

INTERNATIONAL

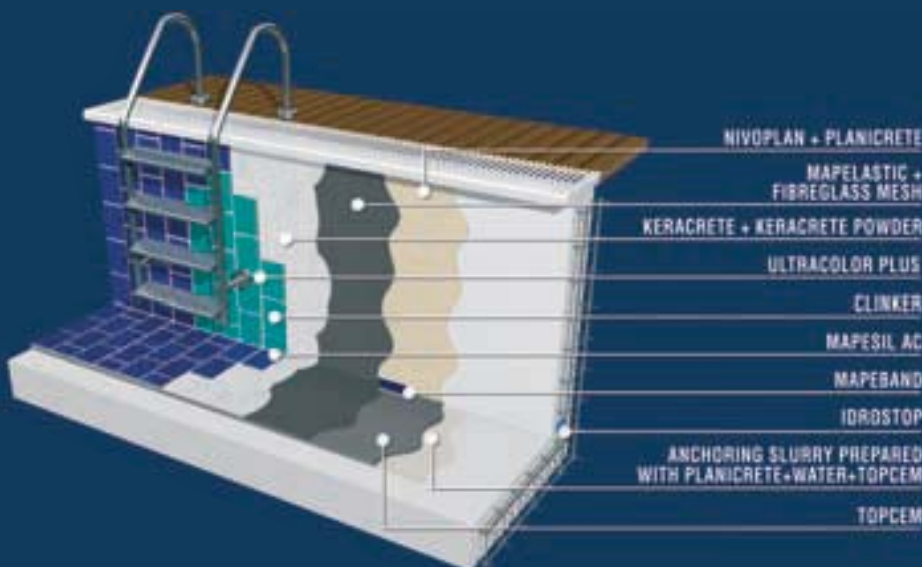
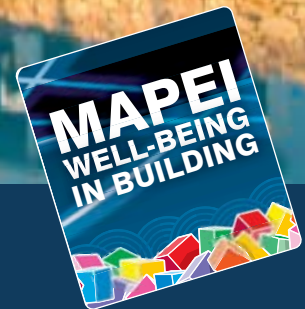
REALTÁ MAPEI

A brilliant Design ✓

“This weekend we will stay at home”



Systems for Building and Waterproofing Swimming-pools



It is wonderful to dive into the well-being Mapei can provide. When building new swimming-pools or renovating existing ones, you can rely on the Mapei System for Waterproofing Swimming-pools. This is a complete range including products for building and waterproofing reinforced concrete structures, adhesives for laying ceramics and glass mosaics, grouts for tile joints and sealants for expansion joints. Do you love your home? Mapei, sweet Mapei!

Mapei products are available from the best distributors of products for building. Mapei products must be applied by professional users.

www.mapei.com
MAPEI
ADHESIVES · SEALANTS · CHEMICAL PRODUCTS FOR BUILDING

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Main cover photo:

the photo shows floor joints grouted with KERAPOXY mixed with MAPEGLITTER, a recently launched Mapei product. MAPEGLITTER is a metalized coloured glitter which, added to KERAPOXY DESIGN, at up to 10% in weight, forms a shiny, metalized grouting mortar, which is particularly suitable for grouting metallic tiles and glass mosaic and tiles. It may also be used for wall coatings. It is available in

silver, light gold and from a choice of 22 other colours upon request.

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TRADE FAIRS AND EVENTS

Cersaie 2007 page 2

RESEARCH

The New Dust Free Technology page 10

PRODUCT SPOTLIGHT

Systems for Building and Waterproofing
Swimming-pools inside front cover

Mapelastic page 21

Granirapid page 30

Kerapoxy Line inside back cover

Keraflex Maxi S1 back cover

TEAMWORK

Mapei Polska is Doubling up page 12

THE EXPERT'S OPINION

Waterproofing Damp Environments page 18

Screeds for Laying Floors page 34

PROJECTS

Water and Wellness: Swimming-pools in Poland page 16

Colour in Airport page 22

Colour and Protection for the Nouveau Atelier page 26

A Fast and Stylish Installation page 28

Shopping in Attica page 31

Villa Torlonia page 36

ART AND CULTURE

An Historical Performance of Aida page 40

From Busseto to South America page 42

SPORT DIVISION

Mapei Day 2007 page 44

Treviso 2008 UCI Cyclo-Cross World Championships page 52

www.mapei.com

The Mapei web site contains all the information about the Group's products, its organisation in Italy and overseas, its involvement in the sector's main trade fairs and lots more.



CERSAIE 2007



25 years of
Cersaie and
70 years of
Mapei:
two success
stories
destined to
last



Cersaie, the international exhibition of ceramic tile and bathroom furnishings confirmed, with three new records, the importance of this trade fair which was held from the 2nd to the 6th of October this year in Bologna.

In 2007, the year which marks the 70th anniversary of the founding of Mapei, Cersaie also celebrated an important milestone: its 25th anniversary. The coincidence of two such important celebrations made the Milan Company's presence at this year's event in Bologna even more appreciated and more meaningful than usual.

Cersaie 2007 set a new record for the overall number of visitors, sector operators from overseas and for Italian and foreign journalists.

In fact, a total of 91,935 visitors (+ 1.1%) crowded the exhibition halls at the Bologna expo centre.

This is a new record for the Cersaie editions held over 5 days, a performance which may be considered even more important by the increasing international feel and quality of visitors which was registered.

Amongst those who crowded the stands representing 1,078 companies from 32 different countries, were 27,121 foreign professional operators (+3.7%), a further growth compared

with the record established last year, and which is now 29.5% of the total. So Cersaie is widely recognised as one of the most international gatherings in the world.

The quality of the Italian operators which participated was also very high, with 59,345 present, an increase of 0.4%.

The number of journalists present also increased: the 604 official journalists at the 2006 edition increased to 632 (+4.63%), thanks to a larger presence of both Italian journalists (360 in all, +7.8%) and foreign journalists: 272 representatives of the international information circuit, which now represents 43% of the total.

The general public was present in large numbers for the various institutional meetings, starting with "Liberalisations: where are we today?", the convention held on Tuesday, 2nd of October, chaired by Giuseppe Turani, a journalist who writes for "La Repubblica" (one of the most popular Italian daily newspaper). Participants included Luca Cordero di Montezemolo, President of Confindustria (Confederation of Italian Industry), Innocenzo Cipolletta, Chairman of Ferrovie dello Stato (Italian State Railways), Francesco Giavazzi, a journalist who writes for "Il Corriere Della Sera" (another very popular

Italian daily newspaper) and Alfonso Panzani, Chairman of Confindustria Ceramica (the Association of Italian Ceramic Tile and Refractory Material Manufacturers).

More than 200 people took part at the International Press Conference, held in the afternoon on Tuesday 2nd of October, in the Palazzo Re Enzo in Bologna. Speakers included Alfonso Panzani, Vittorio Borelli, Chairman of Confindustria Ceramica's Promotional Activities Committee, Giorgio Squinzi, President of Federchimica (Italian Federation of Chemical Industry) and CEO of Mapei, Massimo Mamberti, General Director of ICE (Italian Institute for Foreign Trade), and Franco Vantaggi, General Manager of Confindustria Ceramica.

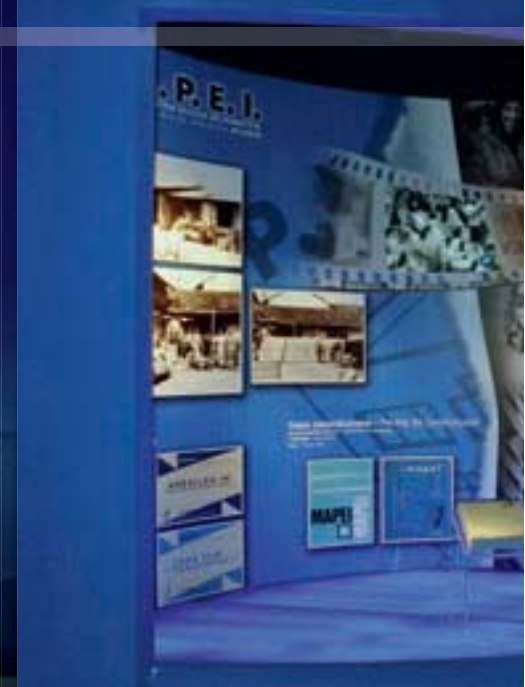
Sala Italia in the Congress Centre was also full to bursting point, where the Lectio Magistralis entitled "Architecture and Memory" was presented on Thursday, 4th of October by the architect Mario Botta, introduced by Alfonso Panzani and chaired by Prof. Aldo Colonetti, Director of the specialised sector journal "Ottagono".

Mapei at Cersaie 2007: A Memorable Exhibition

For Mapei, Cersaie has always been an important date on the calendar,

1937 • 1946

TRADE FAIRS



when for numerous appointments the Company is regarded as the leading performer. This international event is also a crucial moment where a year's work may be carefully analysed, while planning ahead for the near future. It is also the chance for the entire Group to get together, to gather around Giorgio Squinzi, and to live an intense experience where exchanges and acquaintances are reinforced as a form of belonging to the Group, in the full knowledge of being part of "a great team". And apart from these reasons, Cersaie is also an important occasion from a purely communicational point of view.

In fact, Cersaie offers a perfect occasion to fully express Mapei's image, and to offer visitors the chance of capturing, with just a single glance, what is the real spirit which drives the Company. For Mapei, the XXV edition of the

Bologna trade fair was really memorable, both for the number of visitors which crowded the stand each day of the event, and for the beauty of the image the Company wanted to project. In 2007, the year which marks the 70th anniversary of the founding of the Milan Company, the Mapei stand hosted a really special and unique event.

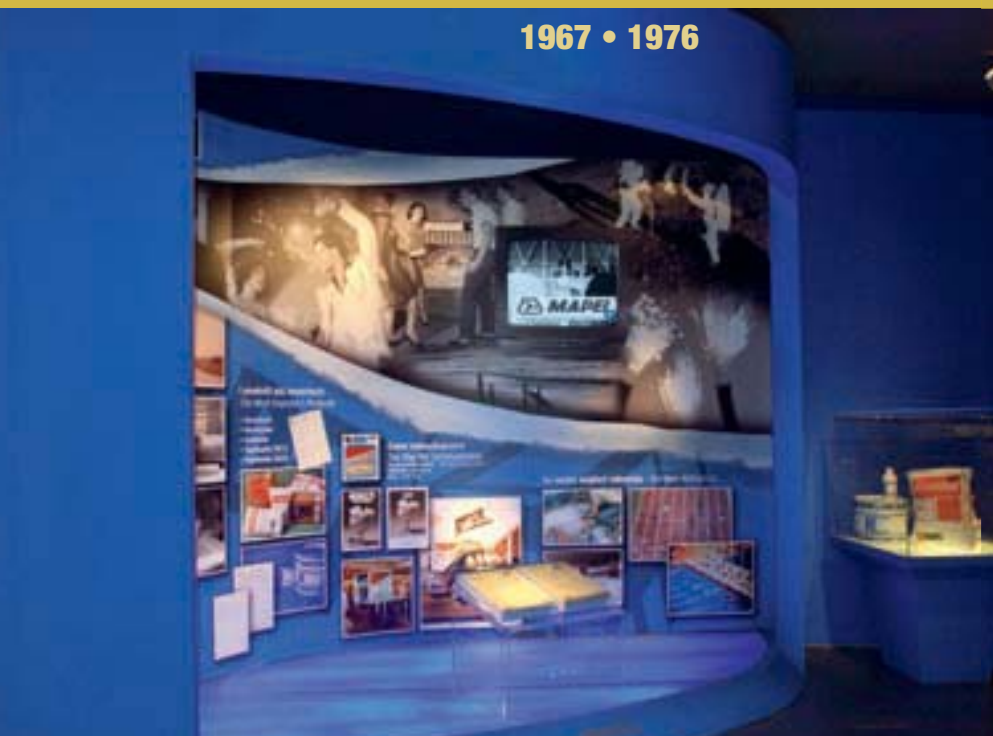
The Mapei staff had been hard at work for months to make Giorgio Squinzi's wish come true: to share all the excitement and memories of 70 years of history with all the professionals from the world of ceramics, and with their clients and friends who all paid a visit to the stand.

In the entrance to the exhibition area there was an enormous sepia-coloured photo, with the founder of Mapei Rodolfo Squinzi together with his first group of employees, pictured in front of the original Mapei headquarters

in Via Cafiero, Milan. And alongside, there stood a carefully repaired old-fashioned FIAT 1100 E, reproducing the Company's first van. This was a special gift from the Puttini family (owners of Saces, Mapei sales agent for the Campania region). Opposite the photo, the very same kind of van was on display in all its splendour, restored to its original pristine condition, with the back loaded with the first products developed by Mapei 70 years ago.

It proved to be an emotional jump into the past which, right from the first impact, transmitted to the visitors not only an historical, fascinating image of the Company, but also expressed how Mapei, right from its humble beginnings, has concentrated its story on a world of principles, with the common and continuous element of giving value to the men and women which are part of the story.

1967 • 1976



1977 • 1986



1947 • 1956



1957 • 1966



This was a common theme to the way the Mapei stand was dressed, a historical exhibition where, on a basis which let the visitors follow a visual image of the most important historical moments from the last century, highlighted the success of the Company. A success story, which since 1937 has arrived to where we are today, ready to enter the future driven by three fundamental principles: specialisation, internationalisation and, above all, research. Since 1937, the Mapei story was unravelled by highlighting the most important stages, the milestones achieved, decade by decade.

The visitors who entered into the enormous Mapei exhibition area enjoyed a real journey through time. The circular, clockwise layout of the route, made up of a series of islands, recreated the individual atmosphere of each decade, for a multi-medial happening with enor-

mous impact. For example, there was SILEXCOLOR in its original packaging: Mapei's first product, created in 1937 and used in the construction of the Maggiore Hospital in Milan, while a radio played music from the same era. Further ahead, the historic ADESILEX P9 could be found, which in 1959 signalled the start of the end of traditional sand and cement laying technique for ceramics, making way for more reliable laying using pre-blended adhesives. Meanwhile, a black and white television transmitted images of Carosello (a very popular Italian television programme broadcasted in 1957-1976), the famous Italian cyclist Fausto Coppi and the Beatles, along with the Pirelli Skyscraper in Milan, one of the most prestigious projects carried out in those times under the supervision of Mapei. While the journey through time continued, step by step, and we finally got

to the present, with the KERAPOXY line, a series of epoxy adhesives and grouts, revisited and increased.

Finally, Mapei technology and research was projected into the future. The innovative **Dust Free** technology was presented at international level, a process developed in Mapei's own R&D laboratories to improve life on site. And we couldn't leave out a glance at an important reference of the future, the sports facilities for the Beijing 2008 Olympic Games.

6th Reference Grand Prix Awards

As usual, Cersaie proved to be the perfect occasion to reunite all the technical-commercial strength of the Mapei Group, from all four corners of the world.

On the outskirts of Bologna, in the beautiful setting of Palazzo Alberghati, one of the most important and original



1987 • 1996



pieces of architecture from the 17th century in Emilia region, prizes were awarded to the most important references of the year.

This was the occasion of the 6th Reference Grand Prix Awards, where numerous prizes were awarded for the most important building projects which, together with the contribution of the technical personnel from the Company, included the use of Mapei products and systems.

The next editions of Realtà Mapei will dedicate a series of articles to those sites which received awards.

New technologies and New Products

Even though the communicational impact of the Mapei exhibition stand was based on the Company and on the various steps which, decade after decade, have determined its growth, certain innovative products and systems were at the centre of attention.

The area of the stand entitled "the present which is already the future" in particular deserves a special mention. The latest results from Mapei research include the new **Dust Free** technology, which allows for a drastic reduction in the amount of dust given off during production, mixing, blending and application (in-depth article on page 10).

This technology improves life on site by eliminating a number of irritating problems, especially during restructuring work. In fact, from demonstrative tests carried out, the **Dust Free** products produced by Mapei reduce the amount of dust which is normally released during pouring, mixing and application phases of powdered products by 90%.

In keeping with the principles which

have always inspired the Company, Mapei continues to follow this commitment to respect the environment and man, in accordance with various quality systems. In fact, less dust given off means less dust inhaled and increased safeguard for the environment.

The new **Dust Free** technology presented at Cersaie will be progressively applied to the whole range of powder products for laying ceramic tiles and stone material, starting with KERAFLEX MAXI S1. This product represents the forerunner for Mapei. In fact, this high-performance, deformable, cementitious adhesive, with no vertical slip and extended open time for ceramic tiles and stone material is now available with **Dust Free** technology. KERAFLEX MAXI S1 is spread on at a thickness of from 3 to 15 mm, and is particularly recommended for laying large-size porcelain tiles and stone material (see further details on page 11).

