



SLOVENSKI STANDARD
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Plavalni bazeni za domačo uporabo - 2. del: Posebne zahteve, vključno z varnostjo in preskusnimi metodami za vgradne bazene

Domestic swimming pools - Part 2: Specific requirement including safety and test methods for inground pools

Schwimmbäder für private Nutzung - Teil 2: Besondere Anforderungen einschließlich sicherheitstechnischer Anforderungen und Prüfverfahren für in den Boden eingelassene Schwimmbäder

Piscines privées à usage familial - Partie 2: Exigences spécifiques, exigences de sécurité et méthodes d'essai pour piscines enterrées

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spécifiques, exigences de sécurité et méthodes d'essai
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Schwimmbäder für private Nutzung - Teil 2: Besondere
Anforderungen einschließlich sicherheitstechnischer
Anforderungen und Prüfverfahren für in den Boden
eingelassene Schwimmbäder

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This document (FprEN 16582-2:2015) has been prepared by Technical Committee CEN/TC 402 “Domestic pools and spas”, the secretariat of which is held by AFNOR.

This document is currently submitted to the Formal Vote.

This document is part of a series of standards dealing with domestic swimming pools which consist of:

- *Part 1: general requirements including safety and test methods;*
- *Part 2: specific requirements including safety and test methods for inground pools;*
- *Part 3: specific requirements including safety and test methods for aboveground pools.*

This European Standard has to be read in conjunction with local and national regulations if they exist.

FprEN 16582-2:2015 (E)

1 Scope

This part of FprEN 16582 specifies the specific safety and quality requirements and test methods for domestic partially or fully in ground swimming pools in addition to the general requirements of FprEN 16582-1 and shall be read in conjunction with it. The requirements of this specific standard take priority over those in FprEN 16582-1.

These requirements and test methods are only applicable to partially or fully inground pool structures, including their means of access.

This European Standard applies to pools with a minimum water depth of more than 400 mm.

This European Standard does not apply to:

- pools of public use covered by EN 15288-1;
- paddling pools according to EN 71-8;
- domestic or public use spas.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN ISO 527-4, *Plastics - Determination of tensile properties - Part 4: Test conditions for isotropic and orthotropic fibre-reinforced plastic composites (ISO 527-4)*.

EN ISO 14125, *Fibre-reinforced plastic composites - Determination of flexural properties (ISO 14125)*.

3 Terms and definitions

For the purposes of this document, the terms and definitions given in FprEN 16582-1 and the following apply.

**3.1
skimmer (surface water suction)**
equipment specially designed to trap, by suction or overflow, the surface layer of the water body in order to bring this water into the filtration system

Note 1 to entry: Skimmers are usually mounted vertically (on the wall at water surface level). Floating skimmers are connected by a floating suction pipe to a suction fitting.

Note 2 to entry: The skimmer is generally equipped with a basket.

**3.2
levelling course**
horizontal upper part specific to a built or manufactured wall

**3.3
flatness**
measure of form fault

3.4**deck**

fitted surface, contiguous to pool

Note 1 to entry: The loose ground (grass, sand, etc.) isn't considered as part of the deck.

3.5**ground**

natural soil, worked or not

3.6**service ability limit states (SLS)**

states corresponding to conditions beyond which serviceability requirements specified for a structure or a structural element are no longer satisfied

3.7**ultimate limit states (ULS)**

states associated with collapse or other similar forms of structural failure

Note 1 to entry: These generally correspond to the maximum bearing capacity of a structure or part of a structure.

3.8**ground pressure**

all the stresses generated by packed elements of natural origin and in contact with the structure when it is fully or partially buried

3.9**additional pressure (on pool walls)**

all the stresses generated by the construction and applied loads, on the backfill, of building works contiguous to the structure when it is buried or partially buried

EXAMPLE Overloads are primarily caused by the deck located around the basin.

3.10**prefabricated structure**

set of manufactured units, specifically designed for the production of pools, which may or may not be modular and/or homogeneous

Note 1 to entry: The watertightness of which may be dependent on, or independent of, the support and which shall be used on site specifically according to the manufacturer's recommendations.

EXAMPLE Wooden frameworks, panels (steel, resins, plastics, concrete, stainless steel, etc.), polyester shells, permanent active casing structures designed to be filled with concrete, etc.

3.11**reinforced concrete structure**

structure whose walls and bottom consist of concrete and steel reinforcements subject to harmful cracking calculation rules

Note 1 to entry: The cracking calculation rule may vary according to the type of watertightness

3.12**leakproofing system**

internal coating adhering to its structure, providing watertightness

FprEN 16582-2:2015 (E)**3.13****masonry structure**

structure made up of a base slab and walls made by assembling prefabricated blocks, designed for construction

Note 1 to entry: The blocks may be filled with concrete.

3.14**base slab**

continuous reinforced concrete base foundation supporting the pool either on the ground or elevated

3.15**life span**

period of time a swimming pool structure shall remain serviceable, provided it has been built or installed, maintained and operated according to the manufacturer's instructions

Note 1 to entry: Life span is different from contractual warranty.

3.16**datum point**

prescribed, fixed, construction reference point, from which levels and lengths, depths and heights are measured accurately

4 Mechanical resistance performance requirements**4.1 General****4.1.1 General**

It is important to take into account the specific requirements of coatings or means of leakproofing or watertightness from the structure design stage.

Whatever the type of structure under consideration, it shall be dimensioned to resist reasonably foreseeable load configurations, such as:

- ground and additional pressures on partially or totally buried and empty pools,
- hydrostatic pressures on a swimming pool which is filled before backfilling, if allowed by the manufacturer's instructions.

The pool structure shall comply at least with the following requirements taking into account that other regulations may apply.

NOTE The load configurations are defined as per series EN 1990 (in SLS and ULS).

4.1.2 Permanent loads**4.1.2.1 Dead weight**

The dead weight (G) of the structural elements is to be considered in the case of partially buried pools.

G is null in the case of completely buried structures.