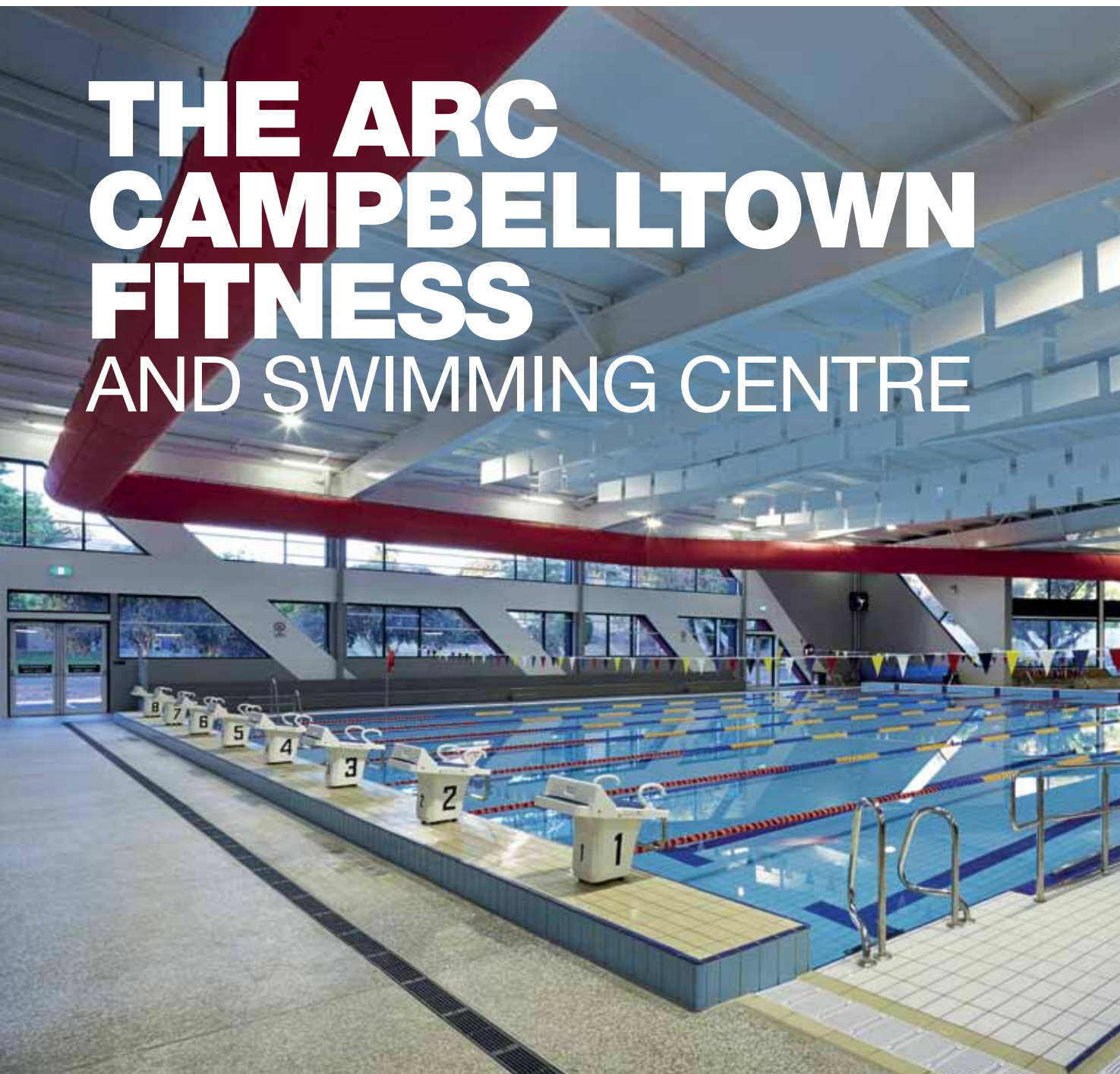


THE ARC CAMPBELLTOWN FITNESS AND SWIMMING CENTRE



NEW CERAMICS HAVE BEEN INSTALLED IN THE SPORTING HEART OF A LOCAL COUNCIL IN THE CITY OF ADELAIDE

The public swimming pool in the City of Campbelltown – a city in South Australia just a few kilometres to the east of Adelaide – has reached a new standard following the upgrade of the ARC Fitness and Swimming Centre.

A winning mix of creative design, a keen eye on the needs of users of the centre and comforts of the latest generation, have all enabled a centre to be created that provides a combination of welcoming surroundings, fun and excitement.

Today's ARC Swimming Centre is an aquatic centre with an indoor, heated 25 metre pool with eight lanes, a children's pool, a sauna and a relaxation area. The complex also has a bar, a gymnasium, a fitness centre, an infants' centre, five squash courts and multi-functional playing courts for basketball, netball and volleyball.

A large-scale refurbishment with Mapei products playing a key role to waterproof surfaces and install new ceramics.

REPAIR WORK AND PREPARATION OF THE CONCRETE

Work on the installation of new tiles in the 25 metre indoor



TO THE LEFT. The 25-metre indoor swimming pool in the ARC Campbelltown Centre once all the work had been completed. More than 2,000 m² of ceramic tiles had been installed.

pool, the children's pool and on the water features in the recreation area started with removal of the old tiles and cleaning of all the surfaces.

KERAPOXY two-component, acid-resistant epoxy mortar was used to restore the expansion joints, while MAPEBAND TPE, a special tape in TPE, was used to form elastic, waterproof seals in the expansion joints and cracks subjected to movements.

EPORIP two-component, solvent-free epoxy adhesive was also used for these operations to monolithically seal the cracks in the screeds and the second pours in the rigid, waterproof joints.

