Designation: F 2208 – 02$^{\epsilon 1}$

Standard Specification for Pool Alarms[1]

This standard is issued under the fixed designation F 2208; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

ϵ^1 NOTE—Sections 3, 4.2, 4.3, 4.4, and 4.5 were editorially corrected in June 2005.

INTRODUCTION

According to CPSC data, each year, on average, 350 children under five years of age drown in swimming pools, with most deaths occurring in residential settings. Also, each year, on average, 2600 children under five years of age are treated in hospital emergency rooms for near drowning incidents in swimming pools. About 42 % of the incidents require hospitalization of the child. About 79 % of the near drowning incidents occur in a residential setting. These numbers have remained relatively unchanged for the past several years.

1. Scope

1.1 This standard is intended to provide performance requirements for pool alarms for residential swimming pools and spas.

1.2 This standard is intended to describe devices intended to improve personal safety and reduce injuries or deaths.

1.3 This standard covers devices that provide for rapid and automatic detection and alarm in cases of unintentional, unsupervised or accidental entry of a child one year of age or older into the water of swimming pools or spas.

1.4 This standard is not intended to replace other standard safety requirements that should be in place, that is, adult supervision, fences, gates, locks, and so forth.

1.5 This standard covers four different types of alarms.

1.6 The detection criteria for this standard is for a child one year of age and older.

2. Terminology

2.1 *Definitions of Terms Specific to This Standard:*

2.1.1 *pool alarm*, *n*—a device designed to provide a rapid detection and automatic alarm in incidents of accidental, unintentional or unsupervised entry of a child one year of age or older into the water of a swimming pool or spa.

3. Classification

3.1 *Types*:

3.1.1 *Type A, Surface*—Pool alarm floating on water surface.

3.1.2 *Type B, Subsurface*—Pool alarm located below the water surface.

3.1.3 *Type C, Pool Perimeter*—Pool alarm located such as to detect movement at the perimeter of or above the water surface.

3.1.4 *Type D, Personal Immersion Alarm*—Pool alarm device located on the person(s).

4. Performance Requirements

4.1 *General*:

4.1.1 Alarms shall sound both at poolside and inside any adjacent residence or building of occupancy via a remote receiver within 20 s or less when tested in accordance with Section 5.

4.1.2 The condition of a swimming pool alarm, either on or off, shall be indicated with an energized lamp or other distinctive indicator, visible from a distance of 10 ft (3.5 m) at angles of ±45° perpendicular to the unit, to indicate the operability of the product.

4.1.3 Pool alarms shall have a minimum sound pressure rating of 85 decibels at 10 ft (3.5 m) for 3 min.

4.1.4 If the device is battery operated, there must be a low battery indicator. A low battery condition is defined as an inability to meet the requirements of 4.1.3.

4.1.5 Pool alarms shall automatically reset.

4.2 *Type A, Surface Alarm*:

4.2.1 Type A alarms are to provide for automatic sound of the alarm when tested in accordance with 5.1. For alarms with variable sensitivity, the setting shall be set at the least sensitive, according to manufacturer's instructions.

[1] This specification is under the jurisdiction of ASTM Committee F15 on Consumer Products and is the direct responsibility of Subcommittee F15.49 on Swimming Pool Alarms.

Current edition approved Sept. 10, 2002. Published November 2002.