

**Business Unit:**

**Date Of Issue: July 2010**

**SWIMMING POOL WATERPROOFED AND  
RETURNED TO GLORY WITH SIKA**

Following decades of usage, the Gateshead Leisure Centre, Tyne and Wear, was suffering from age. To repair its badly leaking pool and restore the entire facility to its former glory, it was shut for a year so that a multi-million pound refurbishment scheme could be completed. A combination of the renowned Sika 1 waterproofing system and Sikadur Combiflex, from global construction material producer Sika, was chosen to ensure that following the remedial works, the swimming pool would remain watertight for decades to come.

The scheme, delivered by main contractor Willmott Dixon as part of a design and build contract with Gateshead Council, forms part of the Building an Active Future Programme (BaAF). The programme, which involves investing £36 million, is part of a plan to improve the health of residents in the town by 2030.

The refurbishment project has covered every corner of this popular facility. It has brought the 70 year old centre up to the standards of modern health and leisure facilities with the addition of a top class gym, poolside sauna and steam rooms, fitness studios and more. To ensure that the renovated pool was watertight and would not leak as it had previously, requiring costly and regular refilling of the pool, the selection of the waterproof membrane had to be carefully considered. Not only did it have to remain watertight whilst submerged, but it also had to be able to resist the chlorine and ozone that are used to keep pools clean.



Sika 1 was specified by consulting engineering firm Cundall for its market proven abilities. This year the renowned waterproofing material celebrates its centenary of successful usage on everything from swimming pools to basements, tunnels and world-class museums. The system is fully certified by the British Board of Agrément (BBA), which stated that “Sika 1’s pre-bagged waterproofing system will provide an effective barrier to the transmission of liquid for the life of the building to which it is applied”. Crucially, owing to the harsh and chemical environments that swimming pools represent to concrete, Sika 1 is exceptionally resistant.

Sika 1 is a total waterproofing system comprising prebagged mortars, renders and screeds – ensuring ease of use and onsite quality control. It is so effective at waterproofing due to the Sika 1 admixture, a colloidal silicate liquid that swells when in contact with water. This seals the pores and capillaries of mortar, ensuring a 100% watertight seal – ideal for a swimming pool, where water retention is of the essence.

The swimming pool was waterproofed to BS1802 Grade 3. This standard ensures that there is no water seepage from the pool and that only the slightest degree of vapour penetration occurs. This is crucial to retaining water within the pool and ensuring that any seepage does not cause structural concerns elsewhere.

Specialist contractor Quickseal was appointed to carry out the waterproofing works on this project. With over 25 years experience in the use of this system, Quickseal was a good choice for the job. Its first task was to prepare the pool for waterproofing. To do this the company’s Sika trained operatives removed the surface tiling of the pool – 500 m<sup>2</sup> in all – and the existing failing waterproof membrane. Minor repairs were then conducted to the existing concrete frame of the pool. The entire concrete slab was then mechanically prepared for the application of the Sika 1 pre-bagged system.



The fully trained operatives from Quickseal cast a layer of spritz mortar over the bottom and sides of the tank, totally covering the existing slab. This was followed by a second and third layer of Sika 1 Finishing Mortar and Render for the walls and Sika 1 Prebagged Screed mortar for the bottom.

To ensure that the swimming pool was 100% watertight, all joints and junctions were sealed with Sika's Sikadur Combiflex, consisting of a Sika Hypalon strip and Sikadur 31 epoxy resin adhesive for fixing. The system is elastic, rot proof and resistant – crucial considering the chemical composition of swimming pool water. Having proven its worth over years of swimming pool installation, it functions without impediment in heated or unheated swimming pools to provide excellent seals at joints.

Once the Sika 1 waterproof membrane had been installed and the joints sealed with Sikadur Combiflex, the pool was re-tiled in white, for the sake of hygiene and aesthetics.

Providing lasting repairs to leaking swimming pools is crucial. The constant refilling of pools is both costly and time consuming, and can be avoided through sensible product choice and good workmanship. Water loss also makes it more difficult to heat pools, as warmth exits the pool with water and may even lead to expensive repair works beyond the pool – they are a frequent cause of water ingress into basements.



With work complete, the swimming pool is once more full of water and being enjoyed by the local community – though now without leaks! Often specified to keep water out, Sika 1 is a reliable watertanking agent for swimming pools and has shown its mettle on projects of all sizes, from splash tubs right up to Olympic standard pools. Combined with Sikadur Combiflex, it offers specifiers and designers a means to ensure that their elaborately designed pools stand up to the rigours of usage for the lifetime of the structure.

Images courtesy of Gateshead Council.

For further information on Sika's range of waterproofing solutions and other specialist construction products, visit [www.sikaconstruction.co.uk](http://www.sikaconstruction.co.uk).

## Ends

For further information, please contact David Ing at CFA on:

Telephone: 01622 754295

Mobile: 07802 409484

Email: [david.ing@cfa-group.com](mailto:david.ing@cfa-group.com)

## Notes to Editors:

Sika Limited is a wholly owned subsidiary of Sika AG, a global company based in Switzerland specialising in the manufacture and supply of chemical based products for construction and industry. A world-leader in its field Sika has subsidiaries in more than 70 countries, generates annual sales of CHF 4.6 billion and is committed to providing quality, service, safety and environmental care.

In Great Britain, Sika Ltd provides market-leading solutions for flooring, sealing and bonding applications, waterproofing, roofing, structural sealing and strengthening and many other construction applications.

Sika Limited's head office is based in Welwyn Garden City at Watchmead, Welwyn Garden City, Hertfordshire, AL7 1BQ. Call 01707 363866, e-mail [technical@uk.sika.com](mailto:technical@uk.sika.com), or visit [www.sika.co.uk](http://www.sika.co.uk).



# Press Release

Further press information about Sika and Sarnafil Limited, including an extensive image gallery, can be found at the Sika Media Centre – [www.sikamarketing.co.uk](http://www.sikamarketing.co.uk).



**Sika Limited**, Watchmead, Welwyn Garden City, Herts, AL7 1BQ  
Tel: 01707 394444 / Fax: 01707 329129 [www.sika.co.uk](http://www.sika.co.uk)

**Innovation & Consistency** | since 1910