

# ATS 5200.047—2005

## Australian Technical Specification

### Technical Specification for

### Plumbing and Drainage Products

### Part 047: Self-Sealing Devices

### Test Requirements

**Flow capacity:** Flow rate shall be not less than 40 (L/min) for size 32 (DN), 50 (L/min) for size 40 (DN) and 70 (L/min) for size 50 (DN).

**Seal integrity:** The valve shall retain the seal under a backpressure equivalent to 70 mm +5, -0 water column for 10 seconds.

**Thermal cycling test:** Plastics-bodied valves shall be tested for compliance with the thermal cycling test of AS 2887.

**Resistance to environmental agents:** A sample shall be exposed to three test mixtures, each for 10,000 cycles. A cycle comprises 10 second exposure to the mixture, followed by 10 seconds draining. Each test mixture consists of the ingredients mixed in water at ambient temperature. The ingredients shall comprise 5% (+1, -0%) of the total mass of the test mixture. Ingredients tested are organic materials, such as tea leaves, mixed vegetables, rice and pasta, dishwashing detergents containing sodium hydroxide and hair, soap portions and grit.

**Resistance to solvents:** A sample shall be exposed to a test solution for 10,000 cycles. A cycle comprises 10 seconds exposure to the solution, followed by 10 seconds draining. The test mixture consists of an organic solvent (paint brush cleaner, turpentine, kerosene or paint thinners) mixed with water at ambient temperature. The solvent shall comprise 0.5% of the total volume of the mixture.

**Resistance to cigarette burns:** The device shall be fastened to a fixture outlet and in a dry environment a burning cigarette shall be dropped into the device and allowed to extinguish.