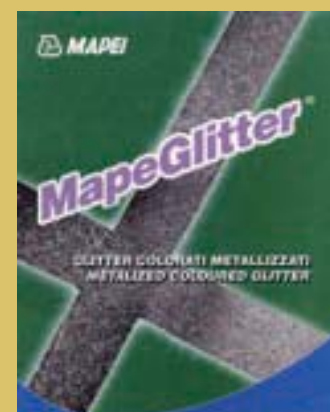
The enhanced KERAPOXY LINE of products (for further details see the inside back cover) was presented at the trade fair, with a series of new products, for bonding and grouting tiles in special residential and industrial environments, subject to all types of traffic and, above all, which require high chemical resistance to all kinds of dirt, oil and acids.

Three new products for the range were presented, starting with KERAPOXY IEG, two-component epoxy mortar with extremely high resistance to chemicals for grouting tile joints at least 3 mm wide. It is the ideal product for industrial applications, and is extremely resistant to acids. Another new product is KERAPOXY ADHESIVE, a two-component epoxy adhesive with no vertical slip, for ceramic tiles and stone material. It is also the ideal solution for fast-setting bonding of special pieces and tiles in fibreglass. Finally, there was KERAPOXY DESIGN, two-component, satin-finish, translucent epoxy mortar for grouting glass mosaics, ceramic tiles and stone material, available in 7 different colours plus a neutral coloured version.

There was also an update in the documentation which presented another product from the range, KERAPOXY P. This is a two-component, acid-resistant epoxy mortar for joints at least 3 mm wide, which is easy to apply and easy to clean. This product is used for large surface areas, is ideal for industrial applications and is very easy to trowel on.

Amongst the new "coloured" products presented at Cersaie, a special mention must go to MAPEGLITTER metalized coloured glitter, to which the cover of this issue of Realtà Mapei International is devoted. A highly attractive gold-coloured slab was presented on the stand, which was a perfect example of what this spectacular and versatile product can do.

A favourite amongst architects, designers and decorators, this new product, added to KERAPOXY DESIGN, at up to 10% in weight, forms a shiny, metalized grouting mortar, which is particularly suitable for grouting metallic tiles and glass mosaic and tiles. MAPEGLITTER may also be used for wall coatings. It is available in boxes containing 10x100 g sachets. It is available in silver, light gold and from a choice of 22 other colours upon request.







**ARCHITECTURE AND MEMORY:
MARIO BOTTA AT CERSAIE 2007**

On Thursday, 4th October the conference entitled "Architecture and Memory" was presented in the Sala Italia conference hall in the Bologna Congress Centre, with a Lectio Magistralis presented by Mario Botta, the renowned Swiss architect, also author of numerous works in all five continents.

"The past as a friend". This significant phrase by Louis I. Kahn, one of his mentors, was the starting point for a reflection by Mario Botta, who underlined and explained the meaning of the relationship which binds architecture to the concept of memory. Architecture and memory as an inseparable combination, because any transformation actuated by architecture becomes a part of the human landscape. "The past, remembered not with nostalgia, but as a root, a structure, an identity which transmits values, a matrix for every human intervention". For Botta, architecture means dialoguing with the present, that is, the sedimentation of experiences and languages which constitute the context, the reference point for the project.

The final part of Botta's speech led on to meta-history when he underlined the special cultural qualities in Europe, declaring that: "Man does not only require technical and functional answers, there are components of history, both symbolic and metaphoric, which are maybe more important than the ease with which we may receive a certain service. In the comparison between global and local, the latter is surely victorious, but this should not let us fall into easy nostalgia, as the memory does not leave us isolated".

Below. Restoration of the Teatro alla Scala in Milan was just one of the latest, successful projects by Mario Botta. Mapei contributed to this project with all the innovative technology offered by its products.



**THE INAUGURAL CONVENTION
AND THE CONFINDUSTRIA CERAMICA
DISTRIBUTORS AWARD**

Cersaie opened, as is now the tradition, with an inaugural convention and the ceremony for the Confindustria Ceramica Distributors Award.

"Liberalisations: where are we today?", with participants which included Luca Cordero di Montezemolo, President of Confindustria, Innocenzo Cipolletta, Chairman of Italian State Railways, Francesco Giavazzi, an opinionist who writes for "Il Corriere Della Sera" who, together with Alfonso Panzani, Chairman of Confindustria Ceramica, held a discussion chaired by Giuseppe Turani, an editorialist from "La Repubblica", to "check where we are" in consideration of the current and future actions to be taken in Italy. The meeting was rounded off with the prize-giving ceremony of the Confindustria Ceramica Distributors Award, a prize which the Association of Italian Ceramic Tile and Refractory Materials Manufacturers awards to the four European importers/distributors, chosen for promoting and spreading the Italian tiles culture, according to special criteria, such as commitment to the product, competence and professionalism shown over a period of time, reliability and trade fair practices, volume of turnover and for investments aimed at increasing awareness and use of ceramic tiles made in Italy.

And with respect to these principles, four different operators from Italy, France, Germany and Sweden were selected for the XII edition of the award. Three of those selected are important clients of the Mapei Group. A Mapei client was awarded the prize for Italy, **C.C.B. Barili Srl** from Bari, a company founded in 1962, with a turnover last year of 16.5 million Euros, 38% of which from the sale of tiles. This company has 84 employees in two show-rooms, with an exposition area of 4,500 m².

Filgres Carrelages Sarl, a distributor from Saint-Genis-Laval in France, has 37 employees and a total turnover of almost 10 million Euros, 90% of which from the trade in ceramic products. The company has four show-rooms for a total of 1,200 m².

Harry's Fliesenmarkt from Hamburg in Germany is a client of the Mapei subsidiary, Sopro. It was founded in 1962 and currently has 45 employees. The commercial network is particularly widespread and well known, with a total of 7,000 m² of exposition space.

The 2007 winner for Sweden is another Mapei client, **Konradssons Kakel AB**. Its headquarters are in Jönköping, and there are a further two branches in Stockholm and Goteborg. This distribution company was founded in 1968, and the turnover in 2007 was 17.7 million Euros, 78% of which through sales of ceramic tiles.

The company has 36 employees.



The winners of the Confindustria Ceramica Distributors Award. From the left: Dieter Stammer from Harry's Fliesenmarkt (Hamburg, Germany); Filippo Fraccalvieri from Filgres Carrelages Sarl (Saint Genis-Laval, France); in the centre Alfonso Panzani, Luca Cordero di Montezemolo, Hans Persson from Konradssons Kakel AB (Jönköping, Sweden) and Andrea Barili from C.C.B. Barili (Bari, Italy). Above, Andrea Barili with Giorgio Squinzi.





The speakers at the Ceramic Tiles of Italy International Press Conference. From the left: Giorgio Squinzi, CEO of the Mapei Group; Vittorio Borelli, Chairman of Confindustria Ceramica's Promotional Activities Committee; Alfonso Panzani, Chairman of Confindustria Ceramica; Massimo Mamberti, General Director of ICE (Italian Institute for Foreign Trade); Franco Vantaggi, General Manager of Confindustria Ceramica; Andrea Serri, Head of Confindustria Ceramica's Press Office and Publishing Activities Department.

THE CERAMIC TILES OF ITALY INTERNATIONAL PRESS CONFERENCE

The Ceramic Tiles of Italy International Press Conference was held on Tuesday, 2nd of October in the picturesque surroundings of Palazzo Re Enzo, Bologna. With an audience of 230 journalists, architects and interior designers from all 5 continents, the speakers included the General Director of ICE (Italian Institute for Foreign Trade) Massimo Mamberti, the Chairman of Confindustria Ceramica Alfonso Panzani, the Chairman of Confindustria Ceramica's Promotional Activities Committee Vittorio Borelli and the President of Federchimica and CEO of Mapei Giorgio Squinzi. They supplied an accurate picture of the trend in the ceramics sector, and the context in which the Italian ceramic tiles industry is currently operating. Results for 2006 confirm that Italy is the leading nation in international trade for quantity, with a share of 21.8% of the total volume, and above all, 38.5% of the total value. Giorgio Squinzi underlined how a large part of the global growth of Mapei is



Prize-giving ceremony of the Ceramic Tiles of Italy Journalism Award 2007. From the left: Giorgio Squinzi, Alfonso Panzani and Olga Sišova (the journalist from "Ceramics: Style and Fashion" who was awarded the prize), Massimo Mamberti and Vittorio Borelli.

due to the Company being close to the world of tiles. Squinzi also underlined how 70% of Mapei's investments in Research and Development is aimed at developing products and technologies which are compatible with the environment, through the devise of products with a low emission of volatile organic compounds (VOC) and with certified performance levels. "We are also committed to the development of products which are even closer to the new European Union's regulations regarding chemical substances. And furthermore, we are committed to the development of systems which help to reduce energy consumption". Speaking as President of Federchimica

(the Italian Federation of Chemical Industry), Giorgio Squinzi also reminded those present that "the future of the chemicals industry lies in its contribution to sustainable progress". At the end of the conference, the Ukrainian journalist Olga Sišova from the trade journal *Ceramics: Style and Fashion* was awarded the Ceramic Tiles of Italy Journalism Award 2007, which this year marked its XI edition. It is awarded for the best international article on the Italian ceramic tiles industry and on Cersaie 2006, and the article was chosen from amongst 103 articles which had been entered for the competition, written by 56 journalists from 16 different countries. RM

THE SEVEN CHAIRMEN

The 25th edition of Cersaie was also the occasion to see all 7 presidents of Confindustria Ceramica (previously called "Assopiastrelle") united together. They who have taken over the chair during the 25 years of this important event, were all toasted and congratulated during the International Press Conference.

In the photograph from left to right: Alfredo Romani, Antonio Camellini, Sergio Sassi, Francesco Zironi, Franco Vantaggi, Alfonso Panzani, Angelo Borelli and Oscar Zannoni.



FROM THE MAPEI LABORATORY EXPERIENCE

AN INNOVATIVE TECHNOLOGY: “Dust Free”



INCREDIBLE DUST REDUCTION (90%) DURING POURING, MIXING AND APPLYING

After developing innovative technologies such as the deformable and highly deformable, class S1 and S2 (according to EN 12002 European standard), one-component adhesives; the highly deformable, lightweight and extremely high yield, one-component adhesives ULTRAFLEX S2 MONO and ULTRAFLEX S2 QUICK; the BioBlock® and DropEffect® technologies, which further improve the excellent characteristics of grouts for tile joints; the ECO products for resilient wall and floor coverings, today Mapei presents one more innovation.

The **Dust Free** technology improves site conditions, eliminating many uncomfortable situations, especially during restoration. In fact, according to our tests, our **Dust Free** products reduce 90% of dust normally released during manufacturing, mixing and applying a powder-based product.

Advantages

- Less dust during pouring
- Less dust during mixing
- Less dust on site, for both new buildings and restoration in inhabited areas

Less dust released means less dust inhaled and greater safeguards for the environment.

Therefore, this advanced technology confirms Mapei's endorsement for environmental and human wellbeing, according to different quality systems: the Environment Management System in accordance with the ISO 14001 standard, the Environmental Management and Audit Scheme or EMAS, the Integrated Environmental Authorisation or A.I.A. (Autorizzazione Integrata Ambientale) pursuant to the Italian Law decree 372/99 (IPPC: Integrated Pollution Prevention and Control) and OHSAS (Occupational Health and Safety Assessment Series) 18001 Standard and CE 761/01 (EMAS 2) Regulations.

The new **Dust Free** technology will be applied to the complete range of cementitious products for the installation of ceramic tiles and marble.

The first product is KERAFLEX MAXI S1, the high performance, cementitious adhesive of class C2TE according to EN 12004 (improved cementitious adhesive, slip-resistant with extended open time) and class S1 according to EN 12002 (deformable), and now also **Dust Free**.



Keraflex Maxi S1



External installation of clinker tiles



Installation of hand made terracotta tiles on an uneven screed



External installation of relief terrazzo "graniglie" tiles



Thickly applied porcelain tiles on a wall



Installation of external hewn back stone with buttering

High performance, deformable cementitious adhesive, with no vertical slip and extended open time for ceramic tiles and stone material, now with **Dust Free** technology. It allows dust reduction during mixing, making it easier and safer for the installer. **Dust Free** technology further improves the product's performance.

Particularly suitable for the installation of large sized porcelain tiles and stone material (thickness of adhesive from 3 to 15 mm).

Applications

Interior and exterior floor and wall bonding of all types and sizes of ceramic tiles and ceramic mosaics, stone material (as long as it is moisture stable) on conventional walls with cementitious renders, cementitious screeds, anhydrite screeds and gypsum walls (as long as they are primed beforehand), interior walls in aerated concrete blocks, gypsum boards, underfloor heating systems, painted interior walls (as long as the paint is well anchored), existing marble, terrazzo and ceramic floors, substrates waterproofed with MAPELASTIC, MAPELASTIC SMART or MAPEGUM WPS and on suitably cured concrete structures. Particularly suitable for the installation of floors subject to heavy traffic and loads.

The innovative Dust Free technology feature of this adhesive, results in a considerable reduction of powder emission during mixing, making it easier and safer for the installer.

Technical data

- **Pot life:** over 8 hours
- **Open time:** ≥ 40 minutes
- **Grouting on walls:** 4-8 hours
- **Grouting on floors:** 24 hours
- **Set to light foot traffic:** approx. 24 hours
- **Ready for use:** approx. 14 days
- **Deformability according to EN 12002:** S1 - deformable
- **Colours:** grey and white
- **Application:** notched trowel No. 4 or 5 or 6 or 10
- **Storage:** 12 months

Consumption

1.2 kg/m² per mm of thickness

Packaging

KERAFLEX MAXI S1 grey: 25 kg bags
KERAFLEX MAXI S1 white: 23 kg bags

KERAFLEX MAXI S1 is CE marked as declared in ITT certificate No. 25070387/Gi (TUM), issued by the Technische Universität München (Germany)





WARSAW

Mapei Polska (Commercial office)

TRZEBINIA

Górk Cement
(Cement plant)

GLIWICE

Mapei Polska (Plant)

MAPEI POLSKA IS DOUBLING UP

The manufacturing plant in Gliwice has been extended and a training centre has been opened for the Polish subsidiary

The official ceremony to mark the end of the extension works on the Mapei Polska manufacturing plant, one of the Mapei Group's subsidiaries, was held on 14th September in front of over 800 guests in Gliwice, a city in the Slesia region of southern Poland.

This is another step forward in the Company's ambitious project to invest on the Polish market, which began in 2000 when Mapei Polska was established and continued through the purchase later that same year of Górk Cement, a manufacturer of aluminous cement, which is now used as a raw material by lots of factories belonging to the Mapei Group.

Rapid Growth

In just a few years the Polish subsidiary has come right to the very fore in Poland, not just on the market for products for installing ceramics but also on the market for waterproofers, wall coatings and solutions for installing resilient and parquet floors.

Just four years after the Gliwice plant opened in April 2003 (see the article in Realtà Mapei International no.14), the brilliant results achieved by Mapei Polska have enabled Mapei to consolidate its position in Poland and, consequently, further investments have had to be made in the manufacturing facilities to support the subsidiary's rapid growth.

For the Mapei Group, Poland is fourth in terms of turnover and investments of all its markets worldwide, after Italy, the United States and Germany. This is due to the presence not only of Mapei Polska and Górk Cement, but also Sopro Polska, a company that became part of the Mapei Group after it purchased Sopro in 2002.

The Mapei Group currently has over 500 staff working in Poland. Mapei Polska hopes to exceed a turnover of 35 million in 2007 and, thanks partly to recently made investments, it plans to increase this by a further 30% the following year.

Mapei Polska's goals are very ambi-

tious: the Company plans to increase its market share and, by implementing the full range of Mapei products locally, it plans to become the leading Company in Poland as regards not only grouting products but also adhesives and chemical products for the building industry, for which Poland is certainly a very receptive market.

Mapei Polska focuses on a wide range of products designed for both professionals working in the sector and customers from the very lucrative and well-developed "Do it yourself" market in Poland.

New Lines, New Machinery, New Ramps, New Spaces

Thanks to recently starting up a new line for manufacturing adhesives and the modernizing of an old-line, Mapei Polska's production capacity has reached an annual turnover of 250,000 tons.

A new machine for fitting PVC sheets over product pallets has also been installed at the Gliwice plant, so that

Photo 1. The Mapei Polska plant in Gliwice.





