

INTERNATIONAL

# Realtà MAPEI

ISSUE 62

**2.4** BILLION EUROS ESTIMATED  
CONSOLIDATED TURNOVER IN 2016  
**18** MAIN RESEARCH CENTRES  
IN 13 COUNTRIES / **1.000** NEW  
FORMULATES EVERY YEAR OF THE MAPEI  
GROUP / **9.000** EMPLOYEES WITH 12%  
WORKING IN R&D / **3.000.000** TONS OF  
CO<sub>2</sub> SAVED THANKS TO MAPEI ADDITIVES FOR CEMENT  
GRINDING / **5.000** PRODUCTS FOR THE BUILDING  
INDUSTRY OF THE MAPEI GROUP / **66.000** CLIENTS  
AROUND THE WORLD / **50.000** TONS OF CO<sub>2</sub> OFFSET  
**73** PLANTS IN 5 CONTINENTS IN 33 DIFFERENT COUNTRIES  
**161.000** PROFESSIONALS FROM THE SECTOR  
INVOLVED IN MAPEI TRAINING COURSES / **25.000**  
TONS OF PRODUCTS SHIPPED EVERY DAY



**ADRIANA SPAZZOLI.**  
*Realtà Mapei  
 International's  
 Editor-in-Chief.*

## CELEBRATING QUALITY AND TRANSPARENCY

**T**he Mapei Group has done so much all over the world over the last five years! Although I devote all my time to supporting and reinforcing Mapei's growth, working in constant contact with all our corporate branches, the truth of this fact really struck me one day while I was updating all the official documentation ready for the celebrations to commemorate the company's 80<sup>th</sup> anniversary.

Taking a momentary break from my everyday concerns and focusing on the recent past to try and grasp its most important aspects was exhilarating and made me realise just how far we have come and how many goals we have achieved over the last five years.

And it is wonderful to realise that when quality and experience come together with professionalism and creativity wonderfully exciting things happen.

New products, lots of new people who have joined the Company, projects envisaged and then carried out all over the world reflect our dream of being a truly international company in the products for the building industry sector.

The latest pictures provide an overview of the last few years of Mapei's corporate history - now compiled in a new corporate monograph and official video about to be presented - a testimony to the stunning growth we have made and which shows no signs of stopping. From manufacturing sites equipped with cutting-edge automated machinery to sophisticated appliances for Research & Development laboratories, what emerges is an astounding ability to innovate based on constant investments. One thing has not changed: quality, the guiding thread over three generations in the development of a Group that is now a world leader in the chemicals for the building industry sector taking cutting-edge Italian manufacturing and design to over eighty countries.

Constant hard work and the ability to launch high-quality products on the market, designed to protect people's health and the environment, are extremely important as we look to the future. Concrete proof of this ongoing progress - based around technology and how it is applied to build-

ings and infrastructures - are all the projects we have carried out that are highlighted in this issue of *Realtà Mapei*: these are constructions Mapei has successfully been involved in with its products and expert technicians. They symbolise a success story in which Mapei has played a key role, demonstrating once again that commitment and teamwork are the winning basis for constructing a better future.

80 years is a long time and so... what about the celebrations?

Lots have already taken place and many more are planned to commemorate this landmark together with all our customers, partners and friends.

Widespread festivities in the style that has always characterised Mapei based on the theory that "work can never be separated from art and passion" is reflected in Mapei's 80<sup>th</sup> celebrations, as well as come together to celebrate the values we share. The main events in Italy are scheduled for the Scala Opera House in Milan, starting with a concert featuring the return to Milan of the great orchestral conductor, Maestro Riccardo Muti, after a 12-year absence, which was held on 21<sup>st</sup> January.

There will also be other events in some of music's most celebrated venues, such as Santa Cecilia National Academy in Rome, Petruzzelli Theatre in Bari and Teatro Massimo in Palermo, prestigious events attracting thousands of people to Italy from all over the world.

Conventions of the very highest technical-scientific calibre and international symposiums and seminars will be held throughout the year, also providing the chance to examine and reflect on major issues associated with the future of the building industry.

As well as music and culture of the highest standard, lots of sports events scheduled in 2017 will provide the opportunity to share Ma-

pei's values and winning spirit. Both national and international sports events, like the San Marino and Riviera di Rimini Motorcycling Grand Prix, the Re Stelvio Cycling Race, and the matches of the Sassuolo Football Club.

There will also be local events organised by the Mapei Group's associate companies featuring cultural and sports activities aimed at focusing on the company's seriousness, experience and presence on the market at the very highest levels. They will look at issues connected with our specific projects, as well as other matters specifically connected with sociocultural life in the various nations in which we operate.

All this following a very specific guiding thread and launching a campaign to safeguard quality in the chemicals for the building industry sector based around the notion of Transparency.

Because ethical business operations, the quest for excellence and transparent communication are ideas that Mapei wants to share with all its stakeholders. Celebrations designed to strengthen bonds and once again promote that "culture of quality", which, looking back and reviewing the key moments in its history, is Mapei's most distinctive trait. Without forgetting that Mapei's incredible history based on passion, tradition and incredible ideas is nourished by constant attention to beauty.

Just as technology is the right means of pursuing constant improvements in corporate functions and products, likewise Beauty and Culture are the core values of a corporate credo focused around people and developing their potential for growth.

*Adriana Spazzoli*



# SUMMARY

## EDITORIAL

Celebrating Quality and Transparency inside front cover

## ART AND CULTURE

- 2 MAPEI celebrates its first 80 years in the name of culture and music

## NEWS

- 6 Transparency beyond appearance  
80 Giorgio Squinzi wins the "Brera Prize"  
Happy birthday Guggenheim Intrapresæ Inside back cover

## MARKET

- 8 Ideal partners  
10 State of the global building industry

## TRADE FAIRS & CONFERENCES

- 14 Domotex: Competence in construction  
32 Bau: MAPEI looks to the future  
74 C-ADD Team at the 21<sup>st</sup> Arab International Cement Conference and Exhibition

## PROJECTS

- 22 Basel Museum of Art  
24 Sports Arena in Cento  
26 Victorian Comprehensive Cancer Centre of Melbourne  
30 Cologne Golf Club  
38 Industrial building in Lorsch  
40 The bridge over the river Arade  
46 Blaj Cultural Palace  
50 Museum of the Innocenti  
56 Falcone-Borsellino International Airport  
58 State Chancellery of Düsseldorf  
60 GERBER Shopping Center in Stuttgart

## THE EXPERT'S OPINION

- 44 Seamless floors: Express yourself

## HOTELS SPECIAL

- 62 Simone Micheli: works of architecture as sustainable works of art  
66 Heritage Hotel Life Palace in Šibenik  
68 Schlosshotel Fleesensee  
70 The Alise Hotel in San Francisco  
72 Hotel Moments in Budapest

## SPORT DIVISION

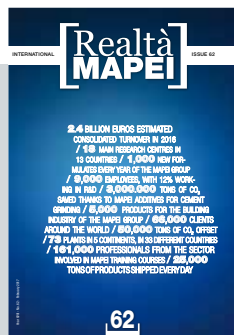
- 76 Sassuolo – the fight back has begun  
77 Sassuolo Women's Football  
78 Sassuolo, transfer market with an eye for the present and the future

## PRODUCT SPOTLIGHT

Ultrabond Eco 195 p. 19, Ultrabond Eco P909 2K p. 23, Ultracoat HT Sport p. 25, Ultrabond Eco V4 SP p. 28, Hospital facilities p. 29, Ultrabond Eco 170 p. 31, Mapeplan p. 39, Mapegrout Gunite p. 43, Mapefloor I 300 SL p. 49, Ultratop p.53, Adesilex P4 p. 57, Elastorapid p. 59, Ultralite Family p. 61

*Save the date!*

WE WILL BE WAITING FOR YOU AT OUR NEXT TRADE FAIRS.  
**COME AND VISIT US AT OUR STANDS!**



**COVER STORY**  
Mapei's figures speak for themselves: 80 years of constantly cutting-edge products and non-stop growth that have made us the leading company within the sector, with 9,000 employees and a consolidated turnover of 2.4 billion Euro for 2016.

