

# Olympic Tour of Mapei

**As in all the previous editions of the Olympic Games since Munich 1972, Mapei has made an important contribution to the construction of numerous sports complexes which will host the Beijing 2008 Olympic Games.**



## National Stadium - Beijing

This imposing, original architectural complex, which has now become one of the most famous symbols around the world for the Beijing 2008 Olympic Games, was designed by the prestigious Swiss architectural studio Herzog & de Meuron, and constructed in five years for a total investment of 320 million Euro. The complex covers an area of 250,000 m<sup>2</sup> and may hold 91,000 spectators on three different seating levels. The stadium hosted the opening and closing ceremonies of the Games, as well as 57 different athletic, weightlifting, soccer and baseball events. The intricate structure of steel pillars, which are visible from outside, has earned the stadium its nickname of "the Bird's Nest". The roof of the stadium foreseen in the original design has not been installed because of the rising costs of the project, and also because it proved to be difficult to comply with the stringent anti-seismic safety standards. The main track for the athletics events, as well the track for warming up, the floors in the internal areas where all the people pass and for the service areas (registration area, anti-doping area, etc.) have been installed using red rubber coverings (supplied by the Italian company Mondo), and laid using ADESILEX G19\* adhesive (with a quick catalyser in order to respect the extremely short lead times for the laying operations).

### TECHNICAL DATA

**Work:** laying the rubber sports tracks and rubber floors

**Period of Works:** 1<sup>st</sup> semester 2008

**Customer:** National Stadium Co. Ltd

**Project:** Herzog & de Meuron (Switzerland) and China Architecture Design Institute (China)

**Installed Materials:** rubber sport tracks (Mondotrack FTX) supplied and laid by Mondo (Italy)

**Mapei Product:** Adesilex G19



## TECHNICAL DATA

**Work:** laying vinyl sport floorings; treating the substrates of the tennis courts; laying ceramic tiles on the swimming-pools

**Period of works:** 1<sup>st</sup> semester 2008

**Client:** General Administration of Sports of China and BOCOG (Beijing Organizing Committee for the XXIX Olympic Games)

**Project:** Architectural Design & Research Institute of Qinghua University, OSA Architect Agency (Australia) and China Sports Facility Design Center (China)

Laying ceramic tiles in the swimming-pools and treating the substrates of the tennis courts:

**Contractor:** CSFC (China Sports Facility Construction)

**Installation Company:** CSFC

**Mapei Products:** Primer G and Ultraplant (for the substrates of the tennis courts); Granirapid and Keracolor GG+Fugolastic (for the installation of ceramics in the swimming-pools)

**Mapei Coordinator:** Peter Jew (Mapei Far East)

Laying vinyl floors:

**Installed Materials:** vinyl sport floorings (Mondosport) supplied and laid by Mondo (Italy)

**Mapei Product:** Adesilex G19

## Shooting Range Hall - Beijing

This structure was designed by the University of Qinghua, Beijing, in collaboration with the Australian design studio OSA Architect Agency. Special attention was paid to the way it integrates with the surrounding environment, the use of eco-sustainable technology and the use of systems which allow for a considerable saving in energy consumption. The stadium may hold 8,954 spectators and includes the areas for the qualifying events and the finals of the shooting contests, apart from service areas for warming up and recreation activities for the athletes. Mapei products were used for the covered tennis courts, where the substrates were treated with PRIMER G\* and then levelled off using ULTRAPLAN\*, before applying 4 layers of acrylic flooring material.

Mapei products were also used for the construction of the swimming pool: GRANIRAPID\* adhesive was used to bond the ceramic tiles in the pool, while the joints were grouted with KERACOLOR GG\*, mixed with FUGOLASTIC\* additive. Also, approximately 5,000 m<sup>2</sup> of vinyl sport floorings were supplied by Mondo and laid using ADESILEX G19\*.

## National Indoor Stadium - Beijing

Although it is certainly less spectacular than the neighbouring "Bird's Nest" stadium, the National Indoor Stadium is still striking for the gently curved shape of its steel roof, positioned on the summit of a central cube-shaped body delimited by a glass façade.

It is the largest poly-functional stadium in Beijing, and can hold up to 20,000 spectators for the artistic gymnastics and handball events, which were held in this stadium during the Olympics, and for the wheelchair basketball event during the Paralympic Games. After the Games, this complex is still used as a backdrop for sports events and training sessions, concerts, shows on ice and acrobatics, as well as various recreational activities. The Beijing Institute of Architectural Design and the Beijing Urban Engineering Design and Research, in collaboration with the Munich Group, have together created a complex which extends over 80,000 m<sup>2</sup> and which is four storeys high. In this case too, special attention has been paid to the use of eco-compatible high



technology, systems and materials, which guarantee considerable savings in energy consumption and a lower impact on the environment.