2

Photo 2. The press conference organized by Mapei Polska. Those attending were (from right): Giorgio Squinzi, CEO of the Mapei Group; Artur Olubek, General Manager of Mapei Polska; Veronica Squinzi, Manager of Strategic Planning for the Mapei Group and Chairman of the Board of Directors for Mapei Polska; Piotr Kuglin, Head of Technical Service for Mapei Polska.

Photos 3, 4 and 5. Pictures of the visit to the factory. In photo 3, from right: Piotr Wojaczek, President of the Katowice Economic Area; Giorgio Squinzi and Veronica Squinzi. In photo 4: Riccardo Ardito, Mapei SpA's Export Area Manager for Poland; Marco Squinzi, Director of Research & Development for the Mapei Group and President of the Board of Directors of Górka Cement; Enrico Geronimi, Mapei SpA Technical Service.

the products can be completely covered and protected. This means the pallets can also be stored outdoors: a real advantage for Mapei customers, who often find themselves forced to store products in either confined spaces or outdoors.

The production line for grouts has also been completely automated and enhanced to cover an annual turnover of 20,000 tons. The installation of a powerful new robotic system also allows smaller packets of grouting products to be packed in pallets, meeting the demands of a market for which service is certainly taking on increasing importance in helping gain a competitive edge.

This increase in production follows closely in the wake of the great success of Mapei grouts in Poland, particularly ULTRACOLOR PLUS (fast-setting, anti-efflorescence grout, water-repellent with DropEffect® and anti-mold with BioBlock® technology), allowing the Company to gain a leading position thanks to the quality of its products,

acknowledged on this market too.

The increase in production goes hand in hand with an increase in the amount of space allocated for storage (the existing 7,000 m² will be extended by a further 5,000 m² of covered spaces) and an improvement in logistics for entering and exiting the plant: 4 new ramps will allow Mapei Polska to load and unload over 150 lorries-a-day.

The Gliwice factory can now manufacture, with even greater flexibility and speed, products specifically designed to meet the needs of the Polish market such as the adhesives for ceramics MAPEKLEJ EXTRA (C1 class accord-

ing to the EN 12004 regulation) and ADESILEX P9 EXPRESS (classed as C2FT and designed to meet the need for fast-setting, C2 class adhesive), MAPETHERM DO STYROPIANU and MAPETHERM DO SIATKI (both belonging to the MAPETHERM range, designed to meet the growing local demand for building insulating materials and used, respectively, for bonding and then smoothing polystyrene panels) and wall coatings for them, such as QUARZOLITE TONACHINO and SILEXCOLOR TONACHINO, featuring special granulometry and properties ideal for the local market.



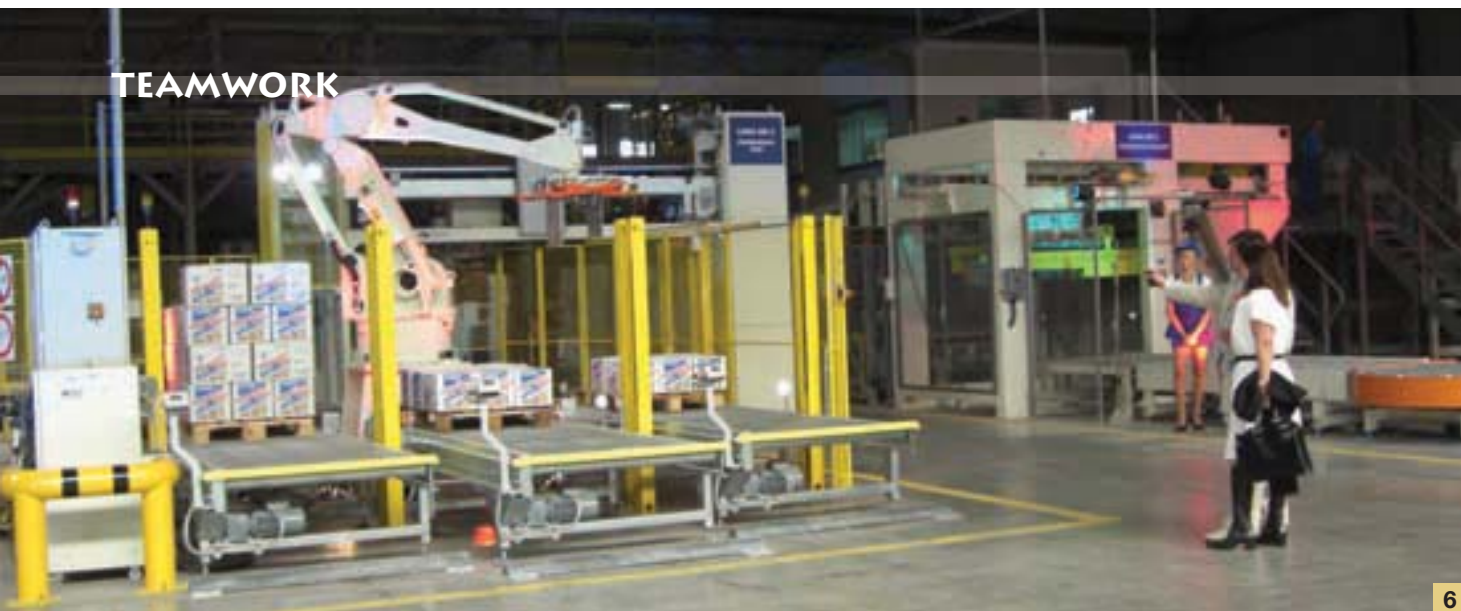
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4



5



6

Photo 6.
The two new machines for packing products in pallets, recently introduced in the plant in Gliwice.



7

Photo 7.
Mapei Polska's new training room.

Photos 8 and 9.
An outdoor demonstration with the new Mapei Polska's training car.

outdoor presentations in a dynamic and professional way: it can be set up in 30 minutes, complete with tables, chairs, plasma screen TVs and special stages for demonstrations.

A sheltered area can also be set up in case of rain.

During 2006 Mapei Polska organised over 1,200 technical training meetings attended by a total of 12,000 professionals working in the sector. These two new tools will allow the Polish subsidiary to strengthen its capacity to interact and provide training for professional installers.

"Indoor" and "on the road" training

As well as a manufacturing area and administration offices, the new headquarters in Gliwice also have a new and extremely modern training room, which has now been officially opened. This is a refined and at the same time modern and technological facility, which, with its 50 seats, will host training operations specially devised for Mapei installers and customers in southern Poland.

The main room leads off from another room organised like a modern showroom, where, in a setting characterized by artificial lights and an elegantly coloured floor made with a Mapei epoxy-polyurethane system (MAPEFLOOR DECOR SYSTEM 70), visitors are accompanied along both sides by huge sheets presenting the Company's main products for installing ceramics, wall coatings and solutions for concrete repair.

Mapei has always focused plenty of attention on training, which becomes a vital part of its strategy for expanding on the various markets where it operates. As proof of this strategic choice, alongside the training room there is also a brand-new training truck at the Gliwice plant, which, like a travelling

school, will travel all over Poland from north to south and from east to west, meeting customers and providing the chance (even in the most suburban areas) to take part in training activities.

The training truck (which weights 12 tons) is specially designed for hosting



8



9

Party!

The opening ceremony took place in a festive atmosphere: an outdoor barbecue was set up outside the plant and, amidst all the music, technical demonstrations and fun entertainment provided by a professional cabaret artist, the over 800 guests, including plenty of local authorities and journalists, visited the plant, training room and training truck.

Then, journalists from various local papers and magazines attended the press conference organised in the training room, during which members of the Board of Directors of the Mapei Group and Mapei Polska made speeches. Giorgio Squinzi, the Group's CEO, took the chance to outline the reasons why the Company decided to make such a big investment in this country: its great commercial potential (the Polish building industry can boast one of the highest growth rates in Europe); the availability of a qualified labour force and high-quality raw materials; its driving force in relation to other markets in Eastern Europe (Mapei Polska actually supplies even Baltic nations, Slovakia, the Czech Republic and Ukraine).

At the end of the day, in a room surrounded by striking shelves over 12 m high and full of pallets of ULTRACOLOR PLUS and other leading Mapei products, a big party began with a meal, entertainment provided by well-known performers and two very popular music groups in Poland: T-Love and Kombi. The evening provided a perfect opportunity for Squinzi to let everybody know how fond he is of Poland and to emphasize the importance of this market for the Company, which has here already reached some excellent goals. Veronica Squinzi, the Mapei Group's Strategic Planning Manager and Chairman of Mapei Polska's Board of Directors, played a key role in achieving success, always believing in this market's potential and managing to achieve targets which no other foreign Company has ever achieved in such a short period of time.

Another key figure directly involved in business in Poland is Marco Squinzi, Director of the Mapei Group's Research & Development and President of the Board of Directors of Górk Cement.

Developing local management was certainly essential for Mapei Polska's success, completely in accordance with one of the guiding principles of Mapei's corporate philosophy: a global Company which acts locally (hence



Photo 10.

The meal laid on at the end of the day at the Gliwice factory.

Squinzi's motto: "We are Italians in Italy, Americans in America, Polish people in Poland". It is also worth remembering Artur Olubek, General Manager of Mapei Polska and a key figure in the organisation of its subsidiary, as well as Agata Modrzejewska, Head of Marketing Department and the one in charge of organizing this

highly successful event, and Miroslaw Faluta, Business Manager of the Mapei Polska.

2010, the year when Mapei's "Vision 2010" development strategy will be fully implemented, is not far away, so full speed ahead..... let's hope the wind from the east will really blow hard!!!



NIGHT OF THE CHAMPIONS

The various marketing operations recently organised by Mapei Polska included the so-called "Mapei Night of the Champions", a sports event which was attended, amongst all the other numerous spectators, by 157 customers, business partners and friends of the Polish subsidiary. A prestigious boxing match was organised on the 26th of May between two famous boxers Krzysztof "Devil" Włodarczyk and Steve Cunningham, which received plenty of coverage from the papers, TV and radio. Mapei Polska was the event's official sponsor and it took the chance to make the most from a business viewpoint of what was the biggest gala evening of boxing ever held in Poland, through special sales promotions and ads drawing on various means of communication. Plus, the Mapei trademark was clearly on show throughout the entire evening inside the arena in Gliwice, backed up by lots of banners, posters, balloons and special programs for the boxing match. The exclusive nature of the event and the electric atmosphere helped make it a glowing success: Mapei Polska's guests all said they were delighted at getting the chance to attend the "Night of the Champions".



WATER AND WELLNESS

The most prestigious Polish hotels, in line with a Middle-European tradition, are devoting ever more room to luxurious swimming pools and areas for body relax and care.

For installing, waterproofing and decorating swimming-pools' surfaces, Mapei developed specific product systems guaranteeing ease of application, excellent and long-lasting performances and a pleasant final look. Due to these characteristics, Mapei solutions have been highly appreciated on the international market since their introduction and were used in many building sites in several countries. For instance, in Poland the Company's products contributed to build lots of swimming pools in prestigious hotels.

The completion of swimming-pools' surfaces in Polish hotels usually includes the following phases:

1. Preparation of the substrates. First of all, the traces of cement wash, contaminants, oil and grease are removed from the concrete substrates. All unevenness is eliminated with a levelling mortar made of PLANICRETE synthetic-rubber latex, water, Portland cement and sand, after applying a binding bridge made of PLANICRETE, water and Portland cement.

2. Waterproofing the substrates. A 1x1 cm groove is made round all passages of pipes, jets and geysers and completely filled with KERAPOXY epoxy mortar, in order to protect them from the risk of cracks due to the vibrations. Three layers of MAPELASTIC waterproofing flexible cementitious mortar are applied on the remaining substrates, adding an alkali-resistant fibreglass mesh to the second layer. In several cases MAPEBAND rubber tape is applied on the corners of the basins for ensuring complete waterproofing.

3. Laying glass mosaics and ceramic tiles. The white shade of GRANIRAPID adhesive is used for bonding most of the mosaic and ceramics tiles. When installing transparent mosaic, instead, a different colour shade of KERAPOXY (here used as an epoxy adhesive) is chosen to create the aesthetic effect required by the architects responsible of the pools' projects. When laying ceramic tiles on very large surfaces, such as in the case of the beaches (i.e. the floorings beside the pools' basins), KERAFLEX adhesive is chosen

4. Grouting tile joints and sealing expansion joints. Tile joints are usually grouted with KERAPOXY mortar, which is especially suitable wherever total hygiene and resistance to chemical substances is required. The larger surfaces are instead grouted with ULTRACOLOR PLUS high-performance, anti-efflorescence grout, which is water-repellent with DropEffect® and anti-mold with BioBlock® technology. The flexible connections between horizontal and vertical surfaces on the swimming pools' beaches or non-monolithic basins are filled with MAPESIL AC solvent-free, acetic-cross-linking mildew-resistant silicone sealant. This product in Poland is available in 30 colours (26 colours in the rest of the world) and transparent, perfectly matching the shades of KERAPOXY and ULTRACOLOR PLUS.

The six reference projects portrayed in these pages have been carried out by the building company MOZ-BUD from Katowice (Poland), using Mapei systems for swimming pools.



Swimming pool at Hotel Habenda – Budzyn

The following products were used to build this swimming pool: PLANICRETE as an additive to prepare the substrates; MAPELASTIC and MAPEBAND for waterproofing them; GRANIRAPID white and KERAPOXY for bonding glass mosaics; ADESILEX P4 for installing porcelain tiles on the concrete basin; ADESILEX P9 EXPRESS (an adhesive manufactured by Mapei Polska, the Polish subsidiary of the Mapei Group, and distributed in Poland and in the neighbouring countries) for installing other types of ceramic tiles; ULTRACOLOR PLUS for grouting tile joints; MAPEFLEX PU21 for sealing the expansion joints between the pool's basin and the beach; MAPESIL AC for filling the expansion joints between the floors and the walls.

For further information on these products see the technical data sheets at www.mapei.com

Swimming pool at Hotel Belvedere – Zakopane

The works had to meet the challenge of a very short deadline (less than two months). The substrates were prepared with a levelling compound to which PLANICRETE latex was added, then waterproofed with MAPELASTIC and MAPEBAND. The white shade of GRANIRAPID fast-setting and hydration, two-component cementitious adhesive ensured a fast installation of glass mosaics onto the swimming-pools' surfaces. To connect glass mosaics to the wooden piles surrounding the pool, MAPESIL LM silicone sealant was chosen.



Swimming pool at Hotel Klimek – Muszyna

The pool's substrates were prepared with a levelling compound mixed with PLANICRETE additive and then waterproofed with MAPELASTIC and MAPEBAND; glass mosaics were bonded with GRANIRAPID white; tile joints were grouted with KERAPOXY; expansion joints were filled with MAPESIL AC. The challenge to connect incompatible materials, such as the plastic stopping pit and the concrete foundation, was overcome using KERALASTIC adhesive. MAPEGUM WPS ensured perfect waterproofing of the toilette's surfaces.

Swimming pool at Hotel Papuga – Bielsko – Biala

PLANICRETE latex was mixed with the materials used to prepare the substrates, which were then waterproofed with MAPELASTIC; glass mosaics were laid with GRANIRAPID; KERAPOXY was used to grout the joints.



Sabala swimming pool at Hotel Oleńka – Zakopane

PLANICRETE was used as an additive when preparing the swimming pool's substrates; MAPELASTIC and MAPEBAND ensured a perfect waterproofing treatment; glass mosaic was bonded with GRANIRAPID white and KERALASTIC; tile joints were grouted with KERAPOXY; expansion joints were filled with MAPESIL AC.

Swimming pool at Hotel Meduza – Mielno

In Meduza Hotel the challenge was the oval shape of the swimming pool. The installers' experience in the use of reliable products, such as those supplied by Mapei, ensured a perfect completion of the works. The solution was a levelling compound made of PLANICRETE additive, water, Portland cement and sand. MAPELASTIC was used for waterproofing the substrates; GRANIRAPID for bonding glass mosaics; KERAPOXY for grouting tile joints.



WATERPROOFING

Mapei's most innovative products for waterproofing damp environments

Waterproofing damp environments such as bathrooms, showers cubicles, swimming-pools, wellness centres, etc. is a necessary operation as, in most cases, building materials which are very sensitive to water (such as gypsum, plaster-board, wood, etc.) are chosen to meet practical needs and short deadlines. Besides, water penetrating through the tile coverings of shower cubicles, washbasins, sanitary fittings, etc. causes serious damages to the building structures, as well as unsightly and antigenic efflorescences.