**EDITOR IN CHIEF**  
Adriana Spazzoli

**EDITORIAL CONTRIBUTORS AND ENGLISH TRANSLATION**  
Martyn Anderson, Nicholas John Bartram, Metella Iaconello, Francesca Molteni, Federica Pozzi, Tiziano Tiziani, Federica Tomasi, Alessandro Brambilla

**PRODUCTION AND EDITORIAL COORDINATOR**  
Francesca Molteni

**PHOTOGRAPHIC RESEARCH**  
Davide Acampora

**GRAPHIC DESIGNER**  
Studio Magazine - Milan (Italy)

**PRINTED BY**  
Rotolito Lombarda - Pioltello (Italy)

**PUBLISHED BY**  
Mapei SpA  
Via Cafiero, 22 - 20158 Milan (Italy)  
Tel. +39/02/376731  
Fax +39/02/37673214  
website = www.mapei.com  
E-mail = mapei@mapei.it

**PRESIDENT & CEO**  
Giorgio Squinzi

**OPERATIONAL MARKETING DIRECTOR**  
Adriana Spazzoli

**REALTÀ MAPEI**  
Registered by the Tribunal of Milan n. 363/20.5.1991  
Realta' Mapei International is published 6 times per year

**CREDITS**  
Bennett Stefanie, Olga Ambrosio, Alec Invernizzi, Master Group, Centro Mapei Sport, Sassuolo Calcio, Mapei GmbH, Mapei Suisse SA, Lusomapei S.A., Mapei Romania SRL, Mapei Croatia d.o.o., Mapei Corporation, Diane Choate, Guggenheim Intrapresæ, Simone Micheli, Mapei Australia Pty Bhd, Mapei Kft., Mapei Suisse SA, Premio Brera



"Responsible Care" is the world chemical industry's voluntary program based on implementing principles and lines of action concerning staff health and environmental protection.

Articles featured in this magazine may be republished in whole or in part after obtaining the editor's permission. In any case the source must be mentioned.



**MIX**  
Paper from responsible sources  
FSC® C005461

80  
years  
1937-2017

# MAPEI CELEBRATES ITS FIRST 80 YEARS IN THE NAME OF CULTURE AND MUSIC

THE GREAT ORCHESTRAL CONDUCTOR'S  
RETURN TO THE SCALA OPERA HOUSE  
FOR A CONCERT SPONSORED BY MAPEI

Mapei's celebrations to commemorate reaching such an important landmark in 2017 - 80 years' experience as a leading company in the building industry - began with a triumphant concert held at the Scala Opera House on 21<sup>st</sup> January.

To emphasise its close ties with the world of culture and music of the highest calibre, Mapei sponsored the concert performed by the Chicago Symphony Orchestra to mark Maestro Riccardo Muti's return to the Scala Opera House.

A memorable event that was attended by over 300 special guests of the firm, who gathered in the company of Mr Giorgio Squinzi and his family to confirm once again that the successes Mapei has achieved around the globe can be traced back to its founder Rodolfo Squinzi's firm belief that "work can never be separated from art and passion".

First established in Milan in 1937 – when the Scala Opera House's orchestra was conducted by Victor de Sabata and its most notable singers included Mafalda Favero - Mapei has gradually become a global benchmark in the chemical products for the building industry sector. A wonderful story based around a constant focusing on research and innovation. Ma-



**RIGHT.** The great orchestral conductor Maestro Riccardo Muti on the stage of the Scala Opera House in Milan together with the Chicago Symphony Orchestra.

**LEFT.** Giorgio and Adriana Squinzi with Alexander Pereira, Superintendent of the Scala Opera House, and Riccardo Muti.



**RIGHT.** Poster for the concert conducted by Maestro Riccardo Muti with the Chicago Symphony Orchestra held in Milan last January, when the great conductor made his return to the prestigious Milanese Opera House.

## Chicago Symphony Orchestra

Direttore

**Riccardo Muti**

20 gennaio 2017

**Alfredo Catalani**

*Contemplazione*

**Richard Strauss**

*Don Juan* op. 20

**Pëtr Il'ič Čajkovskij**

*Sinfonia n. 4 in fa minore* op. 36

21 gennaio 2017

**Paul Hindemith**

*Konzertmusik* op. 50 per archi e ottoni

**Edward Elgar**

*In the South (Alassio)* op. 50

**Modest Musorgskij**

*Una notte sul Monte Calvo*

*Quadri da un'esposizione*  
(orchestrazione Maurice Ravel)

Con il sostegno di



INTESA SANPAOLO

www.teatroallascala.org



pei is now a trusted partner of architectural designers, contractors, suppliers and clients working on prestigious building contracts and eco-sustainable projects, thanks to the quality of its products and technologies.

Throughout all these years of global growth, the bonds between Mapei and the Scala Opera House have grown ever stronger. A founding member of the Scala Opera House since 2008, over the years Mapei has provided its backing for numerous concerts and cultural events, many of which devoted to scientific research and charity work. These include those organised by the Negri Weizmann Foundation for Research into illnesses, the LILT (Italian league for the fight against tumours), the women's section of the Italian Red Cross and the Francesca Rava Foundation, which helps children in need in Italy and around the world.

The company's Sole Director, Mr Giorgio Squinzi, became a member of the Scala Opera House's board of directors in 2016 confirming Mapei's commitment to supporting the Scala.

### A GREAT MAESTRO FOR TWO IMPORTANT CONCERTS

Celebrating anniversaries and scientific events with the help of wonderful music is a well-established practice for both Mapei and the Bracco Group, a famous old Milanese company at the very cutting-edge in diagnostic imaging that can boast its own 90-year history of successes.

The Chicago Symphony Orchestra's performance at the Scala Opera House on its European tour, conducted by Maestro Riccardo Muti, seemed just the right opportunity to begin celebrating the 90th anniversary of the company founded by Elio Bracco way back in 1927. A second concert held the next day, conducted by Maestro Muti, was sponsored by Mapei to celebrate its own 80th anniversary. The two concerts performed on 20th-21st January marked Maestro Muti's first return to the Piermarini building, where he was the Music Director from 1986-2005, since the Wiener Philharmoniker concert held on 2nd May, 2005.

The Chicago Symphony Orchestra, where Riccardo Muti took charge in 2010 and is widely considered to be one of the leading international orchestras, was performing at the Scala for the third time following the concerts conducted by Sir Georg Solti as part of the 1971 and 1981 Symphony Mu-

sic seasons. The Superintendent, Mr Alexander Pereira, said that: "from my very first press conference as Superintendent, Riccardo Chailly and I have always insisted that the world's leading conductors must perform regularly at the Scala Opera House, particularly those who have made extraordinary artistic contributions to the history of the Scala. Following the exhibition to celebrate its 75th anniversary, these two concerts with Riccardo Muti conducting the Chicago Symphony Orchestra were something the city and all music lovers were eagerly awaiting".

### A SPECIAL EVENING MAPEI-STYLE

There was a first-night-of-the-opera-season audience at the Scala for Riccardo Muti's second concert conducting the Chicago Symphony Orchestra. Lots of Mapei's friends joined Giorgio Squinzi and his family, all keen not to miss out on such an important occasion for Milan and another prestigious moment in Mapei's corporate history. Those in attendance included the former lord mayor Gabriele Albertini, Diana Bracco, the former prime minister Romano Prodi, together with his wife, the economist Alberto Quadrio Curzio, and world-renowned architects, Renzo Piano and Mario Botta. Ferruccio de Bortoli was joined by lots of editors of Italian newspapers, such as Maurizio Belpietro, Giancarlo Mazzucca and Antonio Calabrò, and leading figures from the world of economics and





Lots of illustrious guests of the Squinzi family attended the evening. They included (from top of page, clockwise) Alberto Quadrio Curzio, Romano Prodi, Giorgio and Adriana Squinzi. Renzo Piano with Simona Giorgetta and Laura Squinzi, Gabriele Albertini with Livia Pomodoro and Ferruccio De Bortoli with Veronica Squinzi.

finance. Seated up on stage in the company of the Superintendent, Alexander Pereira, were the orchestra conductor, Zubin Metha, and the actor, Gerard Depardieu.

There were also lots of representatives from the world of medical and scientific research, economics and finance.

The music chosen by Muti and magnificently performed by his powerful orchestra was both sophisticated and striking: "Konzertmusik op. 50" for string and brass instruments by Paul Hindemith, "In the South (Alassio)" by Edward Elgar and "Night on Bald Mountain" and "Pictures at an Exhibition" by Modest Mussorgsky, the latter in the famous arrangements by Maurice Ravel.

Mapei's guests and the rest of the audience really enjoyed the programme, giving the Maestro a five-minute standing ovation and throwing yellow roses onto the stage. After performing Verdi's overture "Vespri siciliani" as an encore, an emotional standing ovation drew this very special evening to a close. "We miss you!", somebody shouted out from up in the gods, as the Maestro announced from the stage that: "coming to this wonderful and famous theatre has been a magical moment for the orchestra, so we hope to be back some time...". "In 2020!", the Superintendent, Mr Pereira, shouted out from the stage to everybody's surprise. "We have enjoyed two wonderful days and will be back", Mr Muti replied. "I cannot forget that, for better and for worse, I spent 20 years here and love everything this theatre represents..."

The end of the Maestro's extremely intense two-day return to Milan's Opera house, after being away for twelve years, went as smoothly as any "normal" evening, like a flashback to a couple of decades ago.