The floors around the swimming pool were sealed with MAPEGROUT FAST-SET rapid-setting and drying, shrinkage-compensated, fibre-reinforced mortar for restoring concrete and sealing surface cracks.

The surfaces used by swimmers were treated with PLANI-CRETE SP (available on the Australian market), which is used as an admixture to make highly adhesive, cementitious slurry. The same slurry was also used to form a bonding interface for the two successive layers of MAPELASTIC SMART two-component, high-elasticity cementitious mortar, which is used to waterproof balconies, terraces, bathrooms and swimming pools.

PLANITOP FAST 330 rapid-setting, fibre-reinforced cementitious levelling mortar for internal and external surfaces, which can be used to integrate areas from 3 to 30 mm thick, was applied where required to level the reinforced concrete and make it suitable (after just 24 hours at +20 °C) for the successive application of the waterproofing product MAPELASTIC SMART.

To guarantee the maximum integrity of the sides and bottom of the pool before installing the tiles, MAPETEX SEL, a special, non-woven, macro-perforated fabric used to reinforce waterproof membranes, was integrated into the MAPELASTIC SMART membrane.

INSTALLATION OF THE NEW CERAMICS

Non-slip tiles (119x244 mm x 9 mm thick) were installed on the surfaces around the swimming pool using KERABOND PLUS adhesive mixed with ISOLASTIC 50 elasticising latex for cementitious adhesives (available on the Australian market) which, when used instead of water, improves the characteristics of the adhesive.

Other tiles specifically made for swimming pools were installed with KERABOND PLUS + ISOLASTIC 50, such as special shaped tiles to form a grip around the edges of the pool and on the surfaces of the grates on the wet platforms. The same adhesives were also used to bond the tiles on the walls, on the steps and on the skirting.

The product chosen to grout the tiles in the swimming



pool was ULTRACOLOR PLUS high-performance, anti-efflorescence, rapid-setting and drying, polymer-modified mortar with water-repellent DropEffect® and mould-resistant BioBlock® technology, which is used to fill grout lines from 2 to 20 mm wide.

MAPESIL AC solvent-free, pure, mould-resistant, acetic silicone sealant was then used to form perfectly elastic seals in the expansion joints in the walls and floor.

With more than 2,000 m² of surfaces to be waterproofed and then used to install new tiles, 1,000 m² of surfaces to be levelled, 440 m² of concrete to be repaired, 1,060 m² of

cementitious screeds and 1,500 m of joints to seal with silicone, the key product for the final phase of installing the new tiles in the swimming pool was GRANIRAPID, a specific two-component, high-performance, rapid setting and hydrating deformable adhesive.

Indeed, thanks to its high bond strength and rapid-drying property, GRANIRAPID is particularly suitable for quick refurbishments and for areas that need to be put back into service immediately.

PERFECT INSTALLATION ALSO IN THE SERVICE AREAS

The product chosen to install the new tiles in all the service areas was TIXOBOND FINE S1 deformable, non-slip cementitious adhesive with extended open time, which is available on the Australian market.

The large format floor tiles in these areas were installed with white KERAFLEX MAXI S1 high-performance, deformable, non-slip cementitious adhesive with extended open time, Low Dust technology and very low emission of volatile organic compounds (VOC), particularly suitable for installing large format porcelain tiles and natural stone.

Before installing the new ceramic, all the damp surfaces in the service areas were waterproofed with MAPEGUM WPS rapid-drying, elastic, liquid membrane, which is used to waterproof internal surfaces.

The tiles in these areas were also grouted with ULTRACOLOR PLUS and the expansion joints were sealed with MAPESIL AC.



FACING PAGE. After the operations of substrates preparation and of waterproofing for the swimming pool have been carried out, tiles have been installed with GRANIRAPID and grouted with ULTRACOLOR PLUS.

BELOW. In the service areas the ceramic tiles have been installed on the walls with TIXOBOND FINE 1, an adhesive distributed on the Australia market. Expansion joints have been sealed with MAPESIL AC.

IN THE SPOTLIGHT

KERABOND PLUS

High-performance, C2E class cementitious (C), improved (2), extended open time (E) adhesive ceramic tiles and stone material. It is used to bond all types of ceramic tile (porcelain, single-fired, terracotta, double-fired, klinker, etc.) and mosaic on internal and external floors, walls and ceilings. It is also suitable for spot bonding insulating materials such as foam polystyrene, foam polyurethane, Rockwool, glass wool, soundproofing panels, etc. It helps contribute up to **4 points** to obtain the **LEED** certification.



TECHNICAL DATA

The ARC Campbelltown Fitness and Swimming Centre, Adelaide (Australia)

Period of Intervention: 2016

Intervention of Mapei: supplying products for waterproofing and installing ceramic tiles

Client: Campbelltown City Council

Project Architects: Design Inc.

Consulting Engineers: FMG Engineering

Works Manager: Robert Maiolo

Head Contractor: Sarah Constructions

Pty Ltd

Pool contractor: South Pacific Pool Builders

Installer Company: Commercial Ceramics and G&G Tiling

Mapei Coordinator: John Francis (Mapei Australia)

MAPEI PRODUCTS

Repairing of concrete: Mapeband TPE, Kerapoxy, Planitop Fast 330, Eco Prim T
Waterproofing: Planicrete SP*, Mapelastix

Smart, Mapetex Sel, Mapegum WPS
Installation and grouting of ceramic tiles: Kerabond Plus, Isolastic 50*, Ultracolor Plus, Mapesil AC, Keraflex Maxi S1, Tixobond Fine S1*,

*These products are distributed on the Australian market by Mapei Australia Pty. Ltd.

** For further information see the websites www.mapei.com and www.mapei.com.au