To solve these problems, Mapei developed waterproofing systems and systems for the installation of ceramics, especially devised for damp environments. These systems, including easy-to-use and cutting-edge pro-

Specific materials and a wide range of colours: the Mapei technology guarantees excellent aesthetic and functional results.

ducts, ensure excellent and long-lasting performances and a pleasant look to the final surfaces. Materials especially devised for these environments and a wide range of colours allow Mapei products to hit two main targets: waterproofing and decorating. These product systems are

used for several operations: installing tiles, levelling wall surfaces, grouting tile joints, applying wall coatings and sealing expansion joints.

Mapei is constantly growing and continuously developing new product systems to meet ever-demanding market needs.

We briefly describe here the Company's ever-more innovative systems able to ensure safety, comfort and a pleasant look to damp environments.

Bathrooms in Residential Buildings

► Waterproofing the shower's internal surfaces by applying MAPEBAND rubber tape around the corners, drain-holes and expansion joints, followed by a layer of MAPEGUM WPS fast-drying, liquid elastic membrane.



Left:
**Catez thermal bath
Slovenia**

The picture below shows a detail of the pool's covering. Products used: Granirapid, Adesilex P9, Kerapoxy, Keracolor FF, Mapesil AC.



Right:
Private bathroom - Milan - Italy
 Products used:
 Mapegum WPS, Elastorapid,
 Adesilex P10+Isolastic, Keracolor FF,
 Mapesil AC, Selexcolor Marmorino,
 Silexcolor Tonachino.

Below:
**Prefabricated private bathroom
 Vicenza - Italy**
 Products used:
 Dynamon SP1, Dynamon SP3,
 Planitop 540, Mapelastic, Keracrete,
 Ultracolor Plus, Mapesil AC, Mapesil BM.

- ▶ Laying tiles with KERAFLEX.
- ▶ Grouting tile joints with ULTRACOLOR PLUS, high performance, anti-efflorescence grout, water-repellent with DropEffect® and anti-mold with BioBlock® technology.
- ▶ Sealing expansion joints with MAPE-SIL AC acetic-cross-linking silicone sealant (available in the same colours as ULTRACOLOR PLUS), after applying PRIMER FD.
- ▶ Applying a coloured coating on the un-tiled walls, using SILEXCOLOR MARMORINO silicate-based mineral paste coating, after applying a layer of SILEXCOLOR PRIMER.

Laying Tiles in Sports Complexes

- ▶ Waterproofing walls and floors by applying MAPEBAND around the corners, drain-holes and expansion joints,



Above:
**Reebok Sport Center
 New York - USA**
 Products used:
 Kerabond+Isolastic and
 Kerapoxy



Lipzek public swimming-pool – Russia

Products used: Mapelast, Planicrete, Keracrete, Mapesil AC.

followed by application, by trowel, of MAPELASTIC, two-component cementitious mortar, with a FIBREGLASS MESH embedded in the first layer still fresh.

► Laying ceramic tiles using KERAFLEX MAXI, followed by grouting with KERAPOXY two-component acid-resistant epoxy grout.

► Sealing expansion joints with MAPESIL AC acetic-cross-linking silicone sealant (available in the same colours as KERAPOXY), after applying PRIMER FD.

Coating in Health Centres

► Waterproofing walls with gloss or matt-finish polystyrene cladding (after sanding) by laying MAPELASTIC after applying MAPEBAND around the corners, drain-holes and expansion joints.

► Laying mosaic tiles using ADESILEX P10 mixed with ISOLASTIC diluted 1:1 with water.

► Grouting tile joints with ULTRACOLOR PLUS, high performance, anti-efflorescence grout, water-repellent with DropEffect® and anti-mold with BioBlock® technology.

► Sealing expansion joints with MAPE-SIL AC acetic-cross-linking silicone sealant (available in the same colours

as ULTRACOLOR PLUS), after applying PRIMER FD.

Coating in Swimming Pools

► Waterproofing the pool surfaces by applying MAPEBAND around the corners, drain-holes and expansion joints, followed by a layer of MAPELASTIC, applied by trowel, and of MAPELASTIC SMART, applied with a roller or brush in the areas which are more difficult to reach (beads, fillets, etc.).

► Laying ceramic tiles using ELASTORAPID, then grouting with KERAPOXY.

► Sealing expansion joints with MAPE-SIL AC acetic-cross-linking silicone sealant (available in 26 colours and transparent), after applying PRIMER FD.

Coating in Prefabricated Bathrooms
With modular units

► Waterproofing the shower internal surfaces with MAPELASTIC.

► Laying tiles with ULTRAMASTIC III or ULTRAFLEX S2 MONO.

► Grouting joints with KERACOLOR FF or KERACOLOR GG cementitious grout mortar for tile joints, water-repellent with DropEffect® technology.

► Sealing expansion joints with MAPE-SIL AC acetic-reticulation silicon sealant, available in 26 colours and transparent, after applying PRIMER FD.

► Levelling the un-tiled walls using PLANITOP 560 white lime-cement

based finishing compound.

► Smoothing the external walls of the modular unit using PLANITOP 540 cementitious smoothing compound.

With prefabricated bathroom units

► Adding DYNAMON SP1 and DYNAMON SP3 super-plasticisers, based on modified acrylic polymer, to the concrete mix.

► Waterproofing the shower interior surfaces with MAPELASTIC.

► Laying tiles using KERACRETE + KERACRETE POWDER.

► Grouting tile joints with ULTRACOLOR PLUS, high performance, anti-efflorescence grout, water-repellent with DropEffect® and anti-mold with BioBlock® technology.

► Sealing expansion joints with MAPE-SIL AC acetic-cross-linking silicone sealant (available in the same colours as ULTRACOLOR PLUS), after applying PRIMER FD.

► Smoothing the external walls of the unit, using PLANITOP 540 cementitious smoothing compound.

► Sealing expansion joints with MAPE-SIL BM, odourless, neutral cross-linking, silicone sealant with a low modulus of elasticity.



For further information on the above-mentioned products, see the technical data sheets at www.mapei.com.

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The waterproofer

PRODUCT SPOTLIGHT

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- ✓ Easy to apply
- ✓ Suitable for use over existing ceramic surfaces
- ✓ Protective, long-lasting and versatile



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PROJECTS

← ATM-Phone-Restrooms
Gates C1-C20 ↑
East



CREATIVE WALL AND FLOOR COVERINGS WERE INSTALLED WITH MAPEI PRODUCTS IN TERMINAL 4 OF SKY HARBOR AIRPORT, PHOENIX.

Every day at Phoenix's Sky Harbor Airport, Arizona, 1,486 aircrafts and 108,887 passengers arrive and depart, while 808 tons of air cargo are handled, for a daily economic impact of 72 million US dollars.

The airport has experienced a 32% increase in passengers and a 69% cargo volume increase since its opening in 1990.

These dramatic increases in demand have caused the airport to outgrow its facilities and have impacted the ability to provide quality customer service. Consequently, the City of Phoenix Aviation Department has undertaken an aggressive expansion program at Sky Harbor International Airport and has more than 150 projects budgeted at more than 600 million US dollars underway or recently completed.

A Brand-new Terminal

The expansion program also involved Terminal 4, which was built in 1990 with only five concourses but expandable to eight. Two additional concourses have been added since 2000, and

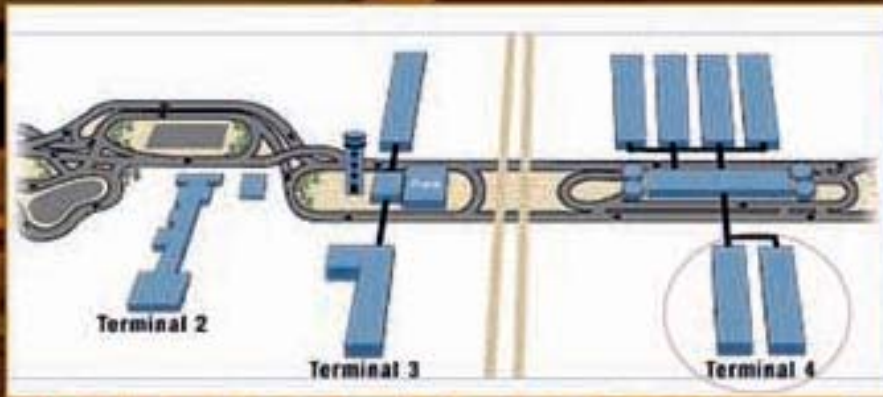
construction on the eighth and final concourse is expected to begin within a few years. Terminal 4 includes the international concourse, with Federal Inspection Service facilities capable of clearing up to 800 passengers per hour and three runways that are over 2 km long.

The city of Phoenix Aviation Department selected Chanen/Jacobs joint venture to manage both the design and construction phases of the 280 million US dollar project. The facility included a seven-story terminal; a four-story, 3,400-car parking garage; two three-story 28-gate concourses; two two-story 16-gate concourses and an additional 700-car parking structure for rental cars.

Arizona Animals and Plants Enter the Airport

To keep the project on schedule, the management team divided the work into 14 separate bid packages and used three general contractors. This procedure met the city's funding requirements and allowed fast-track construction of the project.

Colour in AIRPORT



One important renovation project involved the installation of 30,000 m² of tile in the Terminal 4 concourse. The project used 35 different colors of porcelain tile from eight different Italian manufacturers.

The tiles ranged in size from 10x10 to 46x 46 cm. Almost all of the tiles had to be cut on site and many had to be set to form different geometric patterns. The patterns reflected the themes of four water-jet-cut medallions that were placed in the lobby space of the terminal's four different sets of elevators.

The themes are a cactus wren, a coati-mundi, a gila monster and a scorpion, which are meant to represent Arizona's rich wildlife.

The elevator walls in each area were instead covered with 13x13 cm glazed clay tiles supplied by the American firm Facings of America. In several halls of the Terminal more than 7,000 m² of "Arizona Flagstone" natural stone slabs were laid on the columns' surfaces. The slabs featured two different color shades, which were meant to recall Arizona Grand Canyon's landscape. The walls in the public bathrooms of the Terminal were covered with porcelain tiles.

Innovative Products to Meet Real Challenges

The installation of floor and wall coverings, carried out by the American company Scuderi Tile, was no easy

job. In addition to the inherent problems related to the large amount of the covering materials, the installers had to complete the work in a fully operational terminal, with 800 passengers per hour arriving and departing from the airport. The City of Phoenix Aviation Department required that the installers work on only 600 m² to 1,200 m² of space at a time. To ensure a perfect result to this ambitious job, Scuderi Tile selected cutting-edge technologies and reliable materials, such as the Mapei systems for substrate preparation and tile installation. Scuderi Tile had used them for years and considered them "the Cadillac of all products", the only ones able to meet the challenges of such an elaborate project.

The Basis for a Correct Installation

Given all this, early in the substrate preparation phase, the installation company closely worked with the Mapei sales representative and Mapei field technical consultant, who made a careful analysis of the substrate and revealed noticeable amounts of gypsum patch, adhesive residue and epoxy coatings on the surface. Therefore, for some sections of the Terminal's floorings he suggested the application of the fast-setting cementitious patching compounds PLANIPATCH* or PLANIPATCH PLUS* for smoothing, patching and filling cracks, holes and voids.

The substrates' preparation included the application, after proper scarification, of the primer PLANIBOND EBA* and the fast-setting self-leveling compound ULTRAPLAN M20*. MAPELASTIC SM PRIMER* and MAPELASTIC SM* crack-isolation sheet membrane were then applied on the surfaces to isolate cracks.

The latter is a very innovative product which can isolate and sustain horizontal movements up to 4 cm, while avoiding the transfer of cracks from the substrate to the covering in case of vibration or in-plane movement.

"Well-laid" Animals and Colours

The tile layout was so complex that Scuderi Tile had to call on the help of computer technology. Once the points for the layout were plotted with a CAD (computer-assisted drawing) system on a graph, installers put the computerized plans on the floor and followed them for setting the geometric patterns in the layout. By triangulating with lasers, it was made certain that the tile-setting was performed correctly.

To install approximately 70% of the floor tiles, the Scuderi team used the KERABOND+KERALASTIC* bonding system, which has been successfully used for more than 20 years in the American tile industry.

The system combine a dry-set cementitious mortar (KERABOND*) with a flexible acrylic latex admixture, KERALASTIC*, which is the American equivalent of ISOLASTIC*, available in the rest of the world.

In security areas and at passenger checkpoints, where there was a need for greater speed, the team used GRANIRAPID*, an adhesive featuring high mechanical strength and hydration rate.

With KERABOND+KERALASTIC* porcelain tiles were also installed on the walls and floors in the public bath-



Photo 1. The flooring substrates were treated with Ultraplan M20 self-levelling compound after applying the primer Planibond EBA.

Photo 2. The crack-isolation sheet membrane Mapelastich SM was applied on the whole of the flooring surface in Terminal 4.

Photo 3. Granirapid adhesive was used in the areas where a very fast installation was required.

PROJECTS

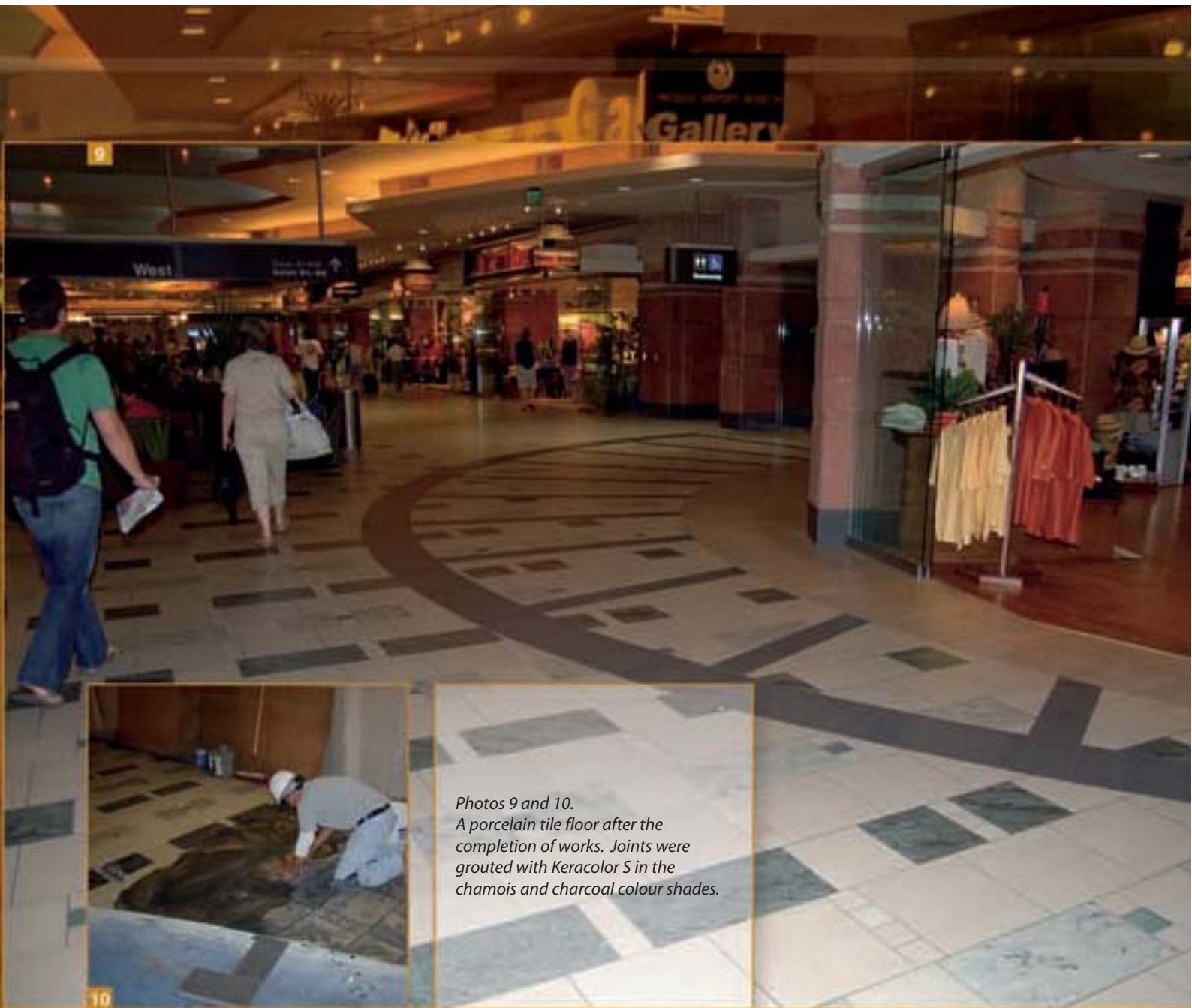


Photo 4.
Glazed clay tiles were bonded on the elevators' external walls with Kerabond adhesive, mixed with Keralastic admixture (which is the American equivalent of Isolastic).

