
NMP 1.9 – SWIMMING POOL AND SPA EQUIPMENT

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Purpose

To ensure the equipment and services associated with *swimming pools* and spas on *residential land* achieves acceptable standards of health and safety.

Application

This standard applies to *outdoor swimming pools* located on *residential land* but does not apply to *portable wading pools*.

Referral Agency

There is no referral agency for this standard.

Associated Requirements

- Queensland Development Code – NMP 1.8 Stormwater Drainage (previously Part 18).
- *Plumbing and Drainage Act 2002*
- *Building Regulation 2006*
- *Building Act 1975*.

Referenced standards

- AS 2818 – 1986 – Guide to *swimming pool* safety.

Definitions

Note: Italicised words in the text of the standard are as defined below.

Chlorine means *chlorine- combined* and *chlorine-free*.

Chlorine - combined means *chlorine* that has combined with ammonium compounds or organic matter containing nitrogen to form chloramines at a concentration not less than 1.5 *ppm* and not more than 3 *ppm*.

Chlorine - free means *chlorine* that has not combined with ammonia but is free to kill bacteria and algae and to destroy organic contamination introduced into the pool water at a concentration not less than 1.5 *ppm* and not more than 3 *ppm*.

Note: *chlorine free* is also known as “free available *chlorine*” and “free residual *chlorine*”.

Disinfection system includes-

- **a salt chlorinator** which is an electronic device that produces free *chlorine* from salt (chloride) present in the pool water; and
- an **injector** which is a fitting enabling a chemical liquid or gas to be injected into the water circulation loop.

Filtration means a process which assists in achieving clarity and purification of pool water.

Indoor swimming pool means the same as defined in the *Building Act 1975*.

Outdoor swimming pool means the same as defined in the *Building Act 1975*.

Pathogens means any bacteria that can cause disease.

Portable wading pools means the same as defined in the *Building Act 1975*.

ppm – parts per million. Can also be expressed as the amount of a chemical by weight in milligrams per litre (mg/L).

Residential land means the same as defined in the *Building Act 1975*.

Resuscitation instruction notice means a notice showing the aspects of cardio pulmonary resuscitation (CPR). Suitable notices are available from the Royal Life Saving Society Australia (RLSSA) or the Swimming Pool and Spa Association (SPASA).

Swimming pool – as defined in the *Building Act 1975*.

**PERFORMANCE
CRITERIA**

**ACCEPTABLE
SOLUTIONS**

Disinfection System

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|-----------|---|-----------|--|
| P1 | A <i>disinfection system</i> must adequately maintain pool or spa water in a condition, which will not cause a health risk for users and prevents the formation of <i>pathogens</i> , disease producing bacteria, viruses, algae and other organisms. | A1 | Pool water is disinfected by-
(a) electrolysis of the salt cell resulting in chlorination of the pool water; or
(b) liquid or granulated <i>chlorine</i> . |
|-----------|---|-----------|--|

Filtration equipment

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|-----------|---|-----------|---|
| P2 | A <i>filtration system</i> must be provided to adequately reduce the <i>pathogens</i> to a level that will not cause a health risk to the user. | A2 | <p><i>Filtration</i> equipment is installed as follows:</p> <p>(a) Filtering, circulating and purifying equipment is provided to clean the water by passing water through a <i>filtration</i> medium of-</p> <ul style="list-style-type: none"> (i) diatomaceous earth filter (10 microns); or (ii) cartridge filter (20 microns); or (iii) sand filter (40 microns). <p>(b) Skimmer box inlets, strainers, and pipework are installed to ensure proper functioning of <i>filtration</i> system.</p> <p>(c) The pump is capable of filtering the total volume of pool water once in every six hours.</p> |
|-----------|---|-----------|---|

Small child safety

- | | | | |
|-----------|--|-----------|--|
| P3 | Intakes to <i>swimming pools</i> or spas must be of such dimensions and have safety protection measures to | A3 | <p>Skimmer boxes have -</p> <p>(a) Dimensions in accordance with AS 2818; or</p> |
|-----------|--|-----------|--|

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS
prevent entrapment by suction.	(b) inlets protected by a securely fastened grille.

Operating noise levels of swimming pools and spas

<p>P4 <i>Swimming pool</i> and spa <i>filtration</i> equipment including pump motors and air blower motors must not operate with excessive noise that can affect the health and amenity of occupants of an area.</p>	<p>A4 Pump motors and air blower motors-</p> <p>(a) operate with a noise level not exceeding the background noise during the following times –</p> <p style="margin-left: 20px;">(i) from 7.00am to 10.00pm by + 5dB(A); and</p> <p style="margin-left: 20px;">(ii) from 10.00pm to 7.00am by + 0dB(A) ; or</p> <p>(b) where they exceed the above prescribed noise level limits, are enclosed in an acoustically designed enclosure (Appendix A) recommended by the Environmental Protection Agency; and</p> <p>(c) do not emit "tonal" sounds as defined in the Environmental Protection Policy Noise 1997.</p>
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Resuscitation instruction notice