A kind of "normality" which, perhaps partly due to an air of familiarity that all meetings and events organised by Mapei tend to have, was embraced by Riccardo Muti, who ended up chatting with all the corporate guests in the opera house foyer at the end of the evening.

Mr Muti seems to be tied to the Scala Opera House by some unbreakable thread. The same kind of close bonds that connect Mapei to both Milan and the Scala Opera House and that also join together all the men and women, who, in perfect unison, have made Mapei such a great company throughout its eighty-year history.



**BOTTOM, FROM LEFT.** Giorgio Squinzi with Cristina Muti. Mr. Squinzi again with Mario Botta. Adriana Spazzoli with Antonio Patuelli.

**BELOW.** Marco and Stefania Squinzi with Alexander Pereira.



# TRANSPARENCY BEYOND APPEARANCE

80 YEARS  
DEFENDING THE  
QUALITY OF  
CHEMICALS FOR  
THE BUILDING  
INDUSTRY



## 1994

THE YEAR OF OUR FIRST  
CERTIFIED QCS - ISO 9001  
STANDARDS



MORE THAN

## 50.000

TONS OF CO<sub>2</sub>  
OFFSET

# SU STAI NABI LITY

Talking about ethics, sustainability and transparent communication is certainly nothing new for Mapei, which has in fact built its corporate identity on these foundations.

Nevertheless, it is always a good idea to keep all the company's clients and vast community of fellow workers and partners, who use Mapei product systems every day all over the world, well-informed and up-to-date about the path the company is taking and all the numerous manufacturing, commercial and communication operations it is engaged in.

What better opportunity could there be, then, than the 80<sup>th</sup> anniversary of Mapei SpA to draw attention to (and relaunch right across the board) its concrete commitments to the basic values that have always inspired the company?

Mapei's corporate mission is to contribute to people's quality of life through research and the creation of increasingly sustainable chemical products for

the building industry. The direct consequence of this basic principle is an awareness of the need to work with the utmost respect for ethics, health and safety, while focusing special attention on social and environmental responsibility.

Long-term reliability and durability are further factors involved in "real sustainability", because they allow savings on materials and energy and help improve people's quality of life. Mapei has been following this guideline since 1937, the year when it was originally founded, focusing more and more attention on innovation as a means of developing products that are increasingly geared to its customers' needs and, at the same time, environmentally friendly.

This is the driving force behind Mapei's desire, as one of the world's leading companies in this industry, to take a further step towards social responsibility by launching a campaign to safeguard quality in the chemicals for the building industry in the name of Transparency.

## RESEARCH & DEVELOPMENT AND CERTIFICATIONS

Research & Development is one of Mapei's most important allies in this battle for ethics, transparency and responsibility, also helping ensure its products are truly sustainable and safe.

That is why Mapei invests approximately 5% of its annual revenue in its 18 R&D laboratories around the world, so that it can market 16 environmentally-friendly product lines that are all safe for people to use.

It is not just research and innovation that come out of these laboratories, but also the guarantee that its products meet the requirements of international standards and that their already high-quality prop-

erties are constantly improved. Keeping these promises is the only way to get all Mapei's claims independently certified and only way to move on from words to action. It is also the reason why Mapei enforces environmental quality, health and safety management systems that are certified in accordance with ISO 9001, ISO 14001 and OHSAS 18001 international standards.

The products and systems also conform to European Building Products regulations (CPR 305/2011) that have been in force since 1<sup>st</sup> July 2013. This is exemplified by its products with extremely low emissions of volatile organic compounds, which have been awarded EMICODE EC1 PLUS certification by the GEV Institute BLUE ANGEL.

## MONITORING PRODUCTS ALREADY MARKETED

But Mapei's commitment to transparency does not stop here. The company is now introducing a higher level of voluntary controls over the standards for products already available on the market working with accredited laboratories.

Product samples are taken from a randomly chosen distributor to prove that they conform to international standards and the properties listed in the documentation and on the packaging.

These checks are carried out regularly and complete those controls already carried out at the 18 R&D laboratories and the quality control laboratories in

## MAPEI ENFORCES ENVIRONMENTAL QUALITY, HEALTH AND SAFETY MANAGEMENT SYSTEMS THAT ARE CERTIFIED IN ACCORDANCE WITH ISO 9001, ISO 14001 AND OHSAS 18001 INTERNATIONAL STANDARDS

Mapei's 73 factories around the world. "Transparency beyond appearance", where facts are what count. Things that Mapei has been doing on a day-to-day basis for 80 years now. A long story of ongoing successes that are continuing in the name of social and environmental responsibility.

As Giorgio Squinzi stated so pertinently in the editorial he wrote for issue No. 32 of *Realtà Mapei International* published in 2010, which is worth re-quoting here: "I firmly believe that efforts made by companies in the direction of sustainability must be carried out in a serious and transparently certified manner. In this field words are meaningless. That is why Mapei never changes its allegiance just to follow the latest trends and remains exemplary in terms of its style and loyalty to its corporate colour: blue, a clean and elegant colour, which has always marked the Company in the world of building as being synonymous with safety, transparency and reliability."



Mapei products are certified according to the most strict international standards. They are formulated using innovative, recycled and ultra-light raw materials developed to reduce energy consumption and with very low emission level of volatile organic compounds (VOC).



Mapei concretely promote sustainability by joining international programmes and organizations.



Mapei develop technologically-advanced products and solutions which help protect the environment and the health of workers and users.



The transparency campaign is grounded on 6 fundamental principles:

- **A commitment to regulations:** we scrupulously enforce local, European and international standards on our products.
- **A commitment to transparency and dialogue:** we behave responsibly and market our products, processes and operations in a transparent fashion. In addition to what is stipulated by the regulations in force, every year we have the products we market revised by independent certified companies.
- **A commitment to ethics:** our ethical code, which we are obliged to conform to, governs our behaviour within and outside the company.
- **A commitment to preventing hazards at the workplace:** our business culture is focused on enforcing and developing measures

and training to prevent hazards at the workplace. Our aim is to have zero accidents at all our sites.

- **A commitment to the environment:** we work to create eco-/people-friendly products.
- **A commitment to promotion and training:** we organise lots of seminars, courses and conference and take part in educational activities at universities, schools and professional associations in the industry. Mapei's training work awards credits for ongoing professional development and refresher courses for people working in the industry, as requested by the industry's Professional Associations.

**DESIGNERS, USERS, BUILDING  
SUPPLIERS: ALL TOGETHER TO  
KEEP ON WORKING**



# IDEAL PARTNERS

We implement our values and principles on an everyday basis in our constant, direct business relations with retailers, who market and sell our corporate products right across the country. Mapei has very close ties with its distributors in the building industry. Bonds strengthened day by day thanks to the reciprocal exchanging of information and know-how allowing us to conquer a rapidly changing market.

Mapei's growth often coincides with the growth of its retailers, who, down the years, have chosen to market a brand and its products that have become synonymous with quality, reliability and safety.

To make this relationship even stronger, Mapei's sales team is committed to providing excellent support, partly thanks to the efforts of Mapei's Marketing Department that provides distributors with all the technical information about its products. In this respect, the strategic focal points of this relationship are, on the one hand, well-trained technical-commercial staff, who interact daily with the sales team, supported by an extensive training programme; and, on the other, information in both paper and multimedia form designed to illustrate the distinctive traits of products and how they are to be used.

In line with this approach, Mapei's new website designed for its 80<sup>th</sup> anniversary will help enforce our corporate mission, which

has always been to inform, support, interact and facilitate design, construction and application choices.

Users of Mapei products experience on a day-to-day basis how this policy translates into optimising work operations, applying products in the most effective way, and perfect results in every imaginable kind of work conditions.

Through the constant exchanging of experiences and ideas with its own clients/customers and building retailers, Mapei receives input and feedback for guiding innovation and extending its range of product lines and references. Small and large ceramics sale outlets and building retailers discover that Mapei quality is not just confined to its products, but also extends to the expertise of its sales staff, the enthusiasm of its retailers and the invaluable advice they provide.

**BUSINESSES  
WITH THE RIGHT  
OPERATING  
STRUCTURE CAN  
EVEN COMPETE  
ON STAGNANT  
MARKETS**



# STATE OF THE GLOBAL BUILDING INDUSTRY

STEADY GROWTH IN THE FAR EAST, OCEANIA AND NATIONS IN THE PERSIAN GULF

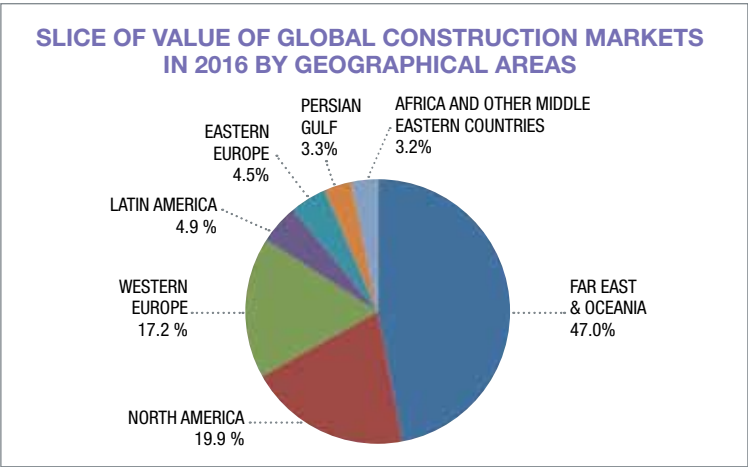
Investments in the building industry reached a figure of approximately 8,000 billion euros in 2016 corresponding to a rise of just over 2%. Last year the global building market grew more slowly than the world economy for which the International Monetary Fund estimates a growth of 3.1%.