Photos 5 and 6.
The four water-jet-cut medallions, located on the floors in front of the terminal's four different sets of elevators, sport colorful porcelain tiles laid with the Kerabond+Keralastic bonding system.



Photos 7 and 8.
Porcelain tiles were laid on the toilettes' walls and floors with Kerabond+Keralastic, after waterproofing the substrates with Mapelastick 315 cementitious membrane.



Photos 9 and 10.
A porcelain tile floor after the completion of works. Joints were grouted with Keracolor S in the chamois and charcoal colour shades.

rooms. Before setting the tiles, MAPELASTIC 315* flexible cementitious waterproofing membrane was applied to the walls.

The same installation system was used to lay glazed tiles on the floors around the elevator doors in each lobby.

The tile colours in each area complemented the theme for that section of the terminal. Yellow predominated around the coatimundi theme, red highlighted the scorpion section, blue dictated the color for the gila monster area, green underscored the colors in the cactus wren medallion.

Sealing a Fine Job

When it came time to grout all the joints of the floor and wall coverings, KERACOLOR S* polymer-modified sanded grout was chosen. Even if a wide range of colors was available, the installers used only two shades of grout, chamois and charcoal, to allow

the hues of the tile to make the defining statement about the patterns in the designs.

After the works were completed, an external consultant visited the site, checking the surfaces and confirming that the job had been perfectly done.

He wrote observation reports and compiled Mapei site inspection reports, thus earning the airport the 10-year project warranty (concerning all installation requirements) that the City of Phoenix Aviation Department required. RM

***Mapei Products:** *Granirapid, Kerabond+Keralastic (the latter is the American equivalent of Isolastic, available in the rest of the world), Keracolor S, Mapelastac 315, Mapelastac SM, Mapelastac SM Primer, Planibond EBA, Planipatch, Planipatch Plus, Ultraplan M20.*

The products mentioned in this article are manufactured and distributed in America by Mapei Corp. (USA) and Mapei Inc (Canada). For further information, see the web site www.mapei.com.



TECHNICAL DATA

Terminal 4, Sky-Harbor Airport, Phoenix, Arizona (USA)

Work: laying wall and floor coverings in the terminal's halls and bathrooms

Years: 2004-2005

Customer: City of Phoenix Aviation Department

Project: Transystem Corporation, Phoenix

Contractor: Weitz Company, Phoenix

Installation Company: Scuderri Tile, Phoenix

Installed Materials: porcelain tiles, glazed tiles and natural stone slabs

Mapei Distributor: Daltille, Phoenix

Mapei Co-ordinators: Jennifer Vagen and Kirk Bailey, Mapei Corp. (USA)

Using the Mape-Antique and Silexcolor ranges, Mapei ensured protection and decoration to the walls of an art atelier in Budapest.

Colour and Protection FOR THE NOUVEAU ATELIER

Amongst all the tourist attractions the city of Budapest has to offer, there is one that is not so well known but certainly worth mentioning. In Kelenhegyi út, not far from the city's most famous spa facility, there is a workshop-house designed back in 1903 by the Hungarian architect and painter Gyula Kosztlányi Kann. The building hosts an art gallery and a number of art studios.

Its architectural design is inspired by the art nouveau style and it has a yellow, white and light blue façade made of square stones.

Over recent times the construction has shown clear signs of decay due to passing time and, in particular, to a build up of rain water flowing down from a nearby hill called Gellért.

Rising damp and residue water have been discovered in the basement. They damaged the ground-floor level and weakened the north-west side of the structure.

End of the Decay

Renovation operations were set under way in 2000 including the construction of a complete drainage system.

Work began by reconstructing the north-west section, the part in a worst condition. Here the wall, already badly damaged by rain water, actually collapsed during excavation work designed for inspecting the state of disrepair and old waterproofing system.

The renovation project also involved restoring the original colour of the façade. The architectural firm commissioned to carry out the project, in close conjunction with a Mapei technician and a superintendent from the local authorities in charge of old monuments, carefully selected the most sui-



table materials (and their colours) for the works, eventually opting for high-quality products guaranteed to be effective and efficient, such as the MAPE-ANTIQUÉ and SILEXCOLOR ranges.

An Integrated System for Protecting and Colouring

Mapei products were chosen because the Company can provide a specific system (MAPE-ANTIQUÉ) including mortars and renders for repairing masonry and stone buildings damaged by widespread rising damp.

This system offers advantages in terms of both application and final results, and it perfectly matches with special masonry coating lines that Mapei provides (in this case the SILEXCOLOR range was chosen).

The work on the façade of Kosztolányi Kann art gallery began in May 2003.

Before carrying out the work, the substrate was carefully prepared by removing all the old plaster and washing the structure using a high-pressure water cleaner.


MAPE-ANTIQUÉ RINZAFFO* light-coloured, salt-resistant, cement-free pre-packed mortar was then applied.

This is used (in a thickness of 5 mm) before applying the dehumidifying mortars for repairing old stone, tuff and brick buildings damaged by the presence of excessive amounts of chlorides. Thanks to its distinctive traits, MAPE-ANTIQUÉ RINZAFFO* prevents soluble salts such as, for example, chlorides, from moving into the render, in this instance made from MAPE-ANTIQUÉ MC*. Otherwise, the soluble salts might lead to anaesthetic patches on the surface of the render.

MAPE-ANTIQUÉ RINZAFFO* is also particularly useful for improving the adhesive properties of micro-porous mortars. A dehumidifying layer of MAPE-ANTIQUÉ MC*, a pre-packed dehumidifying mortar for repairing damp walls made of stone, brick and tuff, was then applied.



After completing the cycle of MAPE-ANTIQUÉ products, the original colours (light blue, yellow and white) were then restored to all the outside walls using products from the SILEXCOLOR range. These are silicate-based products for wall coatings guaranteeing high adhesion to the substrate, high transpirability, excellent resistance to chemical agents (i.e. acid rain, mold etc.) and a nice look of the final surface. Most notably, it was opted to use SILEXCOLOR PAINT*, a product available in 34 colours and particularly suitable for porous vertical surfaces to which a protective but steam-permeable film is to be applied once it has dried. Before applying SILEXCOLOR PAINT*, the walls were treated with a modified potassium silicate-based primer in water dispersion, SILEXCOLOR PRIMER*, capable of helping the subsequent finishing coat to adhere more effectively.

Thanks to the use of Mapei systems for dehumidifying, protecting and decorating stone buildings, Gyula Kosztolányi Kann's Atelier can once again delight, with its brightly coloured walls, both tourists and people from Budapest walking around Kelenhegyi út. 

This article was taken from "Mapei Krónika", issue n° 8, the in-house magazine edited by Mapei Kft, which we would like to thank.

***Mapei Products:** the products referred to in this article belong to the "Coating Systems" range. The technical data sheets are available on the "Mapei Global Infonet" DVD or at the web site: www.mapei.com.



Mape-Antique FC: cement-free, light coloured, fine mortar for finishing dehumidifying mortars applied on stone, brick and tuff masonry.

Mape-Antique MC: pre-packed, cement-free, light-coloured dehumidifying mortar for the restoration of damp stone, brick and tuff masonry.

Mape-Antique Rinzafo: light-coloured salt-resistant, cement-free, pre-packed mortar to be used before applying Mape-Antique MC, Mape-Antique CC and Mape-Antique LC dehumidifying mortars on stone, tuff and brick substrates.

Silexcolor Paint: silicate-based, vapour-permeable protective and decorative paint system for cement- or lime-based renders for interiors and exteriors.

Silexcolor Primer: modified potassium silicate-based primer in water solution.

TECHNICAL DATA

Atelier House, Budapest (Hungary)

Work: renovation of the façades

Year: 2003

Customer: Budapest City Council

Project: Profil Kft., Gödöllo (Hungary); Nagy Bálint & Tsai Építésziroda, Budapest

Contractor: Excluzív Bau Kft, Budapest

Work Management: Miklós Vince, Excluzív Bau Kft

Mapei Co-ordinator: László Szabó, Mapei Kft (Hungary)

Photo 1.

The building, which dates back to the early 20th century, had a badly damaged façade and walls, due mainly to rising damp.

Photo 2.

During renovation works, Mape-Antique MC dehumidifying mortar was applied on the surface.

Photos 3 and 4.

The façade was given a colourful touch using Silexcolor Paint.

Photo 5.

The façade was brought back to its original colours.



A fast and stylish INSTALLATION

Selfridges, the first American-style department store in London, was recently refurbished using a very fast-track system.

Selfridges, located in the heart of London, in Oxford Street, was opened on March 15, 1909. The first store of its kind, Selfridges revolutionised the shopping experience. Its foundations were laid in early 1908 and within twelve months the massive building was completed. The owner, Harry Gordon Selfridge, succeeded in his dream of building an American department store in London. Staff were hired months before the opening and trained in selling the 'Selfridge' way.

By offering a large selection of merchandise, much of it not available at other shops, and all under one roof, the focus was on providing the greatest convenience for the customer.

Selfridge was extremely innovative in the layout of the store and displays, as he intended shopping at the store to be a recreation. Therefore, shoppers were greeted with music and browsing was an all day experience. The store quickly became a national institution. Customers didn't come to buy what they needed, they came for the Selfridges experience. There was a library and a silence room for reflection, comfortable seating, sophisticated restaurants with reasonable prices and appointed reception rooms for French, American and German customers. Selfridge wanted his establishment to

be more than a store. He boasted that he "made the store the third biggest attraction for sightseers in London," next to Buckingham Palace and the Tower of London.

Mapei's Contribution

August to September 2006 saw the refurbishment of this famous department store. Mapei contributed to the project by supplying products for preparing the screeds and laying over 300 m² honed Carrara marble slabs on walkways and lift lobbies of the designer rooms on the second floor, which houses all the fashion shops of famous brands. At this year's Tile Association Awards, a ceremony that praises the products, services and people who work in the British tile industry, Mapei was pleased to nominate HMKM, the architectural consultancy in charge of this project, winner for the 'Best Use of Tile by an Architect or Designer' Award.

The first phase of the works included the formation of screeds in the walkway areas with MAPECEM* special fast-setting hydraulic binder for fast-drying, shrinkage-compensated screeds.

This product allows ceramic and stone coverings to be installed 3 hours after the screeds' formation. This was especially suitable for the work at Selfridges,



1

Photo 1. Outside view of the building housing Selfridges department store in London.

Photo 2. The screeds were prepared with Mapecem fast setting binder for fast-drying screeds. All the work was carried out in the evening, when the store was closed.

Photos 3 and 4. On the second floor floorings sport Carrara marble slabs laid with Granirapid and grouted with Ultracolor Plus.




2

because all works had to be carried out when the store was closed in the evening. In order to meet the client's request, a complete system of products was necessary in order to guarantee a very fast preparation of screeds, installation of floorings and grouting of joints.

Once the substrate preparation was completed, GRANIRAPID* two-component cementitious adhesive was used to bond the 600x600x20mm honed Carrara Marble tiles. The product is particularly suitable for this project as stone materials with high coefficients

of moisture expansion require a fast-drying adhesive that does not stain. It is perfect for rapid re-tiling projects and for flooring that has to be accessed within a short time and is subject to heavy traffic. GRANIRAPID* is available in white and grey shades and the former was chosen for the works at Selfridges.

The completed surfaces were grouted with ULTRACOLOR PLUS*, a fast-setting and drying, high-performance grout. Expansion joints were sealed with MAPESIL AC* mildew-resistant silicone sealant. 



3



***Mapei Products:** the products referred to in this article belong to the "Products for Ceramic Tiles and Stone Materials" range. The technical data sheets are available on the "Mapei Global Infonet" DVD or at the web site: www.mapei.com.

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

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

Mapecem: special, fast setting hydraulic binder for the preparation of fast-drying screeds (24 hours), with controlled shrinkage.

Mapesil AC: solvent-free, acetic-cross-linking mildew-resistant silicone sealant, available in 26 colours and transparent.

Ultracolor Plus (CG2): fast setting and drying, high performance, anti-efflorescence, polymer modified grout, for joints from 2 to 20 mm. Water-repellent with DropEffect® and antimold with BioBlock® technology.



TECHNICAL DATA

Selfridges Store, London (UK)

Work: preparing the substrates, laying and grouting Carrara marble slabs on the floorings of the second floors

Year: 2006

Customer: Selfridges&Co

Project: HMKM

Contractor: Davies Shopfitting Ltd

Installation Company: Signature Stone Ltd

Mapei Distributor: Signature Stone Ltd

Mapei Co-ordinator: Stephen Quorn, Mapei UK

Granirapid

HIGH PERFORMANCE, DEFORMABLE, FAST SETTING AND HYDRATING TWO-COMPONENT CEMENTITIOUS ADHESIVE FOR CERAMIC TILES AND STONE MATERIAL

- ✓ Particularly suitable for the installation of stone material that requires a rapid drying adhesive
- ✓ Particularly suitable for rapid re-tiling jobs and flooring that has to be in service within a very short time-scale (hospitals, supermarkets, swimming pools, etc.)
- ✓ Suitable for bonding floors subject to heavy traffic



Shopping IN ATTICA

In downtown Athens a recently renovated historical building houses a big department store

The Attica department store is housed in one of the most interesting historical buildings in the center of Athens, in the Panepistimiou Avenue. Back in 1930, the army financed and constructed a new modern office in the area where the royal cavalry stables used to be located. This new eight-storey building covered the area of a whole city. In those times its imposing yet elegant outlook and its complex yet light façades gave the underdeveloped area of downtown Athens a cosmopolitan aura. Its architectural style embodied all the more innovative ideas of the time, making the project a unique and impressive urban construction. With the dawn of the new century, the largest part of the building has been renovated and turned into a modern department store. A great effort was made to keep all the architectural features of the original building, as for both the external facades and some particular interior details.



The result of this hard job is a beautiful and huge department store called Attica. On 25.000 m² Attica includes more than 300 shops of over 500 contemporary luxurious designers' brands for men, women and children, as well as design objects for the household and a restaurant with a panoramic view.

Mapei's Contribution

Mapei contributed to the renovation of this building with many products recommended by its Technical Service Department.

Floorings. The Attica department store is a real architectural monument and, therefore, most of its original features were kept intact, such as the main white marble stairs (see photo above). For the floorings on all the seven

floors, the project managers choose either composite marble (made of natural marble and resin) or light-coloured porcelain tile, in order to resemble the materials used in the '30s.

All old floorings were removed and new screeds were formed. Since the timeline was very short, special products were required. For instance, after the removal of the old floorings, NIVO-RAPID* ultra-fast drying thixotropic cementitious levelling mortar was applied on the substrate to smooth the surface's depressions and holes.

To prepare the screeds, the experts of Mapei Technical Service Department suggested the use of TOPCEM* special fast setting hydraulic binder. This was used in combination with selected graded aggregates for both bonded



PROJECTS

Photos 1 and 2.
In order to meet the client's strict deadline, Topcem rapid-drying special hydraulic binder was used to prepare the screeds.

Photo 3
The composite marble slabs were laid with Granirapid fast setting adhesive, which is particularly suitable for installing floorings subject to heavy traffic.



Photo 4.
The marble slabs were laid on the elevator's floorings with Keralastic T.

Photo 5.
View of the installed floorings: beside composite marble, porcelain tiles were also laid on the floors and on some sections of the walls.

Photo 6.
View of a shopping venue of the Attica department store after the completion of the floors' installation works.



and floating screeds. Within only 4 days the screed was completely dry, after having hardened within 24 hours.

The residual moisture was measured with an electronic hygrometer and resulted to be less than 2%.

This product is particularly recommended when, as in the case of the works at the Attica department store, the substrate must be put back into service within a short time.

The 60x60 cm composite marble slabs were installed over the screeds using

all the metal surfaces with KERALASTIC T* high-performance two-component polyurethane adhesive.

For grouting all the joints of the composite marble slabs and porcelain tiles, ULTRACOLOR* fast setting and drying, high performance, anti-efflorescence, water-repellent grout was chosen in the colour shades n. 111, 130 and 132.

Wall Coverings. In many areas the old wall renders were removed and the surfaces were levelled with a cementitious compound, to which PLANICRE-



the white version of GRANIRAPID* two-component cementitious adhesive, applied in an average thickness of 5 mm. This product features fast-setting time, excellent bonding and is particularly suitable for installing floorings subject to heavy traffic.

