

Aqua-World in Budapest



Aquaworld Budapest is covered by an enormous dome, 72 m in diameter and 5-storey high; the total – unsupported – area under the dome is 4200 m². The spherical-cap-shaped dome is constructed with a very special architectural technique developed originally in space research. It is fully transparent, protected by a multi-layer foil system, and it relies on glued wooden support structures. Hot air is circulated in two cells and the dome provides protection from ultraviolet radiation. Its internal pressure is adjusted to the weather conditions ever with the help of a control system governed by sensors. The supporting structure of the dome is made of 40m long ribs, fitted to the ring, 8m in diameter, at the top of the dome in a vault-like structure.

The maximum capacity of the Aquaworld Budapest water theme park is 1800 persons.





project data

year of construction	2008
client	Aquaworld Hotel and Water Theme Park PLC
wood structure	Göckel Holzbau GmbH
structure planning ETFE-foil	Konstrukt AG
covered area	4.000 sqm
material	etfe-foil

