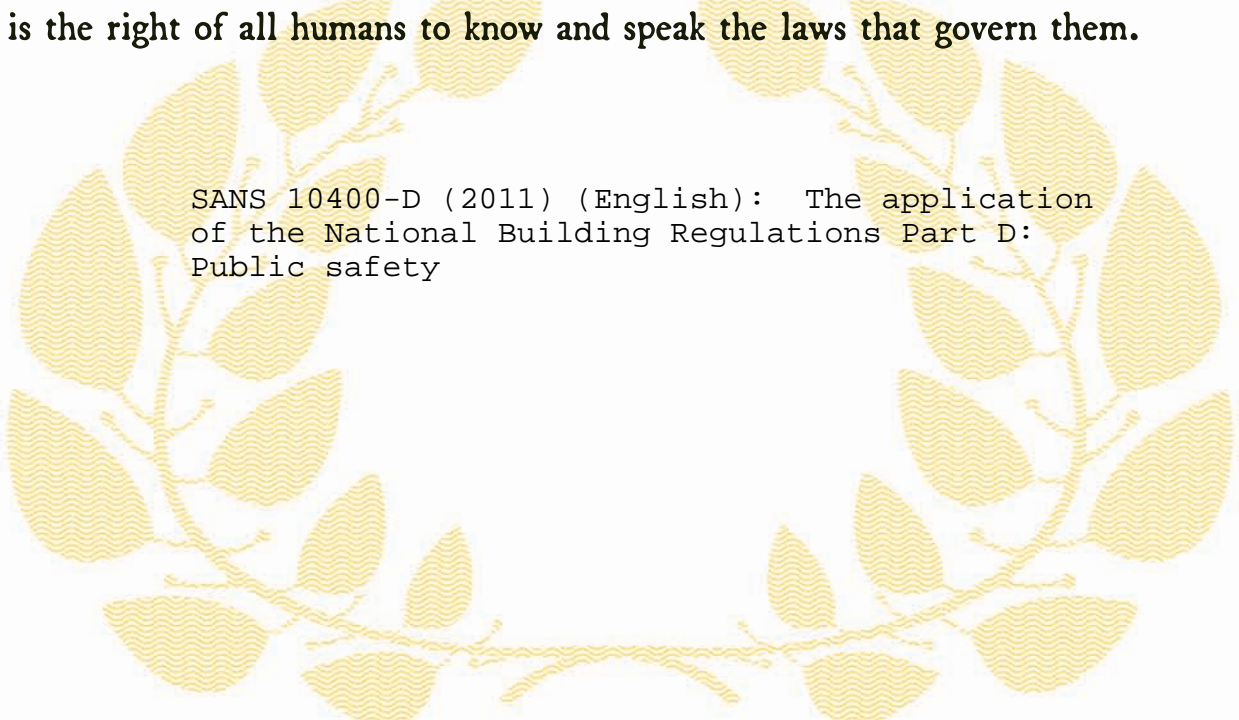




Republic of South Africa

✎ EDICT OF GOVERNMENT ✎

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SANS 10400-D (2011) (English): The application
of the National Building Regulations Part D:
Public safety



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Edition 3

SOUTH AFRICAN NATIONAL STANDARD

The application of the National Building Regulations

Part D: Public safety

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SANS 10400-D:2011
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Table of changes

Change No.	Date	Scope

Acknowledgement

The SABS Standards Division wishes to acknowledge the work of the South African Institution of Civil Engineering in updating this document.

Foreword

This South African standard was approved by National Committee SABS TC 59, *Construction standards*, in accordance with procedures of the SABS Standards Division, in compliance with annex 3 of the WTO/TBT agreement.

This document was published in January 2011.

This document supersedes the corresponding parts of SABS 0400:1990 (first revision).

Compliance with the requirements of this document will be deemed to be compliance with the requirements of part D of the National Building Regulations, issued in terms of the National Building Regulations and Building Standards Act, 1977 (Act No. 103 of 1977).

SANS 10400 consists of the following parts, under the general title *The application of the National Building Regulations*:

Part A: General principles and requirements.

Part B: Structural design.

Part C: Dimensions.

Part D: Public safety.

Part F: Site operations.

Part G: Excavations.

Part H: Foundations.

Part J: Floors.

Part K: Walls.

Part L: Roofs.

Part M: Stairways.

Part N: Glazing.

Part O: Lighting and ventilation.

Foreword *(concluded)*

Part P: Drainage.

Part Q: Non-water-borne means of sanitary disposal.

Part R: Stormwater disposal.

Part S: Facilities for persons with disabilities.

Part T: Fire protection.

Part V: Space heating.

Part W: Fire installation.

This document should be read in conjunction with SANS 10400-A.

Annex A forms an integral part of this document.

