

SWIMMING POOLS

Building Practice Note SP-01: Swimming Pool Standards and Safety Requirements

Swimming pool standards and safety requirements which must be adhered to ensure public safety.

The content below provides guidance on:

- Building standards
- Swimming pool barrier requirements
- Building permit requirements
- Inspection of building works and testing requirements



For further information on swimming pool barriers and safety requirements, please refer to Building Practice Note SP-02: Swimming pool barriers and other requirements.

Abbreviations & Definitions

The definitions and abbreviations set out below are for guidance only. They are not intended to vary those set out in the Building Act 1993 (the Act), Building Regulations 2018 (the Regulations) or the National Construction Code 2019 (the NCC).

- AS Australian Standards
- Act Building Act 1993
- Barrier Assembly of components, natural or otherwise, that restricts access to the pool. The barrier includes
 fences, posts and panels, gate units, gates and door sets, constructed or natural walls (retaining or otherwise),
 sides of buildings, and balustrades on a balcony where they form part of intended barrier.
- BAB Building Appeals Board
- Barrier Height Height of the barrier perpendicular to the finished ground level.
- Barrier Standard Australian Standard AS 1926.1-2012 (Swimming pool safety Part 1: Safety barriers for swimming pools)
- BCA Building Code of Australia Volume One and Two
- **Boundary Barrier** A dividing barrier between two adjacent properties.
- **FGL** Finished Ground Level or permanent stable surface.
- MBS Municipal Building Surveyor
- NCC National Construction Code 2019
- **Permanent Barrier** Barrier or part of a barrier which cannot be removed without the use of tools, as set out by the barrier standard in AS1926.1.
- RBS Relevant Building Surveyor
- Regulations Building Regulations 2018



- **Site Fence** Any permanent fencing on property boundaries as well as temporary fencing used during the construction period.
- Swimming Pool Any excavation or structure (including a spa or a relocatable structure) that is capable of
 containing water to a depth of greater than 300mm, and principally used (or is designed, manufactured or
 adapted to be principally used) for swimming, wading, paddling, bathing or similar activities.
- Young Child A child under the age of five years.

Introduction

Swimming pools can be dangerous if children are able to enter the water unsupervised. On average, according to Kidsafe Australia, six young children die in Victoria in home swimming pools each year, and many more are taken to hospital for near drownings. Active supervision of young children in and around swimming pools at all times is the first line of defence against drowning.

To prevent children under the age of 5 from gaining unsupervised access to a swimming pool, it is a government requirement that an approved barrier is installed.

The excavation of a swimming pool shell can be a hazard, as it may hold ground or rainwater and also create a risk for falls. Precautions to alleviate these risks are important, both before and during construction (refer to AS 1926.1 for details of barrier construction requirements).

Building Standards

The Building Regulations 2018 adopt the National Construction Code, which references the Australian Standards that are applicable for the construction of the barrier, the location of the barrier and water recirculation systems for the swimming pool.

The construction of new swimming pools and barriers must comply with requirements that include, but are not limited to the following:

- A swimming pool associated with a domestic building must be constructed by a registered domestic builder (for work valued more than \$10,000) or owner-builder who has successfully completed their Certificate of Consent (for work valued more than \$16,000)
- A site fence must be in place prior to excavation commencement
- A barrier complying with the Barrier Standard must be erected and maintained once the swimming pool can contain water to a depth of more than 300 mm
- All outdoor swimming pools built after 1 May 2010 must not have direct access to the swimming pool area via a
 door from a building (that is, house or garage)
- Swimming pool gates must be self-latching and self-closing
- Barriers must not be installed near trees, barbeques or other climbable structures that could allow children access to the swimming pool area. This may include pot plants and outdoor furniture.

If work is undertaken on an existing swimming pool or barrier that requires a building permit, it will need to be brought into compliance with current Regulations (unless exempt under Schedule 3 of the Regulations).



Failure to comply with the Act, the Regulations or building permit requirements whilst building work is being carried out, is a breach of section 16 of the Act.



Swimming Pool Barrier Requirements

All new swimming pools being constructed, that will be capable of containing water to a depth of more than 300mm, must have a permanent barrier that complies with the requirements in the Act and the Regulations. These requirements apply to all swimming pools associated with Class 1, 2, 3 buildings and a Class 4 part of a building, or a children's service. These requirements include:

- indoor swimming pools and spas
- · outdoor in-ground and above-ground swimming pools
- most relocatable pools
- children's paddling and wading pools, and
- spas, jacuzzi, hot tubs and swim spas.

