

NSF Protocol P181 Residential Portable Electrical Spas



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NSF Protocol P181

Residential Portable Electrical Spas

1 General

1.1 Scope

This protocol establishes health and performance requirements for portable electrical spas that are intended for use and operation by an individual homeowner in a residential setting. This protocol establishes requirements for the materials, design and construction, and performance of spa components, including those involved in the circulation, filtration, heating and sanitation of spa water. Filtration systems shall be restricted to cartridge or cartridge-type high-permeability filtration, not requiring backwash. This protocol is based predominantly on requirements from the National Spa and Pool Institute's ANSI/NSPI 6 *Residential Portable Spas* and NSF/ANSI 50 - *Circulation System Components and Related Materials for Swimming Pools, Spas/Hot Tubs*, as well as other relevant national standards and test methods.

1.2 Limitations

This protocol does not cover public spas, permanently installed residential spas, whirlpool bathtubs or other spas, such as those operated for medical treatment, physical therapy or other purposes. This protocol does not establish requirements for the installation of spas or spa components.

1.3 Variations in Design and Operation

A spa varying in design and/or operation may qualify under this Protocol. Appropriate tests and investigations shall indicate the spa or spa component performs as well as systems complying with this Protocol. Such spas or spa components shall meet the requirements for materials and construction in this Protocol.

1.4 Alternate Materials

If specific materials are mentioned, other materials equally satisfactory from the standpoint of public health may be permitted.

1.5 Protocol Review

A review of this Protocol shall be conducted at least every five years. The review shall be conducted by stakeholders from industry, public health officials, and user groups.

2 Normative References

ANSI/ASME A112.19.8M "Suction Fittings for Use in Swimming Pools, Wading Pools, Spas/Hot Tubs and Whirlpool Bathtub Appliances", American Society of Mechanical Engineers, New York, NY 10017.