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The application of the National Building Regulations

Part D: Public safety

1 Scope

This part of SANS 10400 provides deemed-to-satisfy requirements for compliance with part D (Public Safety) of the National Building Regulations.

NOTE Part D of the National Building Regulations, issued in terms of the National Building Regulations and Building Standards Act, 1977 (Act No. 103 of 1977), is reproduced in annex A.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies. Information on currently valid national and international standards can be obtained from the SABS Standards Division.

SANS 1390, *Steel fencing for private swimming pools*.

[SANS 10400-A, *The application of the National Building Regulations – Part A: General principles and requirements*](#).

[SANS 10400-B \(SABS 0400-B\), *The application of the National Building Regulations – Part B: Structural design*](#).

[SANS 10400-S \(SABS 0400-S\), *The application of the National Building Regulations – Part S: Facilities for persons with disabilities*](#).

3 Definitions

For the purposes of this document, the definitions given in SANS 10400-A (some of which are repeated for convenience) and the following apply.

3.1

deemed-to-satisfy requirement

non-mandatory requirement, the compliance with which ensures compliance with a functional regulation

3.2

functional regulation

regulation that sets out in qualitative terms what is required of a building or building element or building component in respect of a particular characteristic, without specifying the method of construction, dimensions or materials to be used

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3.3

interconnected complex

complex of multiple dwelling units, such as terraced or multi-storey complexes, or cluster or retirement-village-type developments (or both), where management of common property usually resides with (but is not limited to) a management body

3.4

site

erf, lot, plot, stand or other piece of land on which a building has been, is being or is to be erected

3.5

street boundary

boundary of a site which abuts any street

4 Requirements

4.1 General

The functional regulations contained in part D of the National Building Regulations (see annex A) shall be deemed to be satisfied where a change in level, the design of ramps and driveways, or access to swimming pools and swimming baths comply with the requirements of 4.2, 4.3 and 4.4, respectively.

4.2 Change in level

4.2.1 Any balustrade or wall provided to protect a change in level shall comply with the requirements of SANS 10400-B.

4.2.2 The edge of any balcony, bridge, flat roof or similar place more than 1 m above the adjacent ground or floor level shall be provided with a balustrade or parapet wall not less than 1 m in height, unless unauthorized access of persons thereto has been excluded by a physical barrier properly erected and maintained.

4.2.3 In the case of an interior balcony or a mezzanine floor, such balcony or floor shall be provided with a balustrade or wall not less than 1 m in height, provided that where such balcony or floor is used for public seating in rows such height may be reduced to not less than 800 mm opposite the seating in the front row.

4.2.4 A balustrade or wall provided as protection at a change in level in any occupancy classified as E2, E3, E4, H1, H2, H3, H4 or H5 shall not have any opening that permits the passage of a 100 mm diameter ball, provided that such protection in any occupancy that is not an occupancy classified as E2, E3, E4, H1, H2, H3, H4 or H5, shall consist of at least a handrail and one other rail midway between such handrail and the floor.

4.3 Ramps and driveways

In any building that is not a building classified as H4, or on any site on which such building is situated, any

- a) ramp or driveway used by motor vehicles shall have a gradient of not more than 1 in 25 within a distance of 5 m from any street boundary crossed by such ramp or driveway (see figure 1);
- b) ramp or driveway used by pedestrians other than those ramps or driveways provided for the use of persons in wheelchairs, shall have a gradient of not more than 1 in 8 (see figure 1);

- c) ramp provided for the use of persons in wheelchairs shall be in accordance with the requirements of SANS 10400-S; and
- d) ramp designed for use by both vehicles and pedestrians shall have a walkway not less than 1,2 m wide which shall be provided with a kerb not less than 150 mm high.