**FAR EAST & OCEANIA**

This region has the world's biggest building market with investments estimated at almost €3,750 billion and a 47% slice of the global construction market. Investments in construction per capita are less than €900, while in more mature markets like North America and Western Europe they are well over €3,000. This indicator highlights the future potential of Asia; indeed, there is plenty of room for a realignment between expenditure per capita in the various regions, which will move hand in hand with a reduction in the economic gap between

emerging and mature markets. Over recent years Asia has seen a partial slowdown in growth rates in the building industry, which, nevertheless, remain the highest worldwide in 2016. It is estimated that the market increased in value by 4.4% last year, rising perfectly in line with the overall growth in the economy. Investments are expected to increase by approximately 4% in 2017 and, in this case, the variation in the building industry should mirror that in the region's GNP. The growth in the markets in the Far East and Oceania is not only due to such a colossus as China, but also other countries that have some of the world's leading building markets. Indeed, the region also includes five of the world's top construction markets: Japan, India, Indonesia, South Korea and Australia. The highest market increases are expected in India and Indonesia, while China will fall in line with the average figure for the region. Among the advanced economies, Australia and

GEOGRAPHICAL AREA	VALUE OF CONSTRUCTION INVESTMENTS IN 2016 € billions
FAR EAST & OCEANIA	3,746
NORTH AMERICA	1,583
WESTERN EUROPE	1,375
LATIN AMERICA	393
EASTERN EUROPE	356
PERSIAN GULF	267
AFRICA AND OTHER MIDDLE EASTERN COUNTRIES	253
TOTAL	7.973



**FIGS. 1 and 2.** The table and graph show estimates of the value of investments in construction and each geographical region's slice of the global construction market in 2016. The overall market trend varies from region to region.

Source: Prometeia, December 2016



**SPAIN'S BUILDING INDUSTRY IS EXPECTED TO PERFORM BEST, WHERE IT IS ESTIMATED THAT THE MARKET WILL INCREASE BY BETWEEN 3%-4%.**

South Korea should show the best market trends, while the rise in investments in the building industry in Japan is expected to be more moderate, just like other mature economies.

**NORTH AMERICA**

The North American market is estimated to be worth almost €1,600 billion corresponding to 20% of the global construction industry. Canada and Mexico are stably in the list of the top 15 nations for investments in construction. It is estimated that investments in construction in North America increased by only 0.5% in 2016, a figure which is lower than the estimated 1.5% increase in the GNP. Modest growth in the North American building industry is entirely due to a slowdown in the non-residential and infrastructures sectors. Housing has, in fact, increased by over 4%. Last year there was relatively low growth in the USA and Mexico, while investments in construction in Canada dropped by over 2%. Estimates for 2017 show a clear improvement in the state of the North American building market. Investments in construction should, in fact, increase by over 3%, performing better than the region's GNP, which is expected to rise by 2%. The positive outlook for the building industry is due to an expected revival in the non-residential and infrastructures markets. Growth in the housing sector is estimated at over 3%. This year's rise in investments is estimated at approximately 4% in the United States, while the figure is expected to be around 2% in Mexico and Canada.

**WESTERN EUROPE**

Western Europe is the world's third most important building market with an estimated value of €1,375 billion and a 17% share of global investments. Germany, Great Britain, France and Italy are among the world's top construction markets.

It is estimated that there was a just over 2% increase in investments in the region's construction industry in 2016. This means the building industry has performed better than the economy, which grew by 1.6% last year. The most positive trend in all the various sections of the market came in the housing sector, which is estimated

to have increased overall by between 3%-4%. In contrast the non-residential sector has grown least, suffering from the relatively low rise in GNP. All the main markets have seen a relatively moderate increase in building output, with the sole exception of Great Britain, where the building industry is expected to have stagnated.

Forecasts for 2017 indicate a moderate growth in construction estimated at 2%, which should be slightly higher in the residential sector. Among leading markets, growth in Germany, France and Italy should fall in line with the continental average, while investments are expected to contract by approximately 1% this year in Great Britain. Spain's building industry is expected to perform best, where it is estimated that the market will increase by between 3%-4%. The positive trend in the Spanish building industry is mainly due to the residential sector, which had been hit hardest by the serious industrial recession in Iberian construction.

**LATIN AMERICA**

The region's construction industry is estimated to be worth almost €400 billion, accounting for 5% of worldwide construction output. Slightly less than half of these investments were made in Brazil, which is the only country in the region among the world's top construction markets.

The region's economy and building industry performed worst on a worldwide scale in 2016. Indeed, the GNP is estimated as having contracted by approximately 2%, while the decline in the building industry is estimated at almost 4%. It is believed that the Latin American building industry lost 10% of its value during the three-year period from 2014-2016. The reason for this negative trend in GNP is the serious recession under way in Brazil, Venezuela and Argentina. The good trend in the market in certain countries in the region, including Colombia and Peru, could only slightly mitigate the overall recession in the Latin American building industry.

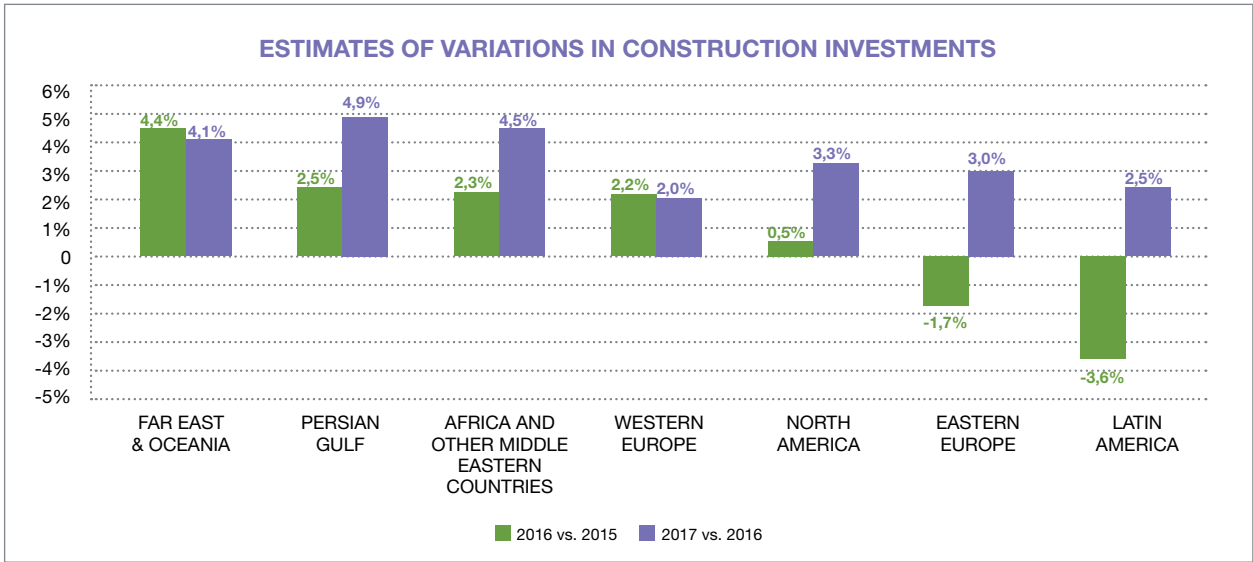


FIG. 3. Estimates of the trend in the building market in 2016 and 2017 in the various geographical areas. Source: Prometeia, December 2016

There is expected to be an improvement in the region's economy this year with all markets coming out of recession, except for Venezuela's. The overall increase in Latin America's GNP is estimated at approximately 1%. Stronger growth estimated at 2.5% is expected in the building market. This estimate is based on meek signs of revival on the Brazilian building market, a relaunching of investments in Argentina, and the continuing expansion of other smaller markets in the region.

**EASTERN EUROPE**

Overall growth in this region was just over 1% in 2016, slowed down by the dip in Russia's GNP (-0.8%), the region's leading market. The region's other two main economies, Poland and Turkey, grew by over 3% and the economic situation was also positive in central-eastern European countries.

