOSE

- 1.1** The purpose of this Standard is to establish an acceptable quality standard for termination valves for use in recreational vehicles. Its purpose is also to serve as a guide for producers, distributors, designers, engineers, installers, inspectors, enforcement agencies and users; to promote understanding regarding materials, manufacture and installation; and to provide for identifying termination valves that conform to this Standard.

The provisions of this Standard are not intended to prevent the use of any alternate material, method of construction or performance, provided such alternates meet the intent of this Standard.

2. SCOPE

- 2.1** This Standard covers physical requirements and tests for materials, components, proper design, operation and other significant properties of construction and finish, and provisions for proper installation of the finished product, together with methods of marking and identification.
- 2.2** The termination valves, covered by this Standard, are those units which are attached to body waste or liquid waste holding tanks, and intended for use in recreational vehicles when installed in accordance with applicable code requirements.

3. BASIC REQUIREMENTS

- 3.1** Termination valves shall be of the quick-opening type and be non-fouling. The sealing element shall withdraw completely from the path of the waste discharge.
- 3.2** Termination valves may be provided with a quick-opening water tight cap or a means of attaching to a three (3) in. or one and one-half (1-1/2) in. ABS-DWV piping and/or fittings and/or flexible drain tubing.
- 3.3** Termination valves shall be removable for repair or replacement.

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4. DETAILED REQUIREMENTS

- 4.1** Termination valves shall be three (3) in. nominal diameter for body waste holding tanks and one and one-half (1-1/2) in. nominal diameter for liquid waste holding tanks.

5. PERFORMANCE AND TESTS

- 5.1 Leak Test:** Termination valves shall not leak when subjected to hydrostatic pressures of one-fourth (1/4) PSIG and four (4) PSIG each, for a period of forty eight (48) hours.
- 5.2** Cycle the valve by fully opening and closing for a minimum of one thousand (1000) cycles with water flowing through the valve. At the completion of the cycles, leak test described in Section 5.1 shall be performed.
- 5.3 Pull Test:** The valve shall open fully with a force of less than twenty (20) pounds after thermal cycling as follows:

140°F (60°C) for thirty (30) minutes, then
-20°F (-28.9°C) for thirty (30) minutes, then
140°F (60°C) for thirty (30) minutes, then
-20°F (-28.9°C) for thirty (30) minutes, then
140°F (60°C) for thirty (30) minutes, then
room temperature for thirty (30) minutes

6. MARKING AND IDENTIFICATION

- 6.1** All Termination Valves shall be legibly and permanently identified with the following:
- (a) Manufacturer's name or registered trademark; and
 - (b) Part or model number or name.

Adopted: 1989

Revised: 1997

editorial revision: October 3, 2001