Permanent barriers are not required for a:

- swimming pool (including relocatable swimming pool or spa) that is not capable of containing water to a depth of more than 300 mm
- a pool or spa that is relocatable and does not require any assembly, and is not made up of several components
- bath or spa used for personal hygiene (located in a bathroom or ensuite and emptied after use)
- fishpond, fountain, or birdbath; and
- water supply, storage tanks or dams.

Building Permit Requirements

A building permit must be obtained to build a new or alter an existing swimming pool and barrier (unless exempt under Schedule 3 of the Regulations).

Regulation 28 states that an application for a building permit must include detailed drawings, specifications and information clearly showing the location of the swimming pool and the barrier on the allotment. In addition, it must contain details of the precautionary measures to be taken during construction, **both before and after** the swimming pool is filled with water. It must also demonstrate how the barrier will comply with the Regulations.

The building permit must define:

- how the barrier will comply with AS 1926.1 2012 Safety barriers for swimming pools and AS 1926.2 2007 Location of safety barrier for swimming pools
- how any glazing will comply with AS 1288 2006 Glass in buildings selection and installation
- the layout of the barrier
- the position of any climbable features such as large trees or fixed barbeques; and
- proposed connection of the barrier to the ground.

The building permit application must also include details of any precautions required to protect the safety of the public (regulation 116), as determined necessary by the Relevant Building Surveyor (RBS).

Issuing a Building Permit

The RBS can issue a building permit just for the barrier where building work will be undertaken to replace or modify an existing barrier. The RBS must be satisfied that sufficient information to demonstrate full compliance with the Act and the Regulations has been provided. Where the building work is only for a proposed swimming pool within an existing approved barrier that satisfies AS 1926 Parts 1 and 2, the RBS can issue a building permit just for the swimming pool.



The RBS may refuse to issue a building permit if insufficient information is provided to demonstrate compliance with the Act and the Regulations. Where a barrier design is not clearly shown in the application for a building permit, and does not show compliance with the Barrier Standard, the RBS must refuse the application. The owner may apply to the Building Appeals Board (BAB) under section 160A of the Act for a determination that the design complies with the Regulations.

The RBS must refuse to issue the building permit if:

- the work is being undertaken under a major domestic building contract; and
- the name and registration number of the domestic builder is not the same as that specified on the Certificate of Insurance, and the major domestic building contract.

The swimming pool builder is not always the builder of the swimming pool barrier. If the swimming pool builder is not contracted to construct the barrier, the builder of the barrier must also be nominated as a builder who will construct the barrier on the building permit.



The builder or the owner should notify the RBS if the swimming pool builder ceases engagement prior to completion of all the work. Once the RBS has been notified of the change of builder, the RBS has the responsibility to amend the building permit to reflect the changes.

Building Work Time Limits

Regulations 53 and 54 state that building work for a swimming pool and barrier must commence within 12 months of the issue date of the building permit and be completed within six months of the building work commencement. If the construction of a swimming pool and barrier is being carried out concurrently with other building work on the same allotment, this work can be completed within the time limits of the other work as referred to in regulation 54(1)(c).

Inspection of Building Works and Testing Requirements

Mandatory Notification Stages

The mandatory notification stages relating to the construction of a swimming pool and barrier are prescribed in regulation 169.

Although the RBS has a discretion to require notification before pouring any footings or in-situ reinforced concrete member, it is recommended that notification for inspection be made before pouring the concrete shell and before pouring any beam immediately adjacent to the swimming pool. Other notifications before pouring concrete may be required at the discretion of the RBS.

The RBS may determine that a barrier complying with AS 1926.1-2012 is required for the excavation and also to protect the public under regulations 116 (1) and (3). If so, the barrier could be installed and inspected immediately after the excavation has been completed.

Barrier Testing Requirements

When undertaking a final inspection, the RBS may request evidence that the installed barrier has been tested in accordance with Section 3 of AS 1926.1. Alternatively, the RBS may require the testing to be conducted while present, to ensure the construction of the barrier meets the structural adequacy criteria and that the gate or door operates correctly.



Manufactured gate units must be tested by the manufacturer and be clearly and permanently marked with a self-adhesive metal label, metal plate secured by rivets or stamping, or moulding with the manufacturer's information into the component.

Water Circulation

Builders should be satisfied that no blockages have occurred in the water circulation system **prior** to handover to the client and operation of the swimming pool. The RBS will need to be satisfied that the water recirculation system has been built in accordance with the approved documentation.

Building Work Completion

Where the swimming pool and the barrier have been completed in accordance with the building permit requirements, a final inspection can then be undertaken. Any non-compliant work may be the subject of a direction to fix, or a building order issued for minor works.