Last year the region's building industry went into recession: -1.7%. Alongside the crisis in the Russian building industry, the decline was also due to a drop in public investments in infrastructures, because of less access to EU funding. Following the 2016 recession, the region's construction market saw a decline in its share of the global building industry; it is now estimated at 4.5% with investments estimated at approximately €360 billion. This year Russia's economy and building industry should come out of recession, recording growths of between 1%-2%. Overall, Eastern Europe's GNP is expected to grow by approximately 2.5% and there is also expected to be a similar trend in the construction market.

**PERSIAN GULF NATIONS**

This region's building market is estimated as being worth approximately €270 billion, corresponding to 3%

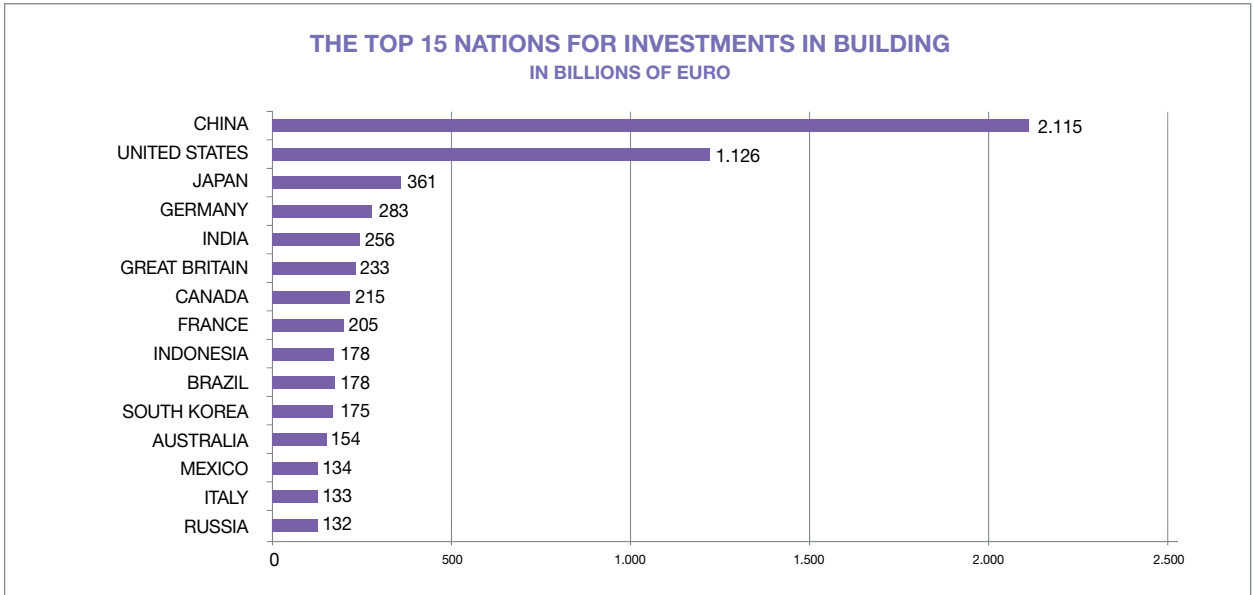


FIG. 4. The top 15 countries in terms of investments in building (in billions of euros).

## **THE ARAB EMIRATES SHOULD SHOW THE BEST TREND IN BUILDING ACTIVITIES IN THE GULF REGION PARTLY DUE TO PROJECTS LINKED WITH EXPO 2020 IN DUBAI**



of the global building output. It is estimated that investments in construction last year increased by 2.4% compared to 2015, showing similar growth to the regions GNP: +2.6%. The rise of the construction industry was negatively affected by the drop in the price of oil, which impacted on financing of public building projects. The countries most affected by low prices of crude was Saudi Arabia, while the GNP and construction industries of the Arab Emirates and Iran (thanks to the dropping of international sanctions) both performed positively. This year there is expected to be a slight increase in the rate of economic growth in the Gulf region, which should be helped along by an expected rise in the price of crude. Overall the building market is expected to improve notably, with an expected rise of approximately 5% in investments, the highest rate of growth in the construction industry worldwide. The Arab Emirates should show

the best trend in building activities in the Gulf Region, partly due to projects linked with Expo 2020 in Dubai. The growth in the construction industry is expected to be more modest in Saudi Arabia, due to a slight drop in public spending for building. The construction market should show a positive trend in Iran: the country will be able to exploit the potential for growth of its housing and infrastructures markets.

### **AFRICA AND OTHER MIDDLE EASTERN COUNTRIES**

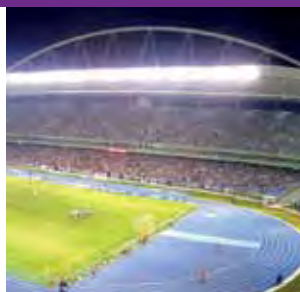
The rate of economic growth in this region varied considerably last year: the GNP in North Africa and the middle eastern region was about 2.5%, while sub-Saharan Africa, negatively affected by the recession in Nigeria, only saw an increase of just 1.6%. Overall investments in construction in this region are estimated at €253 billion, corresponding to approximately a 3% share of the global building market. In this region, the market is mainly focused around infrastructures. The housing market has also been particularly dynamic over recent years, benefiting from the boost provided by urbanisation processes and the development of public building projects. The overall growth in the construction sector in 2016 is estimated at 2.3%. Egypt, Israel, Morocco and Tunisia are the nations where the building industry is most dynamic. The economic situation in the region in 2017 should show signs of improving. Indeed, Nigeria is expected to come out of recession, which should allow sub-Saharan Africa's GNP to grow by almost 3%. Economic growth in North Africa and the Middle East should be about 4.5%. The construction market should benefit from an improvement in the region's macroeconomic situation and it is estimated that it could grow by over 4% in 2017. Of course, these forecasts depend on there being greater social and political stability in the region, which will encourage the influx of foreign investment required to develop the kind of major infrastructural projects Africa needs so badly.

## **NIGERIA IS EXPECTED TO COME OUT OF RECESSION, WHICH SHOULD ALLOW SUB-SAHARAN AFRICA'S GNP TO GROW BY ALMOST 3%**

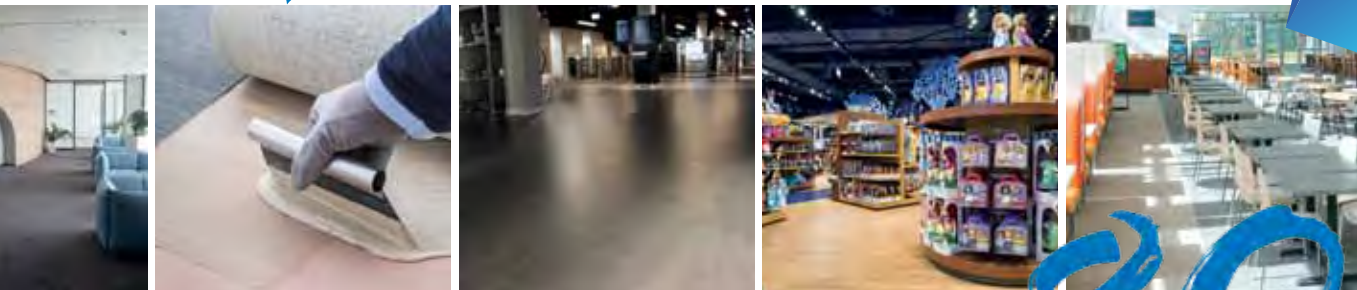


**Francesco Doria.** Mapei Market Research Manager

# DOMOTEX 2017



*Products for installing  
resilient, LVT and textile  
floor and wall coverings*



**80**  
*years*  
1937-2017

# COMPETENCE IN CONSTRUCTION

After four days full of interesting news and events, Domotex 2017 – the international trade fair dedicated to new products and technology for textile, resilient and wooden flooring which was held in Hannover, in Germany, from the 14<sup>th</sup> to the 17<sup>th</sup> of January – came to an end registering a considerable growth in both the number of exhibitors and the amount of display space occupied by the participants, and in the number of exhibitors and visitors from abroad. 1,409 exhibitors from more than 60 countries from all over the world presented their most recent innovations to the global public, highlighting the numerous solutions currently on offer in the flooring sector.

And just like all the previous years, Mapei was an enthusiastic participant at this international gathering, along with their German subsidiary Mapei GmbH, to present all their products and systems developed specifically for this sector.

And, as always, Mapei's participation was highly appreciated by the numerous visitors to the event, with around 70% coming from abroad, mostly (43%) from EU member states. Worth mentioning was the large increase in the number of visitors

from the Middle East (+9%) and from the Orient and Central Asia (+16%). There was also quite a large increase in the number of visitors from the United States and the United Kingdom. Domotex proved to be in constant evolution, becoming a privileged observation point for all that's new in the flooring field.

## EXPERTISE COMES FROM EXPERIENCE

In their large display area (Stand A30 - Hall 7), Mapei highlighted its wide range of solutions.