Mapei ADESILEX G19\* and ADESILEX G20\* adhesives were used to lay the rubber sport floorings for the handball courts.

## TECHNICAL DATA

**Work:** laying rubber floorings

**Period of Works:** 1<sup>st</sup> semester 2008

**Customer:** Guocao Investment Development Co. Ltd and BOCOG (Beijing Organizing Committee for the XXIX Olympic Games)

**Project:** Munich Group (Germany), Beijing Institute of Architectural Design (China) and Beijing Urban Engineering Design and Research (China)

**Contractor:** Beijing Urban Engineering Group (China)

**Installation Materials:** rubber sport floorings (Mondoflex) supplied and laid by Mondo (Italy)

**Mapei Products:** Adesilex G19 and Adesilex G20



## TECHNICAL DATA

**Work:** laying rubber floorings  
**Period of Works:** 1<sup>st</sup> semester 2008  
**Customer:** Wukesong Culture & Sports Centre Co Ltd and BOCOG (Beijing Organizing Committee for the XXIX Olympic Games)  
**Project:** Beijing Institute of Architectural Design (Huyue Studio and Second Design Studio) and Burckhardt + Partner (Switzerland)  
**Contractors:** Urban Engineering Group (China) and Zhongguancun Construction Associates (China)  
**Installed Materials:** vinyl sport floorings (Mondosport) supplied and laid by Mondo (Italy)  
**Mapei Product:** Adesilex G19

## Wukesong Basketball Indoor Stadium - Beijing

The complex, designed by the Swiss design studio Burckhardt + Partners, has a central cube-shaped body. In the original design, the external walls were to be covered by giant LCD television screens. However, after the Chinese authorities carried out a complete review of the design to reduce costs and the impact of the stadium on the local environment, the designers decided to create the facades in glass, supported by a bearing structure in aluminium alloy. The building has 18,000 seats and

is located within the Wukesong Sports and Cultural centre, which covers an area of 50,000 m<sup>2</sup>, and also includes the Wukesong baseball stadium and a further sports field. The stadium hosted various basketball games, both during and after the Olympic Games, and is the home of schools and clubs which play this sport. The rubber floors for the areas used for moving from one area to another within the complex were made using Mondo sport floorings bonded in place using ADESILEX G19\*.

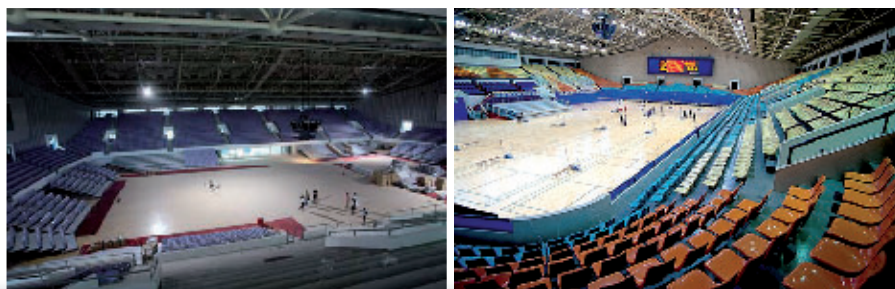
## University of Technology Gymnasium - Beijing

This complex, with its imposing 93 metre-diameter cupola roof, plaid host for the badminton matches and rhythmic gymnastics events during the Olympic Games. It is now available for students of the University for training purposes, and for professional badminton teams. It covers a surface area of 24,383 m<sup>2</sup>, and has a capacity of more than 6,000 spectators. Mapei ADESILEX G20\* adhesive was used to bond the vinyl floors in the courts and the rubber floorings in the areas for moving around the complex, with both types of material supplied by Mondo.

## TECHNICAL DATA

**Work:** laying vinyl and rubber floorings  
**Period of Works:** 1<sup>st</sup> semester 2008  
**Customer:** BOCOG (Beijing Organizing Committee for the XXIX Olympic Games)  
**Installed Materials:** rubber sport tracks (Punti, Futura) and vinyl sport floorings (Mondosport) supplied and laid by Mondo (Italy)  
**Mapei Product:** Adesilex G19





 Sports Centre Gymnasium - Beijing

This centre was extended to host the qualifying rounds and the finals of the handball event during the Olympics, and then for training for the basketball, fencing and rugby events during the Paralympics. It covers an area of more than 47,000 m<sup>2</sup>, and can hold 6,300 spectators. The floor surfaces of the courts and pitches were made using rubber supplied by Mondo, bonded in place using ADESILEX G20\*.

**TECHNICAL DATA**

**Work:** laying rubber floorings  
**Period of works:** 1<sup>st</sup> semester 2008  
**Customer:** BOCOG (Beijing Organizing Committee for the XXIX Olympic Games)  
**Installed Materials:** rubber sport floorings (Mondoflex) supplied and laid by Mondo (Italy)  
**Mapei Product:** Adesilex G20



 Olympic Centre Stadium - Tianjin

Construction of the stadium started in 2003. It covers an area of 78,000 m<sup>2</sup>, with seating available for 60,000 spectators. The stadium was designed by the Japanese studio Axs Sawto Inc. As required by the customer, it takes into account its impact on the local environment, and is equipped with ultra-high technology equipment.