The swimming pool **must not** be filled with water **prior** to the RBS certifying that there is a barrier complying with AS 1926.1-2012. If the completed building work complies, a Certificate of Final Inspection can be issued by the RBS. After 1 November 2020, the RBS must also issue a Swimming Pool Barrier Certificate of Compliance to the owner.

Registration of Swimming Pool

Upon completion, the owner must register the swimming pool within 30 days of the date the owner receives the Certificate of Final Inspection or Occupancy Permit. (Refer to the VBA Council and Practitioner Guide on the VBA website for further details of the registration, inspection and compliance processes.)

Incomplete Building Work

Where the swimming pool and barrier have not been completed and the permit has expired, a new building permit and building levy will be required before any building can continue on-site. A Building Order to Stop Work must be issued where the builder continues working without a building permit.

The RBS must issue a direction to the builder or take enforcement action that is appropriate to the degree of risk present. If the RBS determines that the incomplete work will be a danger to life or property and considers an Emergency Order should be issued, the Municipal Building Surveyor (MBS) should be contacted.

Protection Work

When assessing an application for a building permit to construct a swimming pool and barrier, the RBS must consider whether protection work will be required to protect the adjoining property.

Where the RBS determines protection work is required, it must be provided before and during construction. The type of protection work required varies with considerations such as the location, nature and impact of the proposed building works on the adjoining property or any other considerations to the RBS's determination. However, the RBS must consider matters under regulation 112 when determining if protection work is required.

An example of when the RBS must consider protection work is where proposed building work requires a crane to lift preformed pools or spas over the adjoining property. The RBS must have consideration for protection work as the



building works present a significant level of risk of building materials falling and causing damage to the adjoining property. In this scenario, protection work maybe in the form of overhead protection for adjoining property.

It is important to remember that it is the responsibility of the RBS to determine whether protection work is required for the construction of a swimming pool or barrier when deciding on an application for a building permit. For further information on Protection Work, refer to PN 20 – Protection Work Process available on the VBA website.

Protection of the Public

The RBS must consider the need for protection of the public during the construction of the swimming pool and barrier. Consideration for site fencing under regulation 116 must include provisions to restrict access during excavation, construction, and once the pool/spa can contain water to a depth of greater than 300mm. When determining whether precautionary measures are required, the RBS must give consideration to:

- the height of the barrier,
- whether there are any footholds or handholds that could facilitate climbing,
- the spacing of any horizontal or vertical members, and
- any loadings that could be placed on the structure.

A site fence or hoarding must be provided between an existing dwelling and the pool construction area. Where the swimming pool is being constructed at the same time as the construction of the dwelling, an additional site fence will be required between the pool construction area and the dwelling.

To avoid confusion, it is important that the builder responsible for the installation and maintenance of the temporary barrier is identified at the beginning of the process, especially in the case where more than one builder is appointed for the works. If separate builders are engaged for the construction of the dwelling, the swimming pool and the barrier on the same site, each builder is responsible for the protection of the public respective to their work.

The applicant should fully document who will be responsible and how the precautionary measures can be achieved, providing those details to the RBS for approval. These precautionary measures, when approved by the RBS, form part of the building permit and the inspection of these measures must be detailed on the building permit (refer to section 35 of the Act.) For example, this could be achieved by meeting the design and construction requirements of Section 2, and the minimum horizontal loading requirements under Section 3 of the AS 1926.1-2012 for the temporary barrier.

It is recommended that, where a gate is installed in the temporary fence or hoarding, it should comply with AS 1926.1-2012 to ensure that restricted access by young children is maintained. Where no gate is installed, the barrier must remain in place, except when access to the swimming pool area is required and people are present at all times while the barrier is open.

If any barrier that is not a fence or hoarding is proposed to restrict access to the swimming pool area during construction, it is recommended the relevant performance requirement P2.7.1 or GP1.2 of the NCC is met by using a performance solution. The performance solution must be documented by the building permit applicant and approved by the RBS prior to the installation of that solution. For further information on protection of public, refer to Practice Note 58 - Protection of Public on the VBA website.



Related Documentation

- Building Act 1993 (VIC)
- Building Regulations 2018 (VIC)
- National Construction Code 2019
- AS1926.1 2012 Swimming Pool Safety Safety Barriers for Swimming Pools
- AS1926.2 2007 Swimming Pool Safety Location of Safety Barriers for Swimming Pools
- AS1926.3 2010 Swimming Pool Safety Water Recirculation Systems
- AS1288 2006 Glass in Buildings Selection and Installation
- Practice Note SP 02: Swimming Pool Barrier and other requirements
- Practice Note 20: Protection of Work Process
- Practice Note 58: Protection of Public

Contact Us

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