

INNOPOLIS UNIVERSITY AND SPORTS COMPLEX

MAPEI SOLUTIONS IN THE RUSSIAN
HUB FOR HIGH-TECH INDUSTRIES





Mapei mortars, such as MAPEFILL, MAPEGROUT 430 and MAPEGROUT THIXOTROPIC, were used to complete the campus of the Innopolis University in the Republic of Tatarstan.



Innopolis is a city of the Republic of Tatarstan, belonging to the Russian Federation. Its history begins on June 9th, 2012, when Dmitry Medvedev, the Chairman of the Government of the Russian Federation, together with Rustam Minnikhanov, the President of the Republic of Tatarstan, and Nikolay Nikiforov, Minister of Communications and Mass Media of the Russian Federation, laid a capsule with a message to future residents at the ground-breaking site of the construction. Three years later, on June 9th, 2015, Innopolis held its foundation ceremony.

The economy of the city is based on high-tech industries. The Innopolis Special Economic Zone (SEZ) was established on the territory of the city in order to bring to Innopolis the largest and promising technology companies from all over the world. Innopolis is an attractive place to live and work in comfortable conditions. By 2021, its population may reach 155,000 inhabitants, 60,000 of which will be engaged in Information Technology.

The city has now a unique, eco-friendly city environment with modern infrastructure and many opportunities for education and professional development.

One of the key elements of the city's development was the construction of the Innopolis University, an innovative institution that trains specialists in the IT field. The project of the University was developed jointly with the University of Carnegie Mellon (USA), which is one of the leading information technology schools.

Specializing in the field of modern information technologies, Innopolis University is not only one of Russia's youngest universities, but also the new city's intellectual center. The teaching staff includes leading Russian and foreign specialists in IT and science robotics. Driven by the demands of both business and industry, the educational programs are committed to producing a high-quality stream of professionals for companies located in Innopolis.

The Innopolis sports complex is also an important part of the



Mapei products for ceramic tile installation, such as ULTRACOLOR PLUS, were used both in the University campus and in the sport complex.



The pool substrates in the sports complex were waterproofed with MAPELASTIC before bonding the ceramic tiles with KERACRETE+KERACRETE POWDER.

city environment, promoting a healthy lifestyle among residents. The three-story building attracts visitors with its unique interior design and great vibes. Its total complex area is 9,000 m². It offers residents and city guests a universal sports hall for team sports, a 25 m swimming pool, a jacuzzi, a gym, saunas and hammams.

MAPEI SOLUTIONS FOR THE PROJECT

In the Innopolis University MAPEGROUT THIXOTROPIC fibre-reinforced, shrinkage-compensated mortar and MAPEGROUT 430 fine-grained, fibre-reinforced, normal-setting thixotropic mortar were used to smooth concrete surfaces, due to their high flexural and compressive strengths.

MAPEFILL, a high-flow non-shrinkage cementitious anchoring grout characterized by high adhesion to iron and concrete and excellent resistance to mechanical stress, was used for anchoring works in a shower cabin.

During the construction of the Innopolis sports complex, the above-mentioned products were also used for similar interventions.

Mapei solutions also played a key role in the construction of the swimming pool and the hot tub of the complex.

To provide the necessary waterproofing, MAPELASTIC was chosen. This is a two-component, flexible cementitious mortar for waterproofing balconies, terraces, bathrooms and swimming pools. The product ensures protection of renders or concrete surfaces with cracks caused by shrinkage, against penetration of water even under pressure up to 1.5 bar.

For elastic waterproofing of joints, MAPEBAND alkali-resistant rubber tape was used before covering the surfaces with ceramic tiles.

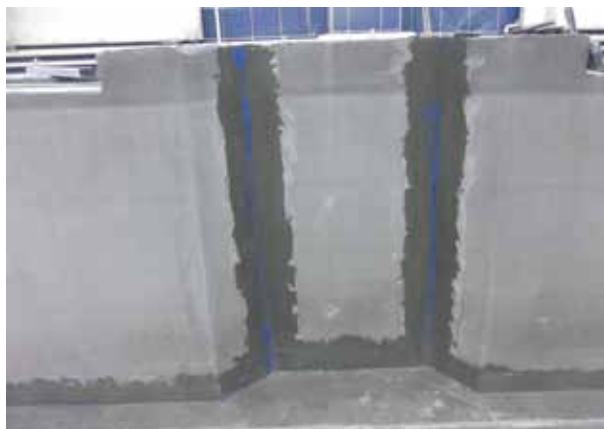
When installing the tiles, KERACRETE + KERACRETE POWDER two component adhesive system (the latter is distributed on the Russian market by ZAO Mapei) was applied, which is especially suitable for bonding tiles in swimming pools. The system is made up of a synthetic rubber latex mixed with sand and cement and has excellent mechanical strength, impact resistance, vibration resistance, resistance to temperature changes and ageing.

For grouting tile joints, ULTRACOLOR PLUS was used. This is a high-performance, anti-efflorescence, quick-setting and drying polymer-modified mortar with water-repellent DropEffect® and mould-resistant BioBlock® technology which guarantees an uniform color, blocks the formation of micro-organisms that cause mould damage and reduces the absorption of surface water.

All these solution helped to create comfortable areas for those living in and visiting one of the most innovative places on earth.



The surfaces of the hot tub in the sports complex were waterproofed with MAPELASTIC.



MAPEBAND alkali-resistant rubber tape was used in the pool for the elastic waterproofing of joints between walls and between walls and floors.

IN THE SPOTLIGHT

MAPELASTIC

It is a two-component cementitious mortar, ideal for the waterproofing and protection of concrete structures, renders and cementitious screeds. MAPELASTIC remains constantly flexible under all environmental conditions and resistant to the chemical attack of de-icing salts, sulphates, chlorides and carbon dioxide. It has excellent bonding properties to all concrete, masonry, ceramic and marble surfaces, as long as they are sound and

sufficiently clean.

This property, together with its resistance to the deteriorating effect of UV rays, ensures that structures waterproofed with MAPELASTIC have a long service life.

It remains flexible at very low temperatures (-20°C) and protects the surface of concrete from CO₂ penetration for more than 50 years.



TECHNICAL DATA

University campus and sports complex, Innopolis, Republic of Tatarstan (Russian Federation)

Period of construction: 2013-2015

Year of intervention: 2014

Intervention by Mapei: supplying products for smoothing concrete, anchoring,

waterproofing, and installing ceramics

Designer: Kazan Giproniaviaprom

Client: Innopolis Main Investment and Construction Department

Contractor: Kamgesnergostroy

Mapei distributor: Avitrade, s.r.o

Mapei coordinators: Sergey Kuznetsov and Igor Kazakov, ZAO Mapei (Russian Federation)
Photos: Diana Grischenko

MAPEI PRODUCTS

Repairing concrete elements: Mapegrout Thixotropic, Mapefill, Mapegrout 430
Waterproofing pool substrates: Mapelastic, Mapeband

Installing ceramic tiles and grouting joints: Keracrete+ Keracrete Powder*, Ultracolor Plus.

*This product is distributed in Russia by ZAO Mapei.

For further information on products see www.mapei.ru and www.mapei.com