

## Background and content

For over three decades, various countries around the world have been building natural swimming pools of various types, using different construction methods. These are artificially created ecosystems that are different to conventional swimming pools in that they use either full or partial biological water filtration technology.

There are now more than 10,000 private natural swimming pools worldwide. According to the German Association for Natural Bathing Waters (DGfNB), in recent times in Germany alone, about 600 private facilities every year have been built from scratch, or else expanded or remodelled from existing pools built in the 1960s and 1970s.

Whereas conventional facilities are generally planned by architects and built by civil engineering and building construction firms, the planning, construction and maintenance of natural swimming pools has become increasingly regarded as an area for landscape architects and gardening and landscaping companies.

The first "Recommendations for the Planning, Construction and Maintenance of Private Natural Swimming Pools" were published in 2006 by the Landscape Development and Landscaping Research Association (FLL), in its role as regulator of the "green industry". They have been well received in practice and are widely used.

Since that document was published, various research findings have been presented, many experiences have been gathered and numerous swimming ponds have been built according to the recommendations.

Constant developments in the field of swimming pond construction have prompted the Landscape Development and Landscaping Research Association (FLL) to collaborate with the German Society for Natural Bathing Waters (DGfNB) to revise the 2006 edition and bring it into line with the latest technological developments.

As part of the process, the contents of the regulations were checked, adapted to the way the current legal framework is applied in practice and supplemented with newly acquired knowledge. They were then developed into the FLL's revised "Guidelines for the Planning, Construction and Maintenance of Private Natural Swimming Pools".

## Details:

Scope, Purpose / Normative References / Definitions / Legal and normative framework conditions (Acts, ordinances / DIN Standards Tendering and Contract Regulations for Construction Contracts – VOB / Guidelines, fact sheets and worksheets) / Types of natural pools I – V / Biology and chemistry of the natural pool (Limnological principles / Significance of biocenoses / Significance of the nutrients phosphorus and nitrogen / Importance of hygiene / Importance of the intensity of use) / Quality requirements (Requirements pertaining to water quality / Requirements pertaining to construction/Building materials) / Planning (General information / Space requirements / Equipment elements / Description of services) / Building requirements (Excavation / Separation of swimming area and regeneration area / Sealing / Edge design / swimming area / Regeneration area) / Water purification (General information / Regeneration areas / Water circulation / Plants, planting) / Acceptance inspection, claims due to defects ( Acceptance inspection of the building work / Claims due to defects) / Maintenance (General information / Checks / Care and maintenance / Repairs) / Sources / Appendix