

Internal Use Only

INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS

MATERIAL AND PROPERTY STANDARD

FOR

SOAKING AND HYDROTHERAPY (WHIRLPOOL) BATHTUBS WITH HYDRAULIC SEATLIFT

IAPMO PS 89-95

1. PURPOSE

- 1.1** The purpose of this standard is to establish a generally acceptable standard for soaking and hydrotherapy (whirlpool) bathtubs with hydraulic seatlift. Its purpose is 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 provide for identifying soaking and hydrotherapy (whirlpool) bathtubs with hydraulic seatlift 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 of this standard.

2. SCOPE

- 2.1** This standard applies to soaking and hydrotherapy (whirlpool) bathtubs with hydraulic seatlift 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 that standards as published in Table 14-1 of the Uniform Plumbing Code. Copy of the current Table 14-1 can be obtained from IAPMO.

ANSI Z124.1	Plastic Bathtub Units
ANSI/ASME A112.19.7M	Whirlpool Bathtub Appliances
IAPMO PS 31	Backflow Prevention Assemblies

4. MATERIAL REQUIREMENTS

- 4.1** Lifting boot assembly and seat material shall be non-corrosive.

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5. GENERAL REQUIREMENTS

- 5.1** Soaking tub shall meet the criteria for ANSI Z124.1.
- 5.2** Hydrotherapy tub shall meet the criteria for ANSI Z124.1 and ANSI/ASME A112.19.7.
- 5.3** A listed backflow prevention device shall be provided at any location where the design provides a potential for cross connection hazard i.e. devices covered by PS 31.

6. TESTING REQUIREMENTS

- 6.1** Seat Load Test. The seat shall support for one (1) minute without failure:
- (a) A static load of 4448 N (1000 lbs.) distributed over the seat surface;
 - (b) A static load of 1112 N (250 lbs.) applied at the edge of the seat; and
 - (c) A horizontal force of 1112 N (250 lbs.) applied at the top to the seat back.
- NOTE:** Failure is any break, crack, or deformation of the seat.
- 6.2** **Hydrostatic Pressure Test.** The lifting system shall hold for one (1) minute without failure or other hazardous conditions a hydrostatic pressure of five (5) times the rated input after 30,000 cycles of normal operations (up, down with 1112 N (250 lbs.) load).
- 6.3** **Tub Boot Test**
- 6.3.1** **Workmanship And Finish.** The surface of the boot and area where attached to the tub shall be visually inspected for defects and blemishes.
- 6.3.2** **Surface Test.** Rub entire boot with a sponge and tap water to remove any dirt. The boot shall be free from cracks, blisters or thin spots.
- 6.3.3** **Leak Test.** Cycle (cycle equals an up and down movement of lifting arm) lift 3650 times (2 cycles equals one day - 3650 cycles equals five years). Fill tub with water and allow lifting arm to stay in the following three (3) positions for a minimum of seventy-two (72) hours:
- (a) Up - seat in highest position;
 - (b) Center - center of full travel of lift; and
 - (c) Down - seat in lowest position.

The tub boot shall show no signs of leakage or cracking.