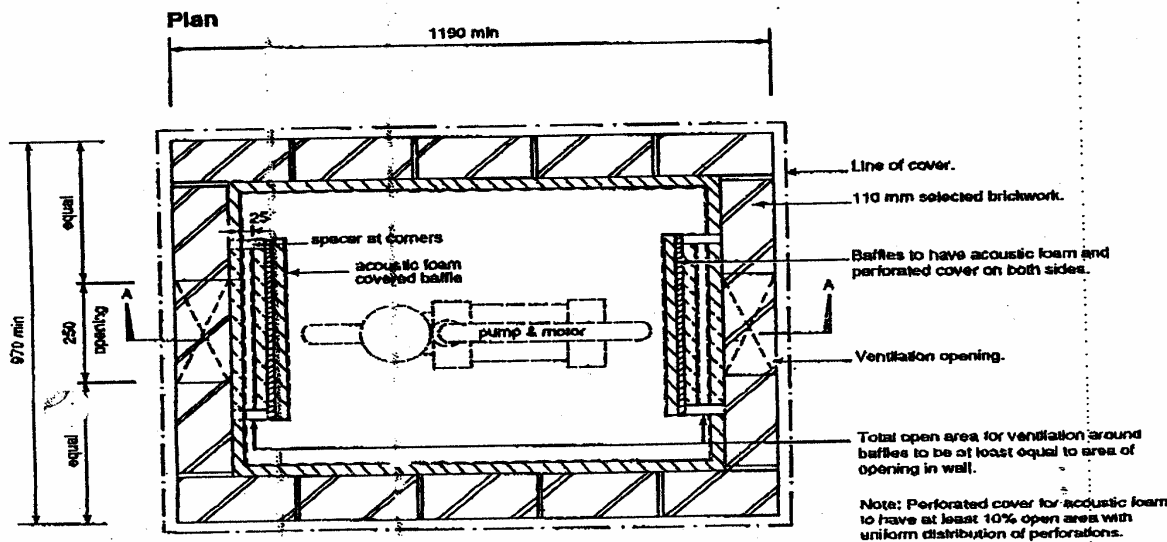
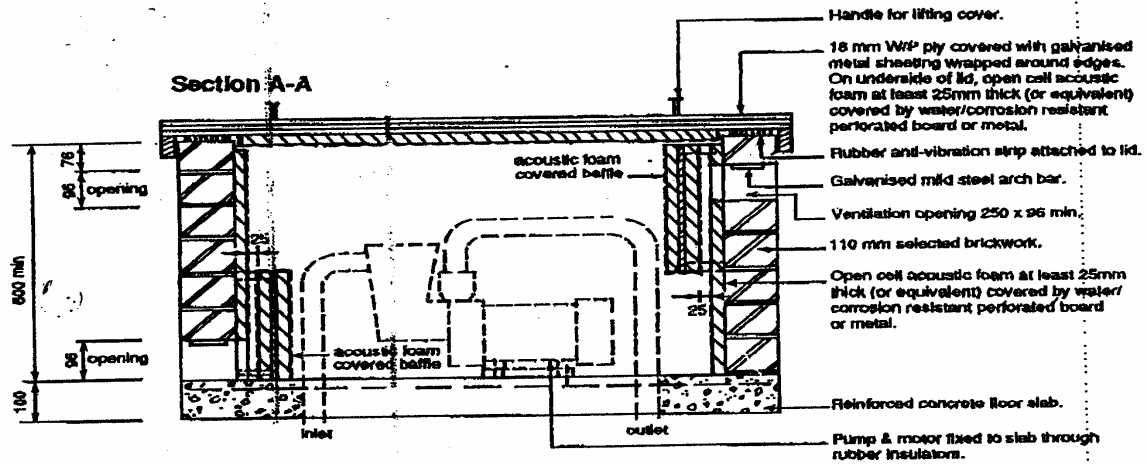
<p>P5 Owners and swimmers using a <i>swimming pool</i> or spa must be able to gain information on resuscitation of life without leaving the fenced area of the pool.</p>	<p>A5 A durable <i>resuscitation instruction notice</i> having an area of not less than 0.5 m² is securely fixed in a position which can be viewed from all parts of the pool area and as close as possible to the exit point from the pool.</p>
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Pool surrounds

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS
<p>P6 The surrounds or concourse of an in-ground <i>swimming pool</i> or spa must be safe when wet and prevent surface waters from flowing into the pool or spa.</p>	<p>A6 A pool surround or concourse –</p> <ul style="list-style-type: none">(a) has a non-slip surface; and(b) is graded away from the pool at a grade of 1:20 for a minimum of 900mm from the inside edge of the pool.
<p>Means of exit from pool</p>	
<p>P7 <i>Swimming pools</i> or spas must provide for a safe means of exit from within the pool or spa.</p>	<p>A7 The exit for –</p> <ul style="list-style-type: none">(a) a spa complies with AS2610 ; and(b) a <i>swimming pool</i> has –<ul style="list-style-type: none">(i) a swim out ledge; or(ii) built-in steps; or(iii) for above ground pools, an internal ladder with steps not less than 215mm wide.

APPENDIX A

Figure 1 – Enclosure for pool pump and motor A4(b)



Important note

It is stressed that this guideline is not a legal or statutory document, and that its observations, advice and recommendations may not be applicable or appropriate in all cases. The section dealing with legal requirements is however applicable in all cases.

Any person using the guideline remains responsible for complying with any applicable Act, Regulation, or By-law and, in this regard, professional advice should be sought in each case before any action is taken.

Further information

The Noise Abatement Act and Regulations can be purchased from Goprint, PO Box 361, Woolloongabba Qld 4102.

Advice on technical aspects of this guideline may be obtained from:

Department of Environment and Conservation
160 Ann Street
Brisbane

PO Box 155
North Quay Qld 4002

Telephone (07) 227 6422