The 40x40 cm porcelain tiles were laid with KERAFLEX* high performance cementitious adhesive, which is especially recommended for surfaces subject to strong stress.

Composite marble was laid on the floorings inside the elevators and on

TE* latex was added in order to improve the new layer's adhesion and mechanical strengths.

In several shopping venues porcelain tiles were installed on the walls with KERAFLEX* high performance, thixotropic, cementitious adhesive.

ULTRACOLOR* was again used to grout the tile joints.

Glass fibre textiles were bonded onto some sections of the walls (including those of the fitting rooms) using ADESILEX MT32* water dispersion adhesive.

*Mapei Products:

the products referred to in this article belong to the "Products for Ceramic Tiles and Stone Materials" and "Products for the Installation of Resilient, Textile and Wood Floor and Wall Coverings" ranges.

The technical data sheets are available on the "Mapei Global Infonet" DVD or at the web site: www.mapei.com.

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

Adesilex MT 32: adhesive in water dispersion for the installation of wall coverings.

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

Keraflex (C2TE): high performance cementitious adhesive, with no vertical slip and extended open time, for ceramic tiles and stone material.

Keralastic T (R2T): high performance, thixotropic, two-component polyurethane adhesive for ceramic tiles and stone material. Particularly suitable for vertical applications.

Nivorapid: ultra-fast drying levelling mortar for interior floors, walls and ceilings.

Planicrete: synthetic-rubber latex for cementitious mixes.

Topcem: normal-setting, rapid-drying (4 days), special hydraulic binder for screeds.

Ultracolor (CG2): fast setting and drying, high performance, anti-efflorescence, polymer modified grout, for joints from 2 to 20 mm.

N.B. The product has been superseded by Ultracolor Plus.

TECHNICAL DATA

Attica Department Store, Athens (Greece)

Work: preparing the screeds; laying and grouting composite marble slabs and porcelain tiles on the floors, walls and stairs of the halls, as well as on the elevators' surfaces; laying glass fibre textile coverings on the walls.

Years: 2003-2005

Customer: Metoxico Tomeio Stratou

Project: Stelios Agiostratits, Gianis Kizis

Installation Company: Arcon

Mapei Distributor: Alto

Mapei Co-ordinator: John Koroupilis, Mapei Hellas SA (Greece)



SCREEDS FOR LAYING FLOORS

by Paola Di Silvestro and Stefania Boselli, Mapei SpA's Technical Service Department

A screed is a constructive element whose thickness is usually between 1–8 cm. It is usually made of mortars blended with cementitious binders. In some cases, binders of different nature might also be used to prepare mortars for screeds. Depending on whether it is laid so that it adheres to a load-bearing substrate, or it is laid onto an isolation layer or onto a layer of thermal or acoustic insulation, or else it includes embedded heating pipes, it is known as bonded, unbonded, isolating or heated, respectively.

The screed must enable the installation of a particular floor covering on schedule and ensure its permanent resistance in different working conditions (interiors, exteriors, premises for industrial, commercial or public use, etc.). So it must guarantee, together with the other layers of the substrate, the proper function of the flooring system. Regardless of the type of floor covering, the screed must be even, smooth, clean, free from cracks and mechanically resistant. Moreover, the residual moisture rate must conform to the accepted values for laying floors which are sensitive to humidity and must be uniform through the whole of the thickness of the screed. For cementitious screeds, residual moisture levels of less than 2% in weight are usually considered adequate. Anhydrite screeds must, instead, have a residual moisture level of less than 0.5%.

Therefore, the flooring durability depends on the screed's quality. However, contractors and worksite managers often neglect or underestimate some of the basic rules related to the substrate preparation. The characteristics of the screed are closely related to those of the products used for its preparation, as well as to the way the mix is prepared and applied. When

choosing the products, one must take into account (besides the price) its final use, the particular site conditions (internal use, external use, thickness, etc.), the type of floor to be laid and the time to wait before laying the floor and before putting it into service. When using a traditional cementitious screed, a quite long waiting time is required before the floors' installation: at least 7–10 days per centimeter of thickness at a temperature of approximately 20 °C and, in any case, one has to respect the value of residual moisture prescribed for the kind of floor to be laid. However, sometimes the worksite conditions do not allow the installer to respect these times and the installation of ceramic tiles is often performed just a few days after the formation of the screed. The risk is that possible cracks of the screed, caused by the mortar's inevitable hygrometric shrinkage, may also crack the flooring. Therefore binders are needed that allow for the preparation of mortars characterized by long workability times and ease of application. At the same time they must enable the installation of the floor covering within a few days. In order to satisfy the need to deliver floorings in very short times, Mapei Research & Development Laboratories have developed MAPECEM and TOPCEM, special hydraulic binders to be mixed with aggregates at the worksite. They enable the formation of screeds with greatly reduced shrinkage, high mechanical strength, rapid drying times allowing the floor to be quickly put into service.

Screeds made with TOPCEM are suitable for the installation of ceramic tiles after only 24 hours and for the installation of materials which are sensitive to moisture after 4 days (residual moisture < 2%). Thanks to its ease of application (it may even be applied with a pump),

workability and setting times, TOPCEM is particularly suitable for screeds for very large surfaces where a very short time is available before the floor covering is put into service.

MAPECEM is a special fast-setting and drying hydraulic binder. Under normal temperature conditions, screeds made with this product are suitable for installing ceramic tiles 3–4 hours after they are laid and suitable for laying floor coverings sensitive to humidity after 24 hours (residual moisture < 2%). Mortars made with MAPECEM may also be applied with a pump. Thanks to these characteristics and its extremely high mechanical strength, MAPECEM is especially suitable for the repair of floors in supermarkets, shopping centres, airports and other areas where it would be impossible or too expensive to interrupt normal activities.

When using this type of binders for screed preparation, it is essential to pay careful attention to the aggregate/



binder ratio and to use the correct amount of water. Moreover, the aggregate must be clean, free from dirt and graded according the thickness to be achieved (for instance, when using TOPCEM or MAPECEM, aggregates should grade from 0 to 8 mm for thickness of 4–5 cm). Humidity in the aggregate also reduces the amount of water to be added to the mix.

To solve the problem, common in many areas, of the difficulty in finding good quality aggregates with a correct grade, and in order to avoid mistakes in the mix and problems related to the workmanship, Mapei Laboratories also developed MAPECEM PRONTO pre-bled, ready-to-use fast-setting and drying (24 hours), controlled-shrinkage mortar, and TOPCEM PRONTO fast-drying (4 days), pre-bled and ready-to-use mortar with normal setting and controlled shrinkage for screeds. Thus, TOPCEM PRONTO and MAPECEM

PRONTO are ideal solutions where the storage of raw materials (aggregates, cement, etc.) is problematic, for example in maintenance work in old city centres. As the screeds' drying and setting time depend on the aggregates' quality, the mix and the workmanship's quality, these products are particularly suitable for laying floor coverings which are very sensitive to humidity (wood, PVC, linoleum, etc). TOPCEM PRONTO and MAPECEM PRONTO are also especially recommended when it is necessary to ensure proper mechanical strengths to the screed, since these products are classified as CT-C30-F6-A1_n (com-

pressive strength > 30 N/ mm²) and CT-C60-F10-A1_n (compressive strength > 60 N/ mm²) respectively, according to EN 13813 European standard ("Screed material and floor screeds; properties and requirements").

TOPCEM, MAPECEM, TOPCEM PRONTO and MAPECEM PRONTO can be used for the formation of screeds that incorporate heating systems without the addition of admixtures.


The main technical characteristics of screeds made with TOPCEM, MAPECEM, TOPCEM PRONTO and MAPECEM PRONTO are stated in the following tables. 



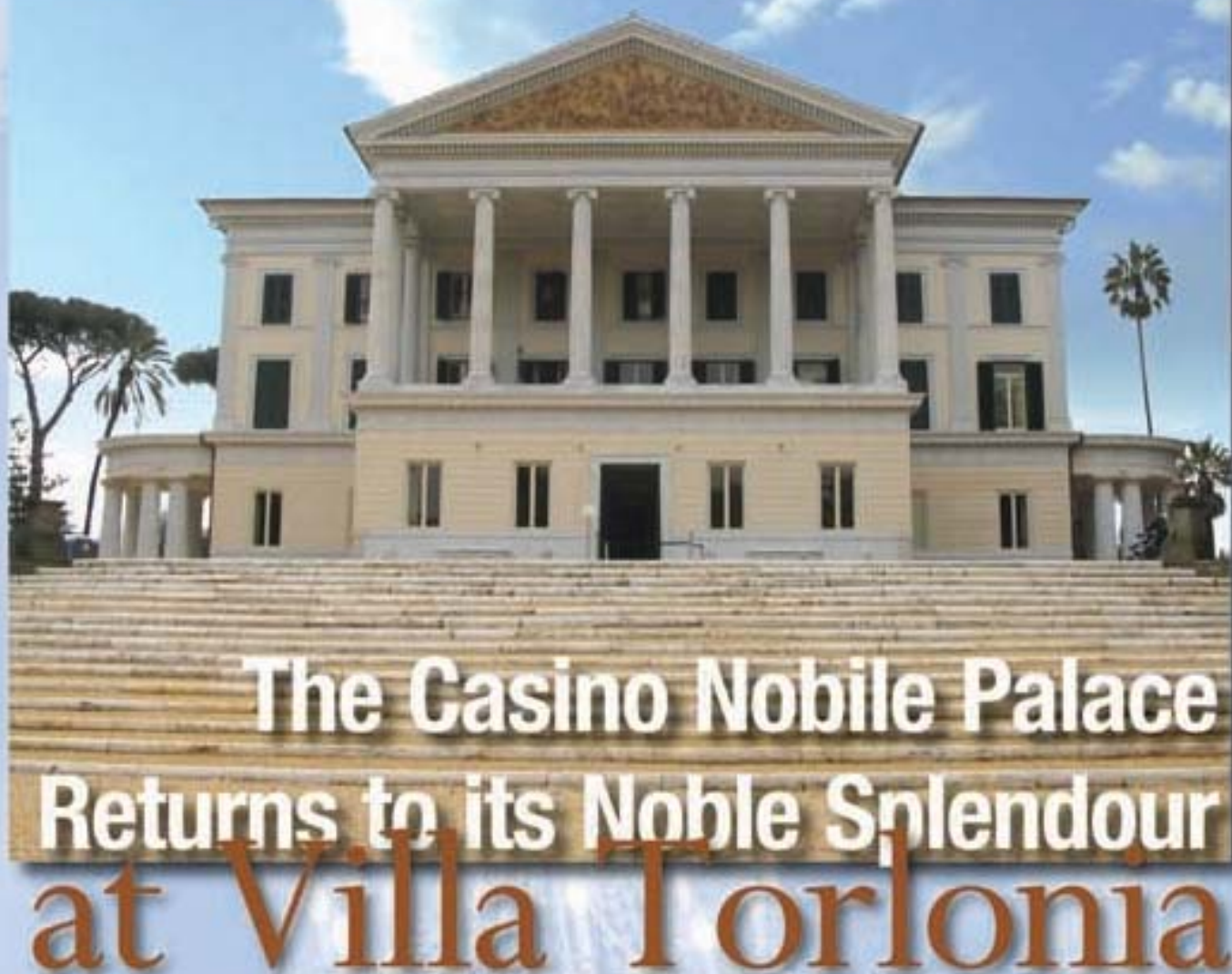
Table 1. Performance characteristics of screeds manufactured with TOPCEM, MAPECEM, TOPCEM PRONTO and MAPECEM PRONTO

	TOPCEM	TOPCEM PRONTO	MAPECEM	MAPECEM PRONTO
Residual moisture (%)				
- After 24 hours	< 3,5	< 3,5	< 2,0	< 2,0
- After 3 days	-	-	< 1,6	< 1,6
- After 4 days	< 2,0	< 2,0	-	-
Waiting time before applying smoothing compounds				
	1-4 days	1-4 days	4 hours	4 hours
Waiting time before laying				
- ceramic tiles	24 hours	24 hours	3-4 hours	3-4 hours
- marble	2 days	2 days	3-4 hours	3-4 hours
- wood	4 days	4 days	24 hours	24 hours
Compressive/Flexural strength (N/mm ²)				
- After 24 hours	> 8/3	> 8/3	> 30/5	> 40/6
- After 3 days	-	-	> 40/6.5	> 50/7
- After 4 days	> 15/4	> 15/4	-	-
- After 7 days	> 22/5	> 22/5	-	-
- After 28 days	> 30/6	> 30/6	> 45/7	> 62/10

Note: When installing wooden floorings or other kind of floorings sensitive to humidity, it is necessary to measure the residual moisture with a carbide hygrometer. The value must be lower than the one recommended by the wood's manufacturer.

Table 2. Comparison of the drying times of screeds based on different binders

Screed type	Thickness (mm)	Residual moisture content suitable for the installation of parquet (%)	Minimum waiting time before the installation of parquet
Cement-based	40	2	28 days
Anhydrite-based	40	0.5	28 days
Topcem-based	40	2	4 days
Manufactured with Topcem Pronto	40	2	4 days
Mapecem-based	40	2	1 day
Manufactured with Mapecem Pronto	40	2	1 day



The Casino Nobile Palace Returns to its Noble Splendour at Villa Torlonia

**AN ANCIENT ROMAN PALACE,
NOW TRANSFORMED INTO A
MUSEUM, HAS BEEN
REOPENED TO THE GENERAL
PUBLIC AFTER A LONG,
METICULOUS RESTORATION
OPERATION**

On the 21st of March 2007, in the presence of the Mayor of Rome Walter Veltroni, the Superintendent of the Rome City Council's Fine Arts Commission Eugenio La Rocca and the Assessor for Cultural Policies Gianni Borgia, the Casino Nobile Palace of Villa Torlonia was inaugurated. The Palace is the main building within a complex located inside a splendid park on the Nomentana Road in Rome, which was once the resi-

dence of the Torlonia family. The Palace, which is today the home of a museum, has antique origins and had been transformed a number of times. In 1797, when the site for the Villa was bought by the wealthy banker Giovanni Torlonia, the architect Giuseppe Valadier was commissioned to transform it into a place in keeping with the social position of the family, which had recently acquired the noble title. Between 1835 and 1845, when new buildings were constructed inside the complex and the park was transformed into a splendid English-style garden, the Casino Nobile Palace became a luxurious home, and was the setting place for social events and parties. The neo-classical external façade featured imposing marmorea columns and parapets, while the internal of the building was decorated with tempera, stucco, frescos and marmoridea, and enriched by marble statues, mosaic floors and prestigious furnishings. A host of artists took part in the work, under the able command of Giovanni Battista Caretti, a renowned painter

and architect of the time. Caretti added an impressive Ionic pronaos with a Palladian flavour on the north façade, with a covered porch at the base and, on the upper level, a gallery with ten imposing Ionic columns.

The rectangular wings on the east and west of the Palace, a firm wish of Valadier, were replaced with two rectangular porches on each side. The so-called "Ipogea Hall" also dates back to this period. This is a round room which is completely underground, with frescos similar to those of an Etruscan tomb, and was discovered during the last restoration operation.

In the 1920's, the Casino Nobile Palace was inhabited by Duce Benito Mussolini, who ordered for further modifications to be carried out. These included the construction of an anti-gas shelter and an air-raid shelter. Between 1944 and 1947, it was requisitioned by the Anglo-American command, leading to considerable damage of both the building and the park.

Since then, the Villa had been abandoned and left to its own devices until



Photos 1 and 2.
The floor screeds in the Ball Hall, with an incorporated heating system, were prepared with Topcem hydraulic binder. The marble slabs were bonded to the substrate using Granirapid adhesive.



1978, when it was bought by the Rome City Council. Because of the Casino Nobile's run-down state, a wide-reaching restoration plan was drawn up to include the architecture and the decorations, in order to create, where possible, the fasts of the original residence and to transform it into a home for the Villa Museum.

On the top floor, a permanent museum for the Roman School of Artists has been created, with the curator being the Archive of the School itself, to host the works of the most important artists who were active in Rome between the 1920's and the 1970's.

Photos 3 and 4.
The cracks in the vaulted roof above the Ball Hall were opened and then sealed using Eporip adhesive.



Faithful to the Past

Even at the time of its purchase by the Rome City Council in the 1970's, the Casino Nobile Palace was already in a terrible state. The walls, ceilings and foundations showed signs of subsidence. Also, part of the ceiling in the Bacco Hall on the first floor had collapsed, while the remaining portion was very unstable. In the Alessandro Hall, which is also on the first floor, large portions of render had fallen away and preservation of the frescos was at risk.