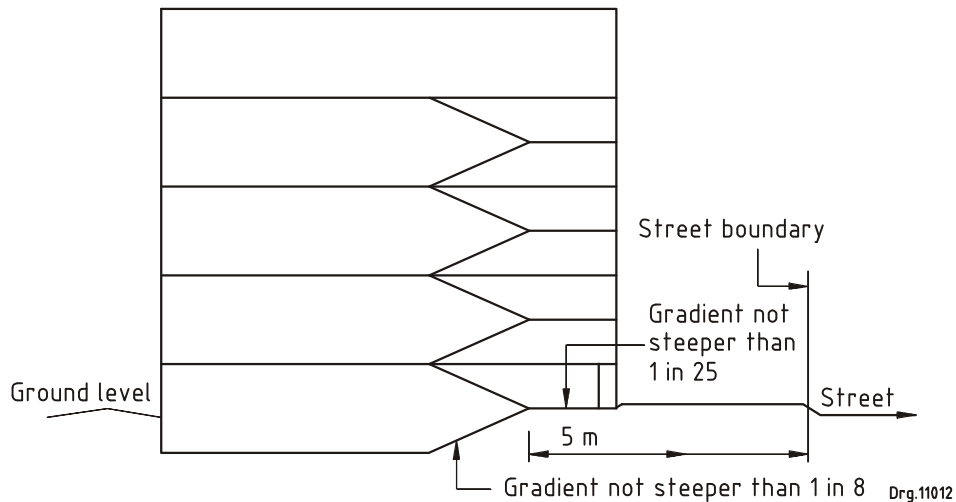


Figure 1 — Motor vehicle ramp or driveway

4.4 Swimming pools and swimming baths

4.4.1 A wall or fence shall be provided by the owner of a site which contains a swimming pool or a swimming bath to ensure that no person can have access to such pool or bath from any street or public place or any adjoining site other than through (see figure 2)

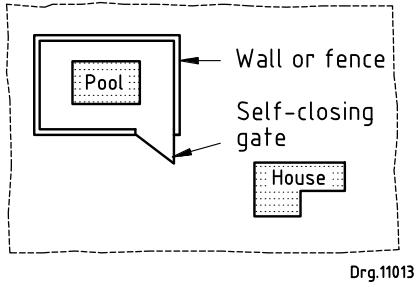
- a) a self-closing and self-latching gate with provision for locking in such wall or fence, or
- b) a building where such building forms part of such wall or fence.

4.4.2 A wall or fence shall be provided in any interconnected complex which contains a swimming pool or swimming bath to ensure that no person can have access to such pool or bath from any street or public place or anywhere within the complex other than through a self-closing and self-latching gate with provision for locking in such wall or fence.

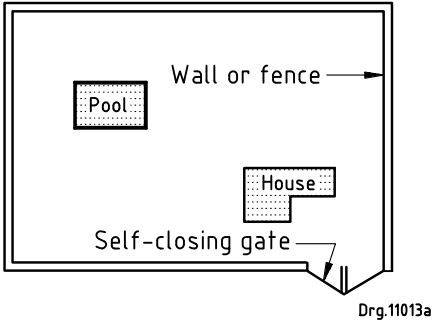
4.4.3 Such wall or fence and any such gate therein shall be not less than 1,2 m high measured from the ground level, and shall not contain any opening that will permit the passage of a 100 mm diameter ball.

4.4.4 The constructional requirements of any steel fence or gate shall comply with the requirements in SANS 1390.

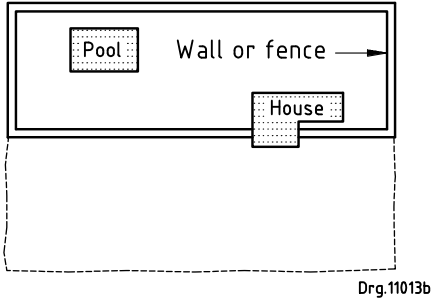
NOTE Additional methods, including pool covers and warning devices, for the protection of children from the hazards of swimming pools are provided in SANS 10134.



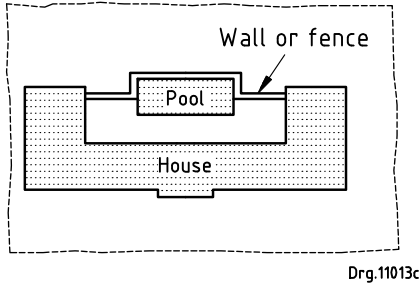
a) Enclosure around pool



b) Enclosure around boundary of property



c) Enclosure formed on part of property



d) Enclosure linked to house

Figure 2 — Examples of safe swimming pool enclosures

Annex A

(normative)

National Building Regulations Part D: Public Safety

D1 Change in Level

The protection of the edge of any balcony, bridge, flat roof or similar place shall be designed to prevent any person from falling from such balcony, bridge, flat roof or similar place.

D2 Pedestrian Entrances to Parking Areas in Buildings

Where any pedestrian entrance is provided to a vehicle parking area in any building, such entrance shall be so positioned, marked or protected that no pedestrian can unintentionally walk into the path of any moving vehicle: Provided that this requirement shall not apply in respect of any building classified as H4 in terms of regulation **A20**.

D3 Ramps

Any ramp or driveway shall be so designed that it is safe when used and is fit for the purpose for which it is intended.

D4 Swimming Pools and Swimming Baths

- (1) The owner of any site which contains a swimming pool shall ensure that access to such swimming pool is controlled.
- (2) Any owner who fails to comply with the requirement of subregulation (1) shall be guilty of an offence.

D5 Deemed-to-Satisfy Requirements

The requirements of regulations **D1**, **D3** and **D4** shall be deemed to be satisfied where change in level, the design of ramps and driveways, or access to swimming pools, as the case may be, complies with SANS 10400-D.

Bibliography

SANS 10134, *The safeness of private swimming pools*.



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