When lit up at night, this imposing structure reminds the observer of a bird's eye, and hosted the qualification matches of the soccer event during the Olympics. The rubber track was supplied by Mondo for a total surface area of approximately 12,700 m<sup>2</sup>, and was bonded in place using ADESILEX G19\*.

**TECHNICAL DATA**

**Work:** laying rubber sport tracks  
**Period of works:** 1<sup>st</sup> semester 2008  
**Customer:** BOCOG (Beijing Organizing Committee for the XXIX Olympic Games)  
**Installed Materials:** rubber sport tracks (Sportflex Super X) supplied and laid by Mondo (Italy)  
**Mapei Product:** Adesilex G19

 Beijing Sport University - Beijing

This university campus, where Chinese students have graduated in various sporting majors since 1953, was the scenario for pre-event training sessions during the Olympics, for the Italian and the Chinese Olympic squads. The Chinese 110 metre hurdles runner Liu Xiang also trained here. Various indoor and outdoor rubber tracks were supplied by Mondo, and bonded using ADESILEX G19\*.

**TECHNICAL DATA**

**Work:** laying rubber sport tracks  
**Period of Works:** 1<sup>st</sup> semester 2008  
**Customer:** BOCOG (Beijing Organizing Committee for the XXIX Olympic Games)  
**Installed Materials:** rubber sport tracks (Sportflex Super X) supplied and laid by Mondo (Italy)  
**Mapei Product:** Adesilex G19



## Shanghai Stadium - Shanghai

This international stadium, built in 1997 for the eighth edition of the People's Republic of China National games, can seat 80,000 spectators; hence its nickname "the 80,000 people stadium". It is one of the biggest stadiums in the world and the second biggest in China (after the National Stadium). It hosted various qualifying matches for the Olympic Games soccer event. The new rubber track was supplied by Mondo for a total surface area of approximately 16,000 m<sup>2</sup>, and was bonded in place using ADESILEX G19\*.

### TECHNICAL DATA

**Work:** laying rubber tracks  
**Period of works:** 1<sup>st</sup> semester 2008  
**Customer:** BOCOG (Beijing Organizing Committee for the XXIX Olympic Games)  
**Installed Materials:** rubber sport tracks (Sportflex Super X) supplied and laid by Mondo (Italy)  
**Mapei Product:** Adesilex G19

## Mapei products at the Olympic Games

The products mentioned in this article belong to the "Products for Ceramic Tiles and Stone Materials" and "Products for the installation of resilient, textile and wood floors and wall coverings" ranges.

The technical data sheets are available on the "Mapei Global Infonet" DVD or at the web site: [www.mapei.com](http://www.mapei.com).

Mapei's adhesives and grouts conform to EN 12004, EN 12002 and EN 13888 standards.

**Adesilex G19:** two-component epoxy-polyurethane adhesive for rubber or PVC floorings. A quick version of this product is also available.

**Adesilex G20:** low viscosity two-component epoxy-polyurethane adhesive.

**Fugolastic:** liquid polymeric additive for Keracolor FF and Keracolor GG.

**Granirapid (C2F, S1):** high performance, deformable, fast setting and hydration two-component cementitious adhesive for ceramic tiles and stone material.

**Keracolor GG (CG2):** high-performance cementitious grout, polymer modified, for joints from 4 to 15 mm.

**Primer G:** synthetic resin-based primer in water dispersion.

**Ultraplano:** ultra-fast hardening (12 hours), self-levelling smoothing compound for thicknesses from 1 to 10 mm.



## Shenyang Stadium - Shenyang

This structure can now hold up to 60,000 spectators, and was built in little more than one year, just in time to host some of the qualifying matches for the Olympic soccer event.

The new rubber track was supplied by Mondo for a total surface area of approximately 16,000 m<sup>2</sup>, and was bonded in place using ADESILEX G19\*.

### TECHNICAL DATA

**Work:** laying rubber tracks  
**Period of works:** 1<sup>st</sup> semester 2008  
**Customer:** Shenyang Wulihe Sports Development Co. Ltd and BOCOG (Beijing Organizing Committee for the XXIX Olympic Games)  
**Projects:** Shanghai Institute of Architectural Design & Research co. Ltd (China) and Ingerosec Corporation (Japan)  
**Contractor:** China State Construction First Division Construction & Developing Co. Ltd (China)  
**Installed Materials:** rubber sports tracks (Sportflex Super X) supplied and laid by Mondo (Italy)  
**Mapei Product:** Adesilex G19