When the renovation work started in July 2004, a large part of the external architectural decorations had been corroded and washed away over the years. A lot of the internal paintwork, plasters and frames were in a poor condition, and the support beams for the vaults were also in a poor state.

The functional renovation work of the Palace was predisposed by the Superintendent of the City Council's Fine Arts Commission, who entrusted the design and direction of works to the architect Francesco Marzullo, while the restoration of the decorative work was entrusted to the Art Historian



Photo 5.
The reed mat ceilings in the Gothic Hall and the Chamber of Venus were consolidated on the outside with Eporip, used to bond the steel strengthening plates to the old wooden slats.

Photo 6.
Mape-Antique I hydraulic binder was employed for the structural renovation of the vaulted roofs.



heating system (heated walls and floors) and a new lighting system.

The entrance hall, the terrace over the porch on the south side and the large, bay window which illuminates the Ball Hall on the ground floor were all restored to their original splendour.

The structural conditions of the floor slabs and the vaulted roofs were also carefully analysed, and consolidated as required.

In some cases, the structure was strengthened to upgrade it to be suitable for the new loads. In other cases, it was necessary to reduce the loads on the vaulted roofs by installing new floor slabs.

The restoration of the decorative works included large areas of the frescos, mosaics, wall paintings, doors, floor marble, stucco decorations and marmoridea which cover some of the walls. The operation was carried out by eight restoration teams, each one specialised in one of the various sectors involved.

On the ground floor, a floor heating system with radiant elements was installed. The old internal wooden floors (including the one in the wonderful Ball Hall on the ground floor) were heavily deteriorated, and were replaced with new marble floors.

Mapei: at the Basis and in the "Bones" for the Casino Nobile Palace

To guarantee that such a complex renovation operation would be successful, it was necessary to use high performance products with innovative technology. This is where Mapei came in, which has always stood out for the quality and innovation of its solutions. In particular, the Company's products were used for the renovation of the floors, the vaulted roofs and the ceilings in various rooms, along with the foundations for this prestigious building. Regarding the floors, before laying the slabs of marble in the various rooms on the ground floor and first floor, the screeds were prepared with TOPCEM* special hydraulic binder. Thanks to this product's short drying time, the time required to lay a floor may be considerably reduced.

TOPCEM* was also employed to make the screeds for the floors in the Ball Hall, which incorporated an under-floor heating system.

The slabs of white Carrara marble, yellow Siena marble and grey Bardiglio marble were then laid in the various halls using GRANIRAPID* adhesive, while the joints were grouted with

KERACOLOR FF* mortar.

In some cases, where the substrate contained a high level of residual humidity, the screed was treated before laying the marble with BIBLOCK* epoxy curing compound and TRIBLOCK* three-component mortar (now replaced on the market by TRIBLOCK P). The first product guaranteed an anti-dust repellent and consolidating effect for the cementitious substrate, while the second of the two products allowed reticulation of the damp surface to take place, to form a compact layer suitable for the wooden covering.

The vaulted roof of the Ball Hall was consolidated on the outer side by injecting MAPE-ANTIQUÉ I* hydraulic binder, used to seal the existing cracks and strengthen the masonry structure.

The hood above the vaulted roof was badly deteriorated due to settling of the structure, and was repaired using MAPE-ANTIQUÉ MC* pre-packed dehumidifying mortar. The cracks in the hood were sealed using EPORIP* epoxy adhesive, which was used to bond the new part of the structure to the old part. In the Gothic Hall and in the Chamber of Venus, both located on the first floor, the reed mat ceilings (a kind of ceiling typical of some Italian regions) were consolidated on the outer side using EPORIP* epoxy adhesive to promote bonding between the old wood-en slats and the new steel profiles, which were attached to the masonry using tie rods.

The consolidation operation of some parts of the structure required casting concrete made with EXPANCRETE* expansive agent in powder form, used to manufacture shrinkage-compensated concrete and mortars. Concrete prepared as above was also used to connect the foundations of the Casino Nobile Palace to the underground Ipogea Hall (or Etruscan Hall). The floor slab above the vaulted roof in the Bacco Hall was also made by casting this type of concrete.

The use of these innovative products, as well as the Mapei Technical Service Department's support during all phases of the operation, doubtless contributed to this well-done work carried out by the restoration teams. On the occasion of the official opening last March, both local authorities and the general public were able to admire the halls in the Casino Nobile Palace, brought back to their former splendour.





Mapei Products:

the products referred to in this article belong to the "Products for Ceramic Tiles and Stone Materials," "Products for the Installation of Resilient, Textile and Wood Floor and Wall Coverings" and "Building Speciality Line" ranges. The technical data sheets are available on the "Mapei Global Infonet" DVD or at the web site: www.mapei.com.

Mapei's adhesives and grouts conform to EN 12004, EN12002 and EN 13888 standards.

Biblock: two-component, epoxy curing compound in water dispersion, with consolidating and anti-dust properties.

Eporip: two-component epoxy based adhesive for cold joints and monolithic sealing of cracks in screeds.

Expancrete: expansive agent for concrete.

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

Keracolor FF (CG2): high performance cementitious grout, polymer modified, water-repellent with DropEffect®, for joints up to 6 mm.

Mape-Antique I: cement-free fillerized hydraulic binder, for consolidating, by injection, stone, brick work and tuff structures.

Mape-Antique MC: pre-packed, cement-free, light-coloured dehumidifying mortar for the restoration of damp stone, brick and tuff masonry.

Topcem: normal-setting, rapid-drying (4 days), special hydraulic binder for screeds.

Triblock: three-component, epoxy-cementitious mortar for waterproofing wet substrates.

N.B. The product has been superseded by Triblock P.

TECHNICAL DATA

Casino Nobile Palace, Villa Torlonia,
Rome (Italy)

Work: preparing the screeds; laying natural stone and wooden floorings; strengthening several halls' vaults and ceilings

Years: 2004-2006

Customer: Rome City Council's Fine Arts Commission

Project and Work Management:
arch. Francesco Marzullo

Rome City Council Fine Arts Commission's Work Management: Alberta Campitelli and Anna Paola Agati

Contractor: IAB SpA, Rome

Installed Materials: Carrara white marble, Siena yellow marble and Bardiglio grey marble; parquet

Mapei Distributor: UNIVEX, Rome

Mapei Co-ordinator: Leonardo Butò, Mapei SpA

An Historical Perf



THE NOTES OF VERDI'S GREAT OPERA RANG ACROSS THE WATERS OF LAKE MAGGIORE, ON "ISOLINO" ISLAND OPPOSITE PALLANZA

Mapei's close bonds with art and music are continuing and actually being strengthened more and more as time goes by. The Company's highly successful venture with the Symphonica Toscanini Orchestra has produced some unforgettable moments and spectacular events, really raising the spirits of all those Mapei has involved in this wonderful enterprise: friends, guests, customers, colleagues and staff. A crescendo of emotions and spectacular events which culminated on 1st August in a celebratory event which few people who attended it will ever forget.

After numerous concerts organised around the world, Lorin Maazel's baton conducted his orchestra into a place with its own very special charm and connected with Arturo Toscanini's life: the "Isolino" (that is, the little island), as Toscanini himself called it, of San Giovanni on Lake Maggiore, where he spent his holiday breaks. Right opposite this little island the Maestro was so fond of, just in front of the Grand Hotel Majestic in Pallanza,

a stage was specially built on the lake, so that the 200 virtuoso musicians of the Symphonica Toscanini Orchestra together with the Choir of the Maggio Musicale Fiorentino and a cast of singers of the highest order could give a concert performance of *Aida* that will live in the memory.

The concert was given again a few days later on 6th August.

It was a moving tribute to the Maestro on the 50th anniversary of his death, which involved a performance of his favourite work and, significantly, retraced the key steps in his artistic career: *Aida* was actually the first opera he conducted as a young man in Rio de Janeiro and the last he ever conducted for a special recording in New York for NBC Symphony Orchestra.

Giuseppe Verdi's opera perfectly embodies Mapei's commitment to music in 2006-2007: as well as the concert on this small island, Mapei was also the main sponsor of the *Aida* which opened the opera season at the Teatro alla Scala in Milan on 7th December last year.

The same score but what a difference



In the foreground from the left, Toscanini's grandson, Walfredo Toscanini, and his cousin Emanuela Castelbarco.

between the two evenings. Sequins, pomp, special effects, fancy staging to evoke film and television, nudity and almost circus-like athletic performances in Milan.

Austerity, composure, refined stylistic elegance, simplicity and precision in every single tricky musical passage, joy and tension from all those involved in bringing the very essence of Verdi's music to light on Lake Maggiore.

Two schools of thought came face to face: one which sees and expects *Aida* to be a story told above all through costume, stage changes, extras and striking set design, and another which, in contrast, went right to the heart of a very simple story magnificently told

Performance of Aida



Maestro Lorin Maazel between Giorgio Squinzi, CEO of Mapei Group, and Adriana Spazzoli, Mapei SpA's Operational Marketing and Communication Director; right, Gianni Baratta, General Manager of the Symphonica Toscanini Foundation.

through music, managing to bring out and carefully describe every tiny psychological detail.

Across from the small island, on a stage whose curtains were the lake itself and whose backdrop was the building with well-lit rooms where Arturo Toscanini once stayed, Lorin Maazel could not have paid a more fitting tribute to the Italian Maestro. He conducted in a style that Toscanini himself would have liked and which genuinely moved the 900 people who witnessed the event.

Among the audience there were lots

of Mapei guests, who were invited to attend a reception held in the Sala Toscanini of the Grand Hotel Majestic before the concert.

In this particularly elegant setting with its wonderful cut-glass chandeliers and fabulous curtains, Mapei's guests enjoyed just the right atmosphere for a gala evening, soaking up all the pomp and ceremony of the golden age of the Belle Epoque, which this hotel – where Claude Debussy and Eleonora Duse stayed in the 1930s, as well as Toscanini – still evokes.

The atmosphere was a combination of the romantic charm of the past and cutting-edge technological innovation that characterizes Mapei's work in the present.

The evening was made all the more significant and intimate by the fact that a number of illustrious descendants were present in the audience: Walfredo, Toscanini's grandson, back on the little island 50 years later, accompanied by his cousin Emanuela Castelbarco and Angiolo Carrara Verdi, the great grandson of the composer from Busseto.

Despite the fact that a starry sky took the place of the usual theatre roof, the acoustics was certainly up to expectations, thanks partly to optimum, discreet use of a special microphone system for the singers.

Completing this ambitious project was no easy enterprise: the wind on the lake, the noise of motorboats and a series of small but annoying technical hitches had made it difficult to perform the rehearsals properly.

And indeed, right up to the very last moment just before the first notes of the opera, there was a feeling of suspense among the audience and young musicians in the Symphonica Toscanini Orchestra.

When Maazel made his entrance onstage, everybody calmed down and, perhaps a sign of the unique nature of this gala evening, even the wind stopped blowing to let Verdi's music ring through the air.

Confident of his own great expertise and experience, Maestro Maazel conducted every note, from the very first to the last, with meticulous precision, nevertheless allowing the warmth of the great emotion in the music of *Aida* pour forth.

Maazel certainly met the challenge of leading the young Symphonica Toscanini Orchestra in a performance which, ending late in the night, will certainly rest in our memories.

It is also worth noting that another concert was also staged here at "Isolino": on 3rd August Maestro Maazel conducted Verdi's *Requiem Mass*.





Photo Dalmaio

From Busseto to South America



An important date on the Symphony of the Air tour undertaken by the Symphonica Toscanini Orchestra to celebrate right through 2007 the 50th anniversary of the death of Arturo Toscanini was the concert held in Busseto. Once again Mapei played a key part in organising the event, which was attended by about 150 guests invited by the Company. In the main square, which was bursting at the seams, of the city where Giuseppe Verdi was born in 1813 – certainly Toscanini's favourite composer – Maazel, conducted Verdi's *Requiem Mass* on 1st July performed by his own orchestra and the Choir of the Maggio Musicale Fiorentino. A wonderful and memorable evening intended to commemorate the fact that it was right here that Maestro Maazel conducted two of Verdi's operas to celebrate the 35th anniversary of his death.

Another unforgettable evening saw the Symphonica Toscanini Orchestra play in Sicily. Here, too, Mapei provided its own invaluable contribution. On 2nd August, in the magical setting of the Greek Theatre in Taormina, the orchestra conducted by Toscanini performed



ca on the wings of great music

an extensive programme of pieces focusing on famous female figures whose lives have been told through music: *Shéhérazade* by Rimsky-Korsakov, *Leonora* by Beethoven and *Salome* by Strauss. A heart-throbbing concert in an enchanted setting, which was attended by over 200 guests invited along by Mapei, reminding us why Maazel is widely acknowledged as one of the most important interpreters of romantic classicism.

After the wonderful performances at "Isolino" (the small island of San Giovanni on Lake Maggiore) described

in the previous article, the Symphonica Toscanini Orchestra continued its tour and arrived in South America. A concert performance of *Aida* was played in Brazil on 23rd August at the Rio de Janeiro City Theatre, the city of Toscanini's first performance as a conductor. The same work was then performed in the city of São Paulo, again in Brazil, on 25th August. São Paulo also hosted a concert on 26th August with music by Roussel, Strauss and Respighi.

The tour then moved on to Argentina: here it again performed pieces by

Roussel, Strauss and Respighi at the Coliseum Theatre in Buenos Aires on 28th August. The following day over 100 guests were also invited along by Mapei Argentina to watch Maazel conduct the Symphonica Toscanini Orchestra in performing Beethoven's *Symphony n. 5*, *La Gazza Ladra* by Rossini, *I Vespri Siciliani* by Verdi and *Pini di Roma* by Respighi. This great conductor and his orchestra did not stop here and did continued playing great music right through this extraordinary year of 2007. Together, of course, with Mapei. 



Here and on previous pages we have described some of the striking concerts given by the Symphonica Toscanini Orchestra over recent months. Here are the dates of the final performances in 2007.

- 16th December** – Milan, S. Ambrogio church
G. Verdi: *Requiem Mass*
- 17th December** – Assisi, Basilica Superiore di S. Francesco
G. Verdi: *Requiem Mass*



MAPEI

day

MAPEI

14-15 JULY
2007
BORMIO -
STELVIO PASS

In the year when Mapei is celebrating its 70th anniversary, the Company's growth, which shows no signs of slowing down, was epitomised by the success in terms of publicity and participation of an event which saw the involvement of 3,000 sportsmen and women, 1,000 more than the previous year. Lots and lots of people took part in the third edition of Mapei Day, which was held on 14th-15th July.

A truly wonderful success due to both the greater numbers involved and the fantastic sporting performances during this unforgettable weekend.

The backdrop of the event was once again Bormio-Strada Imperiale-Passo dello Stelvio and, as always, this very unusual sports events was organised by Mapei in conjunction with Banca Popolare di Sondrio, the Unione Sportiva Bormiese (in charge of organising the sports), Mapei Sport and Pirovano Sci, under the patronage of Bormio City Council and Contea Sport.

And, testifying to its widely acknowledged importance, the event attracted more sponsors than ever: Bormio Terme, Colnago, Enervit, Giussani, Kia Motors, Limonta, Mic-Shimano, Santini, Tempodi, Winning Time.

A total of 3,000 people from all over Europe, a record, took part this time: the limit set by the organisers to ensure everybody received the treatment and support they required to enjoy a truly memorable day. This Mapei Day was more spectacular than ever and ... contagious: as demonstrated by the fact that the very great majority of those

who took part in the first edition of the event came back for the second and then the third, bringing along new cycling and running buddies.

Bormio Welcomes Mapei

For two days Bormio was, literally, overwhelmed by a colourful hoard of sportsmen/women and fans, who took part in the two days of sports events, which once again this year injected real life into the programme. It is said that events like these take time to really capture people's imagination and become the kind of attractions you cannot afford to miss. That is why "third editions" are points of no return. Either the event takes off or it needs revising or even abandoning. What really stands out about the Mapei Day is that right from the very first edition everybody felt they were involved in something unique and even legendary. And so this third chapter in the story serves not only to confirm how successful the overall event is, but also to investigate why it is such a big hit.

"It takes heart to win": leaving aside cold studies and complicated analyses of marketing and communication strategies, the secret of the Mapei Day can be summed up in these four words making up the slogan for a well-known Italian advertising campaign.

