SLOVENSKI STANDARD
SIST EN 16582-2:2015

01-oktober-2015

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

Ta slovenski standard je istoveten z: **EN 16582-2:2015**

ICS:

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EUROPEAN STANDARD

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English Version

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

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European foreword

This document (EN 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 European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by February 2016 and conflicting national standards shall be withdrawn at the latest by February 2016.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document is part of a series of standards dealing with domestic swimming pools which consists 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.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This part of EN 16582 specifies the specific safety and quality requirements and test methods for domestic partially or fully inground swimming pools in addition to the general requirements of EN 16582-1 and shall be read in conjunction with it. The requirements of this specific standard take priority over those in EN 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 16582-1:2015, *Domestic swimming pools - Part 1: General requirements including safety and test methods*

prEN 16713-2, *Domestic swimming pools - Water systems - Part 2: Circulation systems - Requirements and test methods*

EN ISO 527-4, *Plastics - Determination of tensile properties - Part 4: Test conditions for isotropic and orthotopic 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 EN 16582-1:2015 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.) is not 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

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.

4.1.2.2 Ground pressure

The pressure exerted by the ground on the structure varies with the depth notated Z:

$$P_{ground}(z) = K.\rho.g.z$$

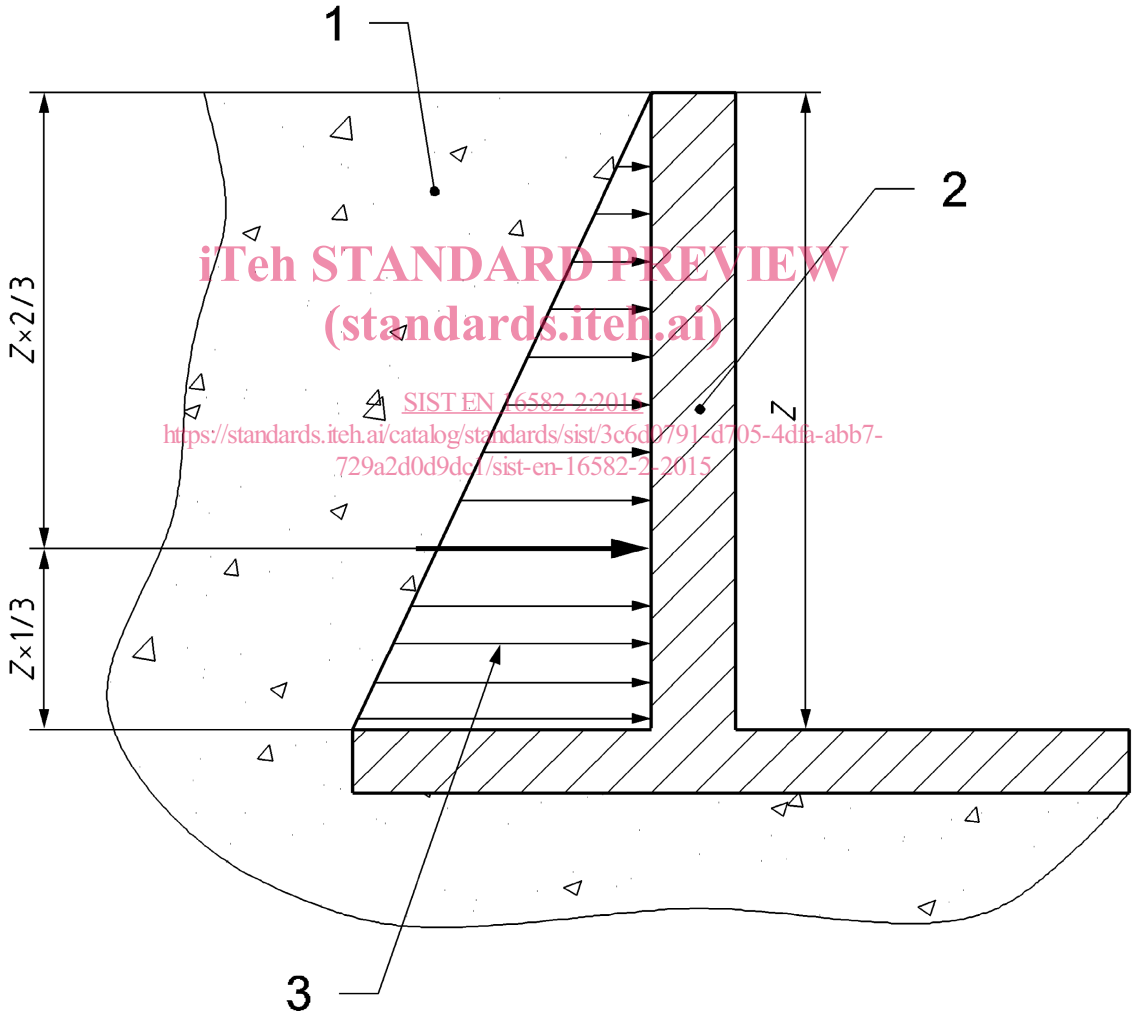
NOTE 1 This formula does not take ground water pressure into consideration which is to be addressed during installation with an appropriate drainage system when necessary.

The minimum unit weight of the ground is considered:

$$\rho.g = 18\ kN/m^3$$

NOTE 2 This value corresponds to the unit weight of ground usually encountered in Europe.

Coefficient K is 0,3 and corresponds to an angle of repose of 30°.



Key

1 earth/ground
2 pool structure
3 pressure exerted by the ground

Figure 1 — Ground pressure