

POOL DESIGN

The following information has been put together by the International Halliwick Association (IHA) Education and Research Committee.

Section 1 is general information relevant to any country.

Section 2 contains information relevant to specific countries/group of countries and will hopefully be added to as people submit information about further regulations.

Section 3 is a short summary.

If you have further information which would be useful to those designing a pool, that is accessible to all, please submit it to a member of the IHA Education and Research Committee. (Details of members can be found on [IHA Education and Research Committee](#).)

Section 1

Accessibility and availability are the keywords when considering those who may use any new public building/physical environment/swimming pool.

There are key issues that are present when planning a new swimming pool including:-

- Type of pool: raised, semi-raised, or deck level.
- Pool size.
- Pool depth and pool floor (determined by the target population).
- Pool entry: steps, hoists, ramps.
- Pool fixed equipment: handrails, under water jets.
- Materials used and finishings: non-slip surfaces, non-abrasive surfaces.
- Environment: lighting, reflection, condensation, ventilation and acoustics.
- Water temperature.
- Pool equipment.
- Facilities: changing room, showers, toilets, rest areas.

Section 2

2.1. Europe

The **European Committee for Standardization (CEN)** www.cen.eu develops standards and other documents on an enormous number of subjects. Formal European Standards (ENs) from CEN have a unique status, since they also are national standards in every one of its 30 Member countries. A **standard** is a technical document that is used as a rule, guideline, or definition. Essentially, it is a consensus-built, repeatable way of doing something. Standards are created by bringing together all interested parties such as manufacturers, consumers, and regulators of a particular material, product, process, or service.

The **European Committee for Standardization** has published two standards:- see - 'Swimming pools: dive in safely'

<http://www.cen.eu/cen/News/Spotlight%20on%20standards/Archive/Pages/Swimmingpools.aspx>

They '... deal with safety requirements for swimming pools. Both standards cover a wide variety: communal pools, water parks, hotel and club pools, and private and home pools. These standards, developed by CEN/TC 136 'Sports, playground and other recreational facilities and equipment' will help raise the level of safety both within the pool, and poolside.'

EN 15288-1: 2008

Swimming pools – Part 1: Safety requirements for design

'EN 15288-1 specifies safety requirements for the design, planning, construction, and operation of swimming pools. It provides guidance regarding the risks associated with design characteristics required for a safe environment. The requirements put forward in this standard are applicable to all new classified pools, and, as appropriate, to specific refurbishments of existing pools.'

- **EN 15288-2: 2008**

Swimming pools – Part 2: Safety requirements for operation

'EN 15288-2 specifies safety requirements for the operation and management of swimming pools. The guidance provided in this document covers risks for both staff and users associated with public swimming pools.'

Where do I get CEN Publications?

All European Standards (EN) and drafts (prEN), as well as any other approved document (Technical Specifications (CEN TS), Technical Reports (CEN TR) and CEN Workshop Agreements (CWA), can be obtained from any of CEN National Member. <http://www.cen.eu/cen/Members/Pages/default.aspx>

CEN itself does not sell these publications.

In the case of some CWAs, a free-of-charge download from the CEN website is possible under certain conditions

<http://www.cen.eu/cen/Sectors/TechnicalCommitteesWorkshops/Workshops/Pages/CWAs.aspx>

'**Finding standards**' gives you the opportunity to search in the entire collection of published standards.

- '**Finding drafts**' allow you to search for all standards under development (prEN).
- '**Latest publications**' lists the CEN documents that were published last month. They will be available within the next six months from the CEN National Members."

SUMMARY

European swimming pool safety requirements for design and for operation standards are executed by the EU state members.

Each EU state member uses these standards and organizes itself according to each country's own regulations.

2.2. SPAIN

Refer to the AENOR web site to request any regulation related to pool design: <http://www.aenor.es> (Asociación Española de Normalización y certificación)

"About AENOR

AENOR is an organisation dedicated to the development of standardization and certification (S + C) in all industrial and service sectors. Its aim is to contribute to the improvement in quality and competitiveness of companies, and to environmental protection.

It was designated to carry out these activities by Order of the Ministry of Industry and Energy, on 26 February 1986 in accordance with Royal Decree 1614/1985 and recognised as a standardization body and to act as a certification body by Royal Decree 2200/1995, promulgated by Industrial Law 21/1992.

Its presence at international forums, both European and American, guarantees Spanish participation in the development of standardization and the international recognition of AENOR certification.”