The event, promoted by Mapei to create the chance to enjoy some intense sporting moments in the company of all its friends and customers has turned into a very popular

DAY 2007

Sports are us

occasion, because it has managed to instantly and readily capture the heart and soul not just of those taking part on a sporting level, but also of the entire community of Bormio, which, each year, generously shows its affection towards the great Mapei community invading its beautiful city centre for two full days in a very celebratory mood.

The ingredients combining to make the Mapei Day such a striking event are: people working hard and enjoying themselves together, a certain trepidation at putting yourself to the test, and a real feeling of team spirit. Almost primeval values in their simplicity and purity, making them almost irresistible.

A great sports party during two warm days in the sunshine and light, which made everybody forget the 20 centimetres of snow that had fallen on Stelvio Pass just four days earlier. A snowstorm which had been a real concern to all the volunteers from US Bormiese involved in setting up the reception facilities up in the mountain pass.

Although Sunday was really Mapei Day, as usual Saturday was also full of sports competitions and entertainment for everybody to enjoy, notably all Mapei's friends and colleagues who were there in Bormio. At the end of the day, everybody came together for a big party at the Bormio Pentagono: champions from sport, fans, good food, music, lots of fun and a bit of generosity. The night before the much feared but eagerly awaited climb up Mt. Stelvio drew to a close in great style.



COLLECTOR'S SHIRTS

The steinbock mountain goat is among the wildlife living up in Stelvio Park, which can be admired from quite close up. This magnificent mammal, which lives up at the summit above the tree line and over 3,000 metres, may be considered one of the most distinctive animals living in these mountains. That is why Mapei chose it to be its

mascot for the third edition of Mapei Day: a stylised image of a steinbock appeared on the cycling jerseys and running vests of those taking part in the climb up to Stelvio Pass. Another animal "symbolising" the peaks of the Stelvio accompanied the sportsmen and women on their endeavours at the previous edition, adding a touch of colour to their sports outfits: the lammergeyer.

© "Archivio Parco Nazionale dello Stelvio" (Archives of Stelvio National Park).
Photo by Walter Anselmi



Saturday 14th July

There were three sports events on Saturday: the golf competition and golf experience; the ski race and skiing; the five-a-side football. The day ended with the party at the Pentagono.



GOLF

Like last year, a new sport was introduced to this year's Mapei Day: golf.

At the gates of Bormio, in a place called La Fornace, totally landscaped in greenery, an exciting golf tournament, with 40 players taking part over the entire day, was held on the 9-hole course of Bormio Golf Club - a 4,236-metre course beautifully set in the surrounding Alpine landscape. Less experienced players were able to improve their swing on the driving range under the watchful eye of the club professionals.

The winner of 1st category was Antonio Massara; the 2nd category went to Andrea Quaglia. In the photo shown above, the winners with the President of Bormio Golf Club, Michele Tagliaferri. The runners-up got the chance to take part in the 10th Alta Valtellina PRO-AM tournament held on the same course on 2nd August, with Mapei guests - Marcello Zamboni, Piergiorgio Teruggi, Edgardo Zagnoli, Giovanni Piero Bertalli.





SKIING

Skiing is now another traditional event on Mapei Day. And once again this year Mapei's guests fond of skiing were able to get to grips with the slopes of the Geister piste on a clear and bright morning. First down the slopes to open the competition was a member of the Italian ski team Nicole Gius. The eventual winner was Piero Feiffer with a time of 36,9". His prize was a weekend break at the Pirovano resort.



FIVE-A-SIDE FOOTBALL

The third Mapei five-a-side tournament was played on the sports ground in Via Manzoni (divided into three playing areas) and the synthetic pitch specially set up at the local Oratorio della Limonta. 16 teams entered the five-a-side tournament; after a number of qualification games and a knock-out stage, the grand final took place in the late afternoon and was won for the second year running by the Banca Popolare di Sondrio team from Valtellina (shown in photo opposite), which beat the Mapei's in-house football team from Sassuolo (an area taken care of by Mapei sales agents Carlo Rossi and Carlo Alberto Rossi).





PARTY AT THE PENTAGONO

For the Company the important thing about Mapei Day is being able to both toil and have fun with its customers, colleagues and friends. United by a love of sport and in such a beautiful natural setting as Alta Valtellina, it is easy to fraternise and "bond as a team". The entire Mapei corporate philosophy, based on the metaphor of sport and fair play, finds a spontaneous way of showing itself in all its original efficiency. And the kind of joy and fun which can only really be enjoyed together is an integral part of this vision.

Once again this year a big party was held on the evening of Saturday 14th July with over 1,300 people congregating in the spacious facilities of Palazzo Pentagono in Bormio.

The event included music, films, important guests and a hearty meal based on typical dishes from the Valtellina region. The evening's host was bubbly Susanna Messaggio (a very famous Italian show-girl), who, together with Adriana Spazzoli (Mapei SpA's Operational Marketing and Communication Director) and Aldo Sassi (Director of Mapei Sport), invited onto the stage local officials, guests

and other important people involved in Mapei Day.

The evening began with an official ceremony: Mapei's CEO, Giorgio Squinzi, was made an honorary citizen of Bormio by the Lady Mayor, Elisabetta Ferro Tradati (see photo, bottom left), in recognition of his idea to create Mapei Day, which now bonds him inseparably from the town of Bormio. This prestigious acknowledgment, only awarded on rare occasions, adds to all the recognition Mr. Squinzi has already received so far in 2007, the 70th anniversary of the founding of Mapei.

Alessandro Brambilla – a famous Italian television speaker and sports expert who has always provided a vocal commentary on Mapei Day - made himself heard as usual, drawing on his encyclopaedic knowledge of sport to mention all the great achievements of the sportsmen and sportswomen present. This included a real procession of old friends from the cycling world, such as Gianni Bugno, Franco Ballerini, Andrea Tafi, Daniele Nardello and Stefano Zanini. There were also plenty of representatives from Sassuolo Calcio - the football team sponsored by Mapei, which just missed out by a whisker on promotion to the second division or Italian Football Series B this year - and other teams which the Company backs, such as the CO-VER Mapei running team and the Merida mountain bike team. Finally, the champion skier and captain of the Italian national skiing team, Giorgio Rocca, also took the stage.

Once again this year, the sporting and

social side of Mapei Day was combined with some charity work. At the end of the evening there was a special prize draw and charity auction with the takings going to three organizations looking after children and young people with problems (Arché, Exodus and Piccola Opera di Traona).

The sponsors of the event, the holiday farmhouses "Cabiavoli" (run by the Puccioni family) and "Il Borghetto" (run by Andrea Tafi), kindly donated the prizes.





Sunday 15th July

MAPEI DAY – RE STELVIO: THE CLIMB FROM BORMIO TO THE STELVIO PASS stretches for 21.097 km, rising up 1.533 metres with an average incline of 7.6% and even reaching 14% at its steepest.

Once again on Sunday the 15th of July the real star of the show was the famous “Strada Imperiale” mountain road climbing up from Bormio to Stelvio mountain pass, the highest in Europe and one of the “classic” summits in the history of cycling.

There were four tough sporting events held up the dramatic slopes of Mount Stelvio in a magnificent mountain setting on a beautiful sunny day, brightened up even more by all the colourful Mapei cycling jerseys:

1. Competitive running race from Bormio to the Stelvio pass: a truly unique half marathon due to the unusually hard climbs and difficulties in breathing due to the rarefied mountain air;

2. “Re Stelvio” competitive cycling race: the classic Valtellina ride, which has now been held 23 times;

3. Bormio-Stelvio bike ride: open to cyclists (club members or not) in the company of former Mapei cyclists and other famous sports personalities.

4. Running race open to all: held for the second time with almost 800 runners taking part.

For competitive runners the 3rd edition of Mapei Day has an added attraction: it was held over the official half marathon distance. The runners set off a few hundred metres further on from

the cyclists.

The tricky logistical organisation of the combination of four sports events was also reinforced and improved in every respect. All the competitors making it to the top of Stelvio Pass at a height of 2,758 metres above sea level found specially provided changing facilities, clothes bags brought from Bormio by the organisers, and a pasta party laid on for free or meals at the numerous reasonably priced restaurants, plus shuttle buses taking the runners and riders (with their bikes), who did not feel like taking on the descent, back to Bormio from 2.00 p.m.

THE WINNERS

The half marathon was won by

Graziano Zugnoni (ADM Melavi Ponte Valtellina) in a time of 1h38’30”; second place came Paolo Battelli (Corradini Calcestruzzi): 1h41’30” was his final time. Finally, third home in a time of 1h42’42” was Franco Canotti (GS Orobie). The “Re Stelvio” men’s competitive bike race was won by Alessandro Magli from Team Granzon, completing his ride in the remarkable time of 1h02’25”. Second, over 3 minutes behind, was Stefano Sala (Team Carimate Audace Corse) in the time of 1h05’47”. The women’s race was won again this year by Daniela Secchi from Team Casari Combustibili in the time of 1h18’23”. Her team mate Sarah Pallfrader was second across the line. The team event was won by US





Bormiese run by Pozzi and Zangrando, who were delighted to see their club riders score 81 points, three more than Team Casari Combustibili which scored 78.

The most distinctive thing about Mapei Day is seeing lots of keen sportsmen and women battle alongside leading athletes up the tough slopes of this mountain. This year saw the involvement of Mapei staff, friends and customers, riding alongside, as usual, Mapei's CEO Giorgio Squinzi, together with a group of champion cyclists like Andrea Tafi, Daniele Nardello, Andrea Noè, Stefano Zanini, the Manager of the Italian cycling team Franco Ballerini and the Director of Mapei Sport, Aldo Sassi.

"Today I am really happy!" were Squinzi's words after crossing the line and beating his own personal best. All the results and photographs from the various days of sport and certificates for taking part are available from the website www.mapeiday.com.

PRIZE-GIVING CEREMONY

An intense day's sport finally ended at 4.30 p.m. in Piazza Kuerc in Bormio. The prize-giving ceremony was held in Bormio's main town square in a festive atmosphere involving the Vice Mayor Stefano Capitani, Renato Sozzani and Mario Pedranzini from the Banca Popolare di Sondrio, Giancarlo Pozzi from the Unione Sportiva Bormiese, as well as Giorgio Squinzi and Adriana Spazzoli (see photo on the right). It marked the end of a hectic weekend, which saw famous athletes and ordinary people competing, celebrating and generally enjoying themselves together amidst the Mapei colours. It provided the chance to once again commemorate and celebrate Mapei's 70th anniversary with a huge cake. They were two unforgettable days, which, considering the growing success of the event over the last three years and the warmth with which



A BIT OF MAPEI UP ON THE STELVIO

Mapei products also played an important part in this event. The stretch of road just beyond the finish area, where the special bike stand and storage facility was set up (see photo above, left), was stabilised using STABILSOIL 200, a hydraulic binder in powder form especially designed to stabilise all kinds of ground.

In addition, the buildings around Piazza Kuerc, where the closing prize-giving ceremony was held, were renovated using MAPE-ANTIQUÉ MC, SILEXCOLOR TONACHINO and SILANCOLOR TONACHINO.

people took part in all the organised events, all the Mapei people involved would certainly best sum up by the words: sports are us! RM

COPPI AND BARTALI: TWO VERY ITALIAN LEGENDS AND... A DUEL THAT CONTINUES

This year's Mapei Day saw two very unobtrusive mascots in attendance during all the most important stages in the numerous scheduled events.

At first sight nothing more than just two magnificent perfectly restored vintage cars, one creamy white and the other grey. But in actual fact these were the cars driven by two legendary Italian cyclists from the past, who split Italy's sports fans into two competing factions in the post-war years by their magnificent sporting exploits and very different personalities.

Yes, Mapei Day had the cars on show that used to belong to Fausto Coppi and Gino Bartali and it almost seemed as if their legendary achievements and fierce rivalry still echoed around the mountains of Alta Valtellina. Owned by two motor racing and cycling fans – Mr. Colombo and Mr. Zanzoterra, who restored them to their former glory – they truly embellished Mapei Day, reminding the general public about “two very Italian legends... and a duel that continues”.

MASERATI 3500 GT - Bartali's car

- Launched onto the market in 1957 when Fangio won his 5th world championship driving a Maserati
- White body work
- Mechanics: 3500 cm³ - 6 cylinders - 220 Hp - 230 Km/h

LANCIA AURELIA B 20 GT COUPE' 3rd CLASS – Coppi's car

- Launched at the 1953 Turin Motor Show
- Special grey colour (not standard) for this show
- Pininfarina designed the body work
- Mechanics: 2500 cm³ -120 Hp, over 190 Km/h (one of the first 6-cylinder Italian motor cars designed by the engineer De Virgilio)
- Right-hand drive, gear-change on the steering wheel





TOP SPONSOR OF TREVISO 2008

Mapei will be the top sponsor of the 2008 UCI Cyclo-cross World Championships taking place in Treviso (Italy) on 26th and 27th January. The "Le Bandie Lake" Sport Centre in Spresiano (in the Province of Treviso) will host the event: this is a wonderful park, resulting from the recovery of a worn out quarry thanks to a project launched by the Mosole Group, which strongly supports the World Championships. This will be the third time Treviso hosts Cycling World Championships: in 1985 and 1999 the Road Cycling World Championships were held in this city.

Numerous side events and activities will accompany the event, which was preceded by a "World Cup test event" at Le Bandie Lake on 4 November, 2006, when a cycling competition was held on the same course of the 2006/2007 UCI Cyclo-cross World Championships.

According to the event's programme, the course inspection and official training sessions will be held on Thursday, 24 and Friday, 25 January. On Saturday, 26 January, the Junior Men and Under 23 UCI World Cup Races will take place. On Sunday, 27 January, the morning will be devoted to the Women's Race and the afternoon to the Elite Man's Race. All the races will be held on a 3,251 m course (731 m on asphalt, 2,041 on meadow and 478 on brick) which was devised by the former cycling champion Adri Van Der Poel. For further information see the website www.cxtreviso.com

RM

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Epoxy grouts and adhesives for industrial and commercial applications

Kerapoxy Line		
	Adhesive	Grout
<i>Kerapoxy IEG</i>		•
<i>Kerapoxy P</i>		•
<i>Kerapoxy SP</i>		•
<i>Kerapoxy</i>	•	•
<i>Kerapoxy Adhesive</i>	•	
<i>Kerapoxy Design</i>	•	•

The **KERAPOXY LINE** has been enhanced with new products for bonding and grouting tiles in special residential and industrial environments, subject to all types of traffic and, above all, which require high chemical resistance to all kinds of dirt, oils and acids.

✓ **Kerapoxy**

Two-component, acid-resistant epoxy mortar for grouting joints wider than 3 mm, available in 26 different colours. It may also be used as an adhesive. KERAPOXY is ideal for residential and commercial environments, as well as for swimming-pools.

✓ **Kerapoxy IEG**

Two-component epoxy mortar with an extremely high resistance to chemicals, for grouting tile joints with a minimum width of 3 mm. It is available in 2 different colours (113 and 130 of Mapei range). KERAPOXY IEG is ideal for industrial applications.

✓ **Kerapoxy P**

Two-component, acid-resistant epoxy mortar which is particularly easy to apply and clean, for grouting tile joints wider than 3 mm. It is available in 2 different colours (113 and 130 of Mapei range). KERAPOXY P is ideal for industrial applications in large areas.

✓ **Kerapoxy SP**

Three-component, high chemical resistance, epoxy mortar for grouting tile joints wider than 5 mm. It is available in neutral colour. KERAPOXY SP is ideal for industrial applications.

✓ **Kerapoxy Adhesive**

Two-component, epoxy adhesive with no vertical slip for ceramic tiles and stone material. It is available in grey colour. KERAPOXY ADHESIVE is ideal for rapidly bonding special pieces and suitable for bonding tiles in fibreglass.

✓ **Kerapoxy Design**

Two-component, acid-resistant, satin-finish epoxy mortar for grouting joints of glass mosaics, ceramic tiles and stone material with a high aesthetic value. It can be also used as adhesive. It is available in neutral and 7 different colours. It can be used in combination with MAPEGLITTER.

For further information on these products, see the technical data sheets at www.mapei.com.

Keraflex Maxi S1



- 90%
DUST

LESS DUST FOR EVERYONE

From the Mapei Laboratory experience an innovative technology: "DUST FREE". Incredible dust reduction (-90%) and excellent performance:

- ✓ Especially suitable for laying large-format tiles
- ✓ Highly deformable
- ✓ No vertical slip
- ✓ Extended open time
- ✓ New formula with **Dust Free** technology



www.mapei.com
MAPEI

ADHESIVES • SEALANTS • CHEMICAL PRODUCTS FOR BUILDING