"Mapei. To Build Expertise" was the key claim adopted to also emphasise Mapei's international leadership in the sector of adhesives and complementary products for the installation of all types of flooring. Expertise in building that is the result of Mapei's unrivalled know-how: specialisation in the building world, internationalisation, research and development into increasingly technologically-advanced products, technical support, teamwork, concern for the health and safety of all those who use our products and the special care taken towards all the people working for the Mapei Group.



*Products for installing  
wooden flooring*

## NEW LOOK & MORE INFO NEW PACKAGING

### PRODUCTS FOR INSTALLING RESILIENT, LVT AND TEXTILE FLOORING

At Domotex, Mapei presented its new packaging solutions for products used to install resilient, LVT and textile flooring, specifically developed to help make choosing and using products that much simpler.

The green lid is a common feature on all the containers used for this line of products, while the coloured band towards the top of the container identifies the actual family of products.

On the back of the container there is also a clear description of the product, along with a series of icons to guide you through its use and the environmental certification and logos covering each single product.

green lid for  
all resilient drums

colour identifying the product  
family

icons for a simply  
choise and easy use  
of the products

clear product  
description

more visible  
environmental  
certifications



## MAPEI RESILIENT PRODUCT FAMILIES

**REACTIVE  
ADHESIVES**



**ADHESIVES FOR  
TEXTILE FLOORING**



**ADHESIVES  
FOR PVC**



**UNIVERSAL  
ADHESIVES**



**ADHESIVES FOR  
WALL COVERINGS**



**ADHESIVES  
AND PRODUCTS  
FOR LVT**



**MULTI-PURPOSE  
ADHESIVES**



**ADHESIVES  
FOR LINOLEUM**



**ADHESIVES  
FOR COVINGS,  
PROFILES AND  
SKIRTINGS**



**ADHESIVES FOR  
CONDUCTIVE  
FLOORING**





## LVT: STYLE AND INNOVATION

Mapei increases its range of products for LVT. What better occasion than Domotex to exhibit the completeness of their product ranges, which from this year also include the possibility of applying over (and removing from) old flooring, including in damp surroundings (bathrooms, showers, kitchens, etc.).

And it was by using a real shower that the stand managed to capture the interest of the visitors, who were able to see and touch the new members of the family for themselves. The shower was chosen mainly to present the new, safe, complete system for installing LVT in damp surroundings, which includes overlaying old covering materials on the walls and floor of showers, consisting

of a one-component, silylated polymer-based reactive adhesive (ULTRABOND ECO MS 4 LVT) and a non-slip finish (MAPECOAT 4 LVT), as well as the most suitable products for preparing and sealing substrates in this particular area of use.

Let's start with the adhesive: ULTRABOND ECO MS 4 LVT is a modern, one-component, silylated polymer-based reactive adhesive specifically developed for installing LVT and to replace conventional two-component reactive adhesives in all areas where this type of material is installed. It is also recommended for installing all types of textile and resilient flooring, particularly the various types of PVC.



**TO THE LEFT.** A new product at Domotex was ULTRABOND ECO MS 4 LVT, ideal for installing LVT flooring.

It is extremely tough and highly resistant to shear loads, which makes it particularly suitable for floors exposed to direct sunlight or intense mechanical loads and stresses from fork-lifts, pallet trucks, etc. and for floors in areas constantly exposed to water (entrances to public areas, communal kitchens, showers, bathrooms, etc.).

It is also available in a thixotropic version (ULTRABOND ECO MS 4 LVT/WALL) for bonding LVT on walls.

ULTRABOND ECO MS 4 LVT is certified EMICODE EC1 Plus (very low emission



## EXPERTISE RECEIVES ITS JUST REWARDS

MAPESONIC 4 LVT and ULTRABOND ECO MS 4 LVT, in their respective twin versions (full set of documentation available at [www.mapei.com](http://www.mapei.com)), were selected by a jury of 9 architects, designers and flooring experts, headed by the designer Stefan Diez, as technologically-innovative and cutting-edge products in the "Application technology and installation" category. The recognition of these innovations is a reflection of current and emerging trends in the textile flooring sector (including fibre and woven flooring), in the resilient, wooden and contemporary laminate flooring sector and in the field of installation techniques and methods. The products were chosen to be included in Innovations@DOMOTEX 2017 – an innovations forum, on this occasion was at its fourth edition – following a selection process which took into consideration all their technological, quality and functional aspects. The products were then put to the test to evaluate their relevance for end-users.

**ALONGSIDE.** New packaging solutions for more efficient communications, display stands with real products where you can experience Mapei solutions at first hand and specialists to assist and advise visitors. In the photo: Paola Di Silvestro Mapei SpA, Corporate Product Manager for the Resilients Line.

# DOMOTEX 2017

of volatile organic compounds) and Blue Angel.

But let's go back to showers, which provided another opportunity to present FLEXCOLOR 4 LVT ready-mixed grouting paste for floors and walls, a product that allows you to add a personal touch to LVT flooring. It can be used, for example, to create an effect that reminds us of wood-like flooring on the bridge of a ship. Or it may be used for the grout lines between tiles to give a ceramic or stone-effect finish. The results you can achieve are often quite surprising.

To close the system, MAPECOAT 4 LVT two-component, non-slip, aliphatic polyurethane finish in water dispersion, available in a matt version (10 gloss) or with a semi-gloss finish (30 gloss) for LVT floor and wall coverings. This prod-



uct offers a non-slip finish with high resistance to wear on LVT flooring in civil and commercial surroundings, including areas subjected to high volumes of foot traffic.

Apart from the complete system for installing LVT in damp surroundings, other products which complete the line

were also presented.

PLANIPREP 4 LVT ready-mixed smoothing and levelling mortar, used to smooth over and level old, uneven substrates or surfaces with grout lines before installing self-adhesive and "tack-dry" LVT. It is now also available in an easy-remove version that leaves no traces of the product, PLANIPREP REMOVE 4 LVT, so that once self-adhesive LVT flooring has come to the end of its use, the underlying flooring can be quickly restored to its original condition. PLANIPREP 4 LVT and PLANIPREP REMOVE 4 LVT are certified EMICODE EC1 Plus (very low emission of volatile organic compounds).

For soundproofing needs the showcased product was MAPESONIC 4 LVT, a sound-absorbing mat for LVT available in two versions; self-adhesive MAPESONIC SA 4 LVT and bonded MAPESONIC GD 4 LVT, both capable of reducing noise in rooms and buildings (reduction in noise from footsteps by up to 16 dB).

MAPESONIC 4 LVT is a compact (1.5 mm), high-density, underfloor soundproofing system reinforced with glass fibres specifically developed for LVT flooring systems to provide additional dimensional stability. It is particularly recommended for use in renovation work (housing units, hotels, offices, etc.) where soundproofing needs to be improved without having to remove the old flooring and screed.

MAPESONIC 4LVT is also certified EMICODE EC1 Plus (very low emission of volatile organic compounds).

## A NEW GENERATION OF LEVELLING PRODUCTS

Particular attention was paid to the large family of self-levelling products, which has now been enlarged with the addition of PLANEX HR rapid-drying, moisture-resistant, self-levelling smoothing mortar for layers from 1 to 10 mm thick, PLANEX HR MAXI, rapid-drying, moisture-resistant, self-levelling smoothing mortar for layers from 2 to 20 mm and PLANIPATCH FAST TRACK ultra rapid-drying, fine grained, thixotropic smoothing compound for integrating repairs in small areas up to 25 mm thick, which allows resilient flooring to be installed after just 1 hour.

Numerous new levelling products were showcased at Domotex, such as PLANIPREP REMOVE 4 LVT, PLANIPATCH FAST TRACK, PLANEX HR and PLANEX HR MAXI.





**ABOVE.** Expertise at first hand: display panels featuring genuine Mapei products were available for the visitors.



## CARPET: A QUESTION OF STYLE

Carpet is an innovative, highly technological, high quality, versatile and elegant product with its own special characteristics which makes it an ideal floor covering and a key feature in the most exclusive surroundings, such as luxury hotels, cruise liners, theatres and airports.

Mapei, world leader in the sector of adhesives for textile flooring, has developed a range of reliable, highly-tech-

nological installation systems that are able to keep pace with the latest trends and developing needs. Amongst the showcased products at Domotex was ULTRABOND ECO 195 with low odour emissions during application and when in service according to ISO 1600-28.

Amongst the other products presented at the trade fair was the updated range of adhesives for textile flooring, including the innovative adhesive ULTRABOND ECO TX 3, characterised by its rapid initial grab, and ULTRABOND ECO 195, a low-odour adhesive with high shear strength and low emission of volatile organic compounds (VOC) for bonding carpet, which makes it particularly recommended for bonding needle-punch flooring without the risk of shrinkage or opening at the joints. In the field of adhesives for resilient flooring, another highlighted product was ULTRABOND ECO VS30, a highly versatile adhesive for PVC, linoleum and carpet, characterised by its high shear strength that develops a strong bond very quickly.