In addition, there is ASOFAP (Asociación de fabricantes de equipos, productos químicos y constructores de piscinas) <http://www.asofap.com>

www.steelpool.com STEEL POOL is one of the main companies of the swimming pool sector. It manufactures markets and installs iron swimming pools. http://www.asofap.com/web_eng/directorio_empresas_08.php

“OUTLINE

Asofap is a non-profit making association, with the objective of defending the common interests of the Industry, promoting domestic and overseas trade, drawing up studies of interest, encouraging the use and development of information technologies and obtaining ISO, UNE, TÜV Certificates.

Asofap consists of a group of Companies, which owing to their business volume in terms of turnover and export and their volume of staff, are representative of the industry for their common interests to be considered by the Administrations concerned, the media, fair organisations and in general, by all financial agents involved in the Industry.

Objectives

To constitute a platform for manufacturers, builders, experts and professionals in order to exchange experiences and defend their common interests.

To act as a representative of the industry to Public Administrations

To promote international trade of all equipment and installations concerning the Association.

To encourage research and development as a quality emblem.

To defend the economic and commercial interests of its members against any competition not meeting current EU regulations in environmental and safety issues.

To achieve greater professionalism in the Industry, particularly in building and maintenance.

To promote the unification of technical-administrative regulations on the building, installation and maintenance of swimming pools, water parks and other public and private installations.

SPANISH STANDARDS (ASOFAP)

LAWS

In recent years, a significant increase throughout Spain has been observed in the number of recreational installations, particularly swimming pools, as a result of changes in social habits and the way of understanding leisure time.

Health protection and the prevention of risk factors for health in public establishments has been transferred and taken over by the Autonomous Governments. This has meant that each region controls, by law, the installation and activities of swimming pools. In some cases, local councils have also imposed regulations.

The aim of these laws is to draw-up Regulations to guarantee that the conditions of public swimming pools do not have a negative effect on the health and well-being of users.

To achieve this, apart from establishing the requirements which the installations and related services should meet, and to determine the specifications of the water and its treatment, these Regulations also include other aspects more directly aimed at guaranteeing safety and minimising risks for users. In this sense, some of the Regulations control certain activities, such as the use of diving boards, springboards and slides, and to make users co-responsible in minimising risks. It is also obligatory for the managers of swimming pools to display internal regulations to users, including behaviour guidelines aimed at preventing accidents and maintaining the hygiene of installations.

In order to guarantee the safety of users, practically all Regulations state that swimming pools must have a life-saving service, first aid box or even a first-aid post.

It is clear that these Regulations are only for both public and private swimming pools for groups. Also, to make users co-responsible in minimising risks, it is obligatory to draw-up internal regulations including behaviour guidelines aimed at preventing accidents and maintaining the hygiene of installations.

Private single-family or multi-family use swimming pools, belonging to communal residencies with less than twenty, thirty or thirty-five homes (depending on the Autonomy) are excluded. Thermal baths, hydrotherapy treatment centres and others of medical use, and pools used for sports competitions, which are subject to specific regulations, are also excluded.

New technologies have contributed significant progress in decreasing possible

risks for health, and it is therefore necessary to revise these Regulations periodically.

In order to make users co-responsible in minimising risks, the managers of swimming pools are obliged to provide users with internal regulations, including behaviour guidelines aimed at preventing accidents and maintaining the hygiene of installations.”

2.3. UK

The **Halliwick Association of Swimming Therapy** (Halliwick AST) has produced a booklet '**Swimming Pool Design – Accessibility for all**'. This publication contains detailed information for those designing a pool to ensure it is accessible to all. This publication can be ordered by using the Halliwick AST '[Halliwick Publications and Dvds order form](#)'.

Further information on pool design can be obtained from [Sport England](#). Details of the different sections on this website are given below:-

a. '[Accessible sports facilities design guide 2010](#)'

Formerly known as *Access for Disabled People* this updated guidance was first published in 2010 and conveys current requirements for accessible sports facilities under the above mentioned standards and regulations. (for swimming pool design see section 15 (page 60) of the design guide)

b. '[Swimming pools design guide 2011](#)'

Outlines the basic principles and concepts of good swimming pool design aimed at those involved in facility development. This 2011 amendment includes general updates and takes into account BS EN 15288, PWTAG 2009, new changing room layouts, addition of new sections relating to stainless steel pools and pool refurbishment and integrates the latest comments received from the national governing body.

c. '[Swimming pools audit checklist 2011](#)'

Checklist for reviewing swimming pool projects during development applicable to both new and refurbishment projects, cross referred to Swimming Pool DGN. Updated to follow the 2011 version of Swimming Pool Design Guidance Note.

SECTION 3

If you are involved in designing a pool you need to find out about swimming pool design and regulations from your local government/council. Ensuring the pool is accessible to all is an important factor to be considered in all stages of design.

If you have information relevant to your country about designing an accessible pool, please submit details to a [member of the IHA Education and Research Committee.](#)