

Designing a swimming pool for visually impaired people

The UK's first pool for blind and partially sighted people uses shape, colour, texture and acoustics to help orientation.

BY DEBORAH SINGMASTER

Burley Architects has recently completed the first swimming pool in the UK specifically designed for blind and partially sighted people.

The pool, at the Cliffden Holiday and Recreation Centre in Teignmouth, Devon (previously converted by the practice), is run by The Guide Dogs for the Blind Association, whose research has established that swimming is one of the few physical activities that visually impaired people can undertake with full independence.

Finding a suitable site for the pool, where it could be integrated discreetly into a sensitive context, was not easy. The client's brief required it to be close to the main house, a listed building. This meant building on the prominent south lawn and destroying views of the coast and of the house, an unacceptable solution for both the architect and the users, who are frequently accompanied by sighted guests.

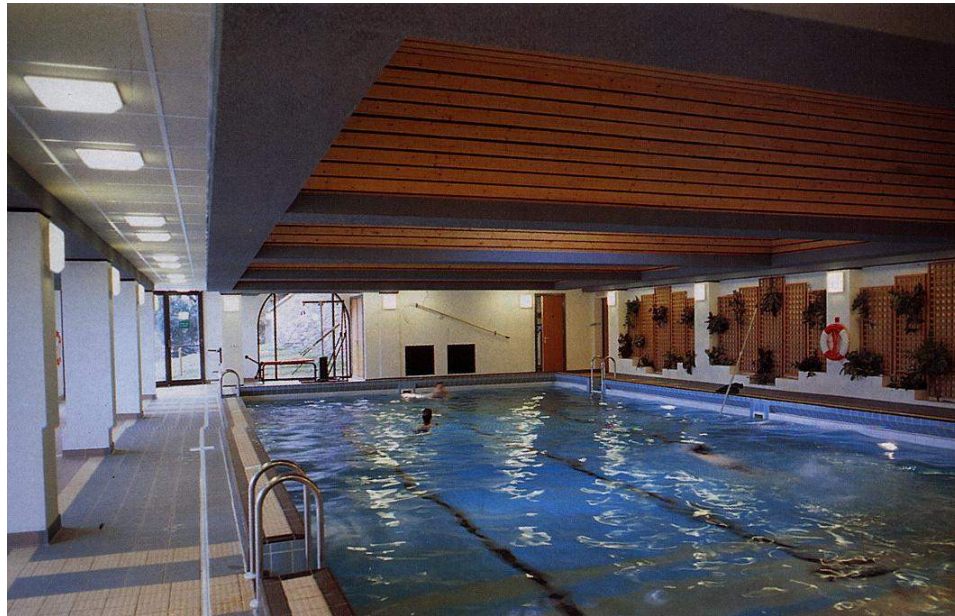
The solution was to take advantage of the natural slope of the site and design a semi-underground building with a landscaped

grass roof that would replace the former garden. Grass steps at the far end of the roof return to the original ground level and reinforce the impression of a building that has grown out of the ground. The buttressed façade, constructed of local stone, mimics the stone terrace walls of the nearby old tennis court.

The design of the pool interior had to facilitate independent and safe use, without patronising users. The key design features that assist orientation are:

▣ **shape/layout:** discussions with blind swimmers revealed that a simple rectilinear pool shape with a uniform single-direction sloping bottom and a maximum depth of 1.5m helped them maintain their sense of position and direction. Recessed handrails and steps ensure that pool users will not bump into them.

▣ **visual aids:** because the majority of visually impaired people have some residual sight, distinct colour differentiation is incorporated around doors, on the floor, pool edge, pool handrail, walls and even on the



ceiling to help people swimming on their backs. ▣ **tactile floorings:** these are used to indicate hazards and focal points and are particularly useful around a pool where users are barefooted. A range of differently textured tiles are used: flat, studded, domed, pin-headed and ribbed to differentiate between

the pool surround and seating areas, changes of direction around the pool walkway, pool steps and upstand edge.

▣ **acoustics:** control of sound reflection is important as excessive sound reverberation disorients users. Careful use of reflecting and absorbing surfaces helps create an 'acoustic map' for the building. Over the pool the high coffered, timber-boarded ceiling is backed with absorbent quilt. The low suspended ceiling over the walkways is finished in highly absorbent tiles which create a different sound effect. Rendered vaults within the seating area give a much 'harder' response.

FURTHER READING

Building study: 'Vision care centre, Bristol.' A building to stimulate the senses' AJ 27.10.93 p41-50
Briefing: 'Sensory impairment' AJ 27.10.93 p40
RNIB Springfield Centre 'Commonsense solutions to universal problems' AJ 9.2.94 p35-41

Opposite page: the pool roof is landscaped. This page, above: the pool interior; below: different tile textures help orientation.

CREDITS

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SUPPLIERS

floor tiles Pilkington Tiles, H&R Johnston Tiles, Paul Fricker Tiling; suspended ceiling Rockfon; external Stonework Lewis Rugg; glazing Kewner UK, Mackenzie Windows