## Adesivi per Tessili Adhesives for Textile Floorings



### ULTRABOND ECO 195

is an adhesive for installing textile flooring characterised by its extended open time and low odour.

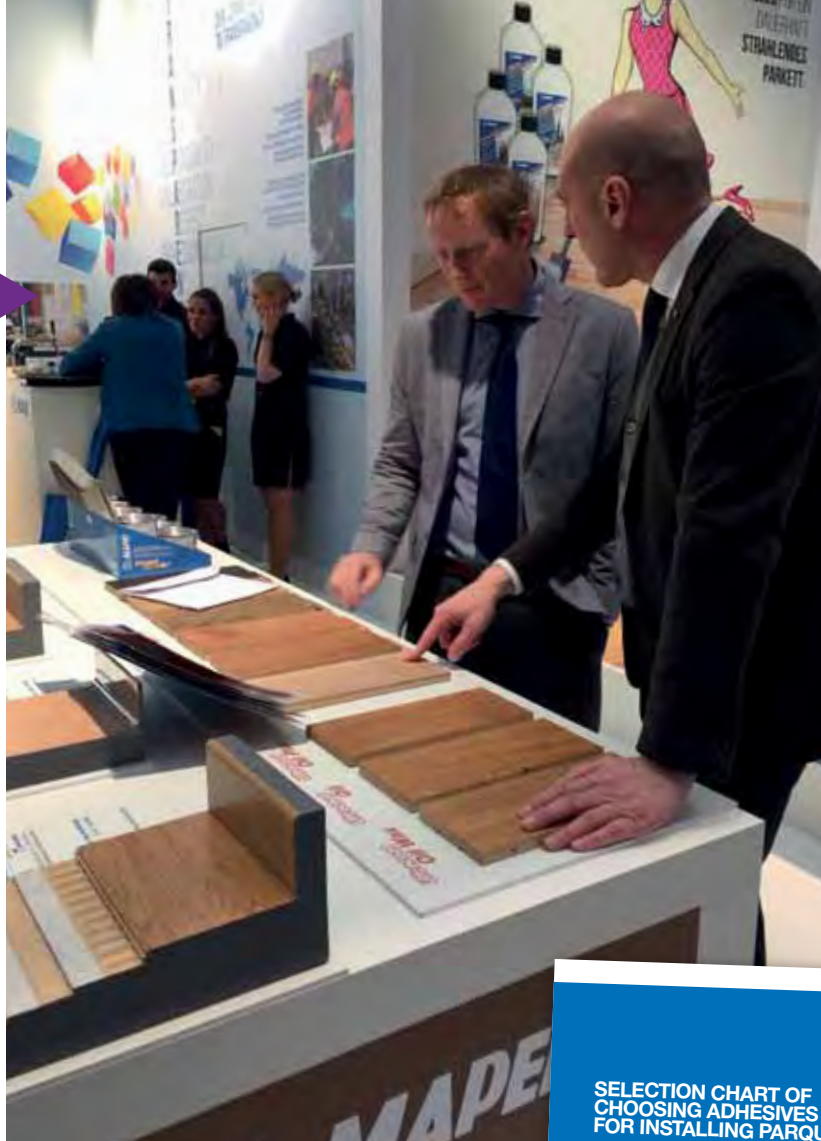


# DOMOTEX 2017

## CARE AND MAINTENANCE OF WOODEN FLOORING

At Domotex, Mapei presented various new products for the care and maintenance of wooden flooring:

- ULTRACOAT TRAFFIC MT two-component, acrylic-polyurethane, water-based lacquer with very low emission of volatile organic compounds (VOC), which may be applied directly on flooring without a primer.
- ULTRACOAT CLEANER concentrated detergent for cleaning lacquered and oil-finish wooden flooring.
- ULTRACOAT REMOVER PLUS detergent for removing old wax and stubborn dirt.
- ULTRACOAT POLISH ANTI-SLIP natural non-slip protective polish.
- ULTRACOAT POLISH MATT stain-resistant wear-resistant protective polish.



### SELECTION CHART OF CHOOSING ADHESIVES FOR INSTALLING PARQUET



**BELOW.** Large crowds gathered at the Mapei stand, especially during the practical demonstrations showing how to apply the products.



**ABOVE.** from left, Uwe Gruber, General Manager of Mapei GmbH and Günther Hermann, Wood & Resilient Line Product Manager of Mapei GmbH

Also showcased was the innovative cleaning aid MAPEI SPRAY MOP, recently introduced onto the market for cleaning domestic floors quickly and efficiently. Along with the range of products to help maintain wooden flooring, Mapei also used the event to propose ULTRACOAT OIL COLOR, low-odour urethane oil finish for colouring wooden floors. It can be painted over with the ULTRACOAT finishes, which highlight the veins in wood. Another family of products presented at the trade fair was the ULTRABOND range of adhesives with very low emission of volatile organic compounds (VOC). Made from silylated polymers, the products from the ULTRABOND family have exceptional viscosity and workability, as well as exceptional rib stability. One of the members of this family is ULTRABOND ECO S968 1K one-component, solvent-free adhesive for bonding all types of solid and pre-finished wooden flooring on any type of substrate, including heated screeds.

The next edition of this important international trade fair will be held, as always, at the Hannover Exhibition Centre, from the 12<sup>th</sup> to the 15<sup>th</sup> of January, 2018.



**ABOVE.** The range of ULTRACOAT OIL COLOR natural oil resins, to bring out the natural beauty of wooden flooring.



**Ultracoat**

Line - Linie



# BASEL MUSEUM OF ART

EXTENSION WORK ON THIS HISTORICAL MUSEUM USING MAPEI PRODUCTS TO MEET SWISS STANDARDS FOR ECO-SUSTAINABILITY



For lovers of contemporary art or, more importantly, of culture in general, Basel is a city not to be missed, with an extraordinary wealth of museums, exhibition centres and foundations dedicated to art, where the actual containers used to house the exhibitions are works of art in themselves.

Amongst such buildings, one that really stands out, for its tradition and the importance of the works on display, is the Basel Museum of Art (Kunstmuseum Basel), which in 2013 was voted the fifth best museum in the world by the British newspaper *The Times*.

This museum boasts the most antique public art collection in the world, with breathtaking works from the Renaissance era up to the historical Avant-Garde period, from Arnold Böcklin to Van Gogh, Gauguin and Picasso, with more than 4,000 paintings, sculptures, drawings, installations and videos.

The Kunstmuseum Basel was extended in the middle of April 2016: with the opening of the underground passageway connecting the main building to the new extension, designed by the Basel architects Christ & Gantenbein, the precious works of art now have around one third more exhibition space, within an architectonic context of the utmost sophistication.

The main building now exhibits works dating from the XV Century up to 1960, while the new area (2,750 m<sup>2</sup>) is home for temporary exhibitions and works created between 1960 and 1990.

## HIGH-PERFORMANCE ECO-SUSTAINABLE PRODUCTS

Mapei Suisse SA, the Swiss subsidiary of Mapei Group, was

present on site with their engineers and products while construction work on the new building was being carried out.

To block the residual damp in the cementitious substrates, the surfaces were preliminarily treated with two coats of PRIMER MF EC PLUS two-component, solvent-free, low-viscosity primer with very low emission of volatile organic compounds. PRIMER MF EC PLUS was chosen because it has no problem resisting up to 5% of residual moisture, while guaranteeing excellent adhesion for the filler materials which were applied later. The primer was then broadcast with QUARTZ 0.5 while it was still wet.

More than 2,000 m<sup>2</sup> of surfaces were smoothed over with ULTRAPLAN MAXI self-levelling, ultra rapid-hardening smoothing compound, which was applied in layers up to 10 mm thick.

## INSTALLATION OF PARQUET

Once the substrate had been completed, work began on the installation of solid oak parquet flooring.

ULTRABOND ECO P909 2K was used for this operation, a two-component, solvent-free adhesive with very low emission of volatile organic compounds (EMICODE EC1 R Plus).

This product was chosen because it is particularly suitable for bonding large planks of solid wood and for its good initial and final adhesion properties. ULTRABOND ECO P909 2K also allows the requirements to be met for parquet installed in areas with a high volume of visitors.

The Mapei products used in the new building for the Basel Museum of Art comply with eco-sustainability standards specified by Minergie-Eco, a common project borned from the two associations Minergie and eco-bau. Minergie-Eco completes from one side the Minergie label, that focuses on energy efficiency and comfort, through health and environmental building requirements. From the other side, thanks to the eco-bau contribute, it offers dedicated product certifications.

Mapei Suisse is pioneer in this field, with more than 80 products which have received the eco-bau certifications - and the only one boasting so many products in different product categories and selling sectors.

**ABOVE.** The new building which has allowed the exhibition spaces in the Kunstmuseum Basel to expand  
**TO THE RIGHT.** Solid oak flooring was installed in the salons with ULTRABOND ECO P909 2K two-component polyurethane adhesive.



## TECHNICAL DATA

**Kunstmuseum Basel,**  
Basilea (Switzerland)

**Period of construction of  
the new venue:** 2013-2016

**Period of intervention:**  
2015-2016

**Intervention of Mapei:**  
supplying products for  
preparing substrates and for  
installing wood

**Client:** Einwohnergemeinde  
der Stadt Basel, Immobilien  
Basel-Stadt

**Works Direction:** ARGE  
Generalplaner KME Basel,  
Christ & Gantenbein AG, Peter  
Stocker AG

**Project:** Architects Christ &  
Gantenbein AG, Basel

**Works Direction:** Peter

Stocker AG Baumanagement  
**Contractor:** Bau- und  
Verkehrsdepartement Basel-  
Stadt, Städtebau & Architektur,  
Hochbauamt

**Installer Company:** J. Sigg  
AG Reinach BL, Stücker AG  
Reinach BL

**Mapei Co-Ordinators:**  
Patrick Zengaffinen, Martin  
Schneider (Mapei Suisse SA)

## MAPEI PRODUCTS

Primer MF EC Plus, Quartz  
0,5, Ultraplan Maxi, Ultrabond  
Eco P909 2K

For further information  
on Mapei products see  
[www.mapei.ch](http://www.mapei.ch) and  
[www.mapei.com](http://www.mapei.com)

## IN THE SPOTLIGHT

### ULTRABOND ECO P909 2K

Two-component, solvent-free,  
polyurethane quick adhesive  
with very low emission level  
of volatile organic compounds  
(EMICODE EC1 R Plus),  
for bonding solid parquet,  
pre-assembled multi-layer  
parquet of all types of formats  
and wood types on any kind  
of substrates, including  
heating systems. It can be

used also by those installers  
who are sensitive to epoxy-  
polyurethane products.  
It can contribute up to **3  
points** to obtain the **LEED**  
certifications.





# SPORTS ARENA CENTO, ITALY

THE ULTRACOAT SYSTEM HAS BEEN USED TO RESTORE THE PARQUET PLAYING COURT OF THE LOCAL BASKETBALL TEAM FROM CENTO

ASD Benedetto XIV 2011 is an historical basketball team from Cento, in the Province of Ferrara, and was founded in 1964.

The first team has been playing in the Serie B Basketball League for a number of years and, in the summer of 2016, Baltur became their "main sponsor".

The team is currently lying in second place in the league table, pretty much in line with the hopes and expectations of the entire local community that follows the team, as testified by the 641 season-ticket holders and more than one thousand fans who regularly flock to the stands to watch every home match, and by the numerous enthusiasts who follow the team for their away games.

The extension project for the arena, which is owned by the club and is now known as Pala Ahrcos, was presented to the public last October, and once the work has been completed it will have seating for two thousand supporters and a restaurant,

making it a place where the inhabitants of the town can meet and congregate.

Last summer, before the extension work commenced, important renovation work was carried out on the parquet court to give it a complete overhaul.

In order to guarantee work was completed by the middle of August, at the beginning of July, in conjunction with the Bisport Company from Modena, a team of Mapei specialists carried out a survey of Pala Ahrcos.

Because of water infiltrating through the roof of the arena, the solid beech parquet playing surface, installed around thirty years ago, was stained in various places and was no longer suitable for the basketball team's training sessions or matches. Once they had received the go-ahead from Cento Town Council, and following a meeting held with engineers from the Municipality, it was decided to overhaul the existing court by polishing the surface and applying a new coat of varnish.

## ECO-SUSTAINABLE PRODUCTS TO REPAIR THE PARQUET

The first phase of the work involved polishing and sanding the original parquet to bring it back to its original condition.

The surface was then treated with a coat of ULTRACOAT PRE-

MIUM BASE two-component, NMP-free (N-Methyl-2-pyrrolidone), water-based base-coat with high isolating capacity and low emission of volatile organic compounds.

The following day the surface was sanded again with 180 and 220-grade ULTRACOAT SR GRANA silica carbide abrasive disks, followed by the application of a coat of ULTRACOAT HT SPORT two-component, polyurethane and water-based varnish, specifically developed for wooden playing surfaces.

ULTRACOAT HT SPORT complies with European standards for



**FACING PAGE.** The playing surface at the Pala Ahrcos after the sanding and varnishing operations.

**ABOVE.** After sanding the surface, a coat of ULTRACOAT PREMIUM BASE base-coat was applied on the wooden floor, immediately followed by a coat of ULTRACOAT HT SPORT water-based lacquer.



indoor and multi-purpose playing surfaces (EN 14904:2006). Its surface hardness, combined with its mechanical strength and resistance to chemicals, make ULTRACOAT HT SPORT COLORS a highly reliable product.

Used in combination with ULTRACOAT PREMIUM BASE it boasts the Bfl-s1 - Cfl-s1 reaction to fire classification.

The following day, the surfaces were sanded again and the sidelines, the free-throw areas and the centre circle were painted with two coats of ULTRACOAT HT SPORT COLORS applied wet-on-wet in the colour RAL 3020, the team colour. ULTRACOAT HT SPORT is a two-component, 100% polyurethane and water-based varnish for wooden floors, with very low emission of volatile organic compounds (VOC) and high resistance to wear and abrasion. Suitable for areas with a high volume of pedestrian traffic, it is the ideal product to resist the runs, jumps and rapid movements typical of basketball players. The final finishing coat was, again, ULTRACOAT HT SPORT.

#### IN THE SPOTLIGHT

##### ULTRACOAT HT SPORT

Two-component water-based polyurethane lacquer for wooden sports floors which has been formulated to meet the highest requirements for wooden sports floors.

ULTRACOAT HT SPORT conforms with European standards for indoor multisports surfaces meeting

EN 14904:2006 requirements. Hardness, chemical and mechanical resistances make ULTRACOAT HT SPORT a highly reliable product.



#### TECHNICAL DATA

**Pala Ahrcos**, Cento (Ferrara)  
Italy

**Period of construction:** 70's

**Period of the Mapei**

**intervention:** 2016

**Intervention by Mapei:**

supplying products for the repair of wooden playing court

**Client:** Municipality of Cento (Ferrara)

**Installer company:** Bisport Srl (Modena)

#### Mapei Co-Ordinator:

Alessandro Bonacini, Davide Zanotti, Rossi Carlo, Carlo Alberto (Mapei SpA)

#### MAPEI PRODUCTS

Ultracoat Premium Base, Ultracoat SR Grana, Ultracoat HT Sport

For further information on Mapei products see [www.mapei.it](http://www.mapei.it) and [www.mapei.com](http://www.mapei.com)



# VICTORIAN COMPREHENSIVE CANCER CENTRE MELBOURNE

VINYL AND TEXTILE WALL AND FLOOR COVERINGS APPLIED IN A NEW HOSPITAL  
COMPLEX SPECIALISING IN THE RESEARCH AND TREATMENT OF TUMOURS

Located in the biomedical district of Parkville, a suburb of Melbourne, the Victorian Comprehensive Cancer Centre (VCCC) was inaugurated in July last year.

The hospital complex has become Australia's leading oncology centre for the research and treatment of tumours and for the quality of training for its medical and paramedical personnel, thanks also to the cutting-edge equipment available and the hospital's research laboratories.

The structure extends over an area of 130,000 m<sup>2</sup> and has thirteen floors above ground level and a further four floors below ground level reserved for parking.

Although the VCCC is separated from the Royal Melbourne Hospital by a busy main road, the two hospitals are connected by three covered bridges so that patients, visitors and medical personnel can move freely between the two structures.

## **A HOSPITAL DESIGNED FOR RESEARCH AND TREATMENT**

Something of a novelty in Australian hospital architecture is the large central atrium, known as the "Welcome Lounge". Illuminated by natural light, it stands at the centre of the structure and makes finding your way and moving around inside the hospital that much easier.

The complex has 160 beds for long-term patients, 110 beds

for the day hospitals and chemotherapy, 8 operating theatres, 28 treatment rooms for the doctors and nurses, 8 radiotherapy bunkers and 97 doctors' studios.

Plenty of space has also been set aside for teaching and training classrooms, as well as areas for seminars and meetings and a large conference hall.

The idea behind the VCCC was that it would become Australia's leading centre for the research and treatment of tumours: which is why it also has 10 research laboratories, where around 600 research scientists can carry out their work. The wet laboratories (specially designed structures where chemical substances, medicines and biological material can be tested in safety with no risk of biological contamination) are located on the upper floors of the structure. All the research areas were purpose-designed so that they could be reconfigured in the future and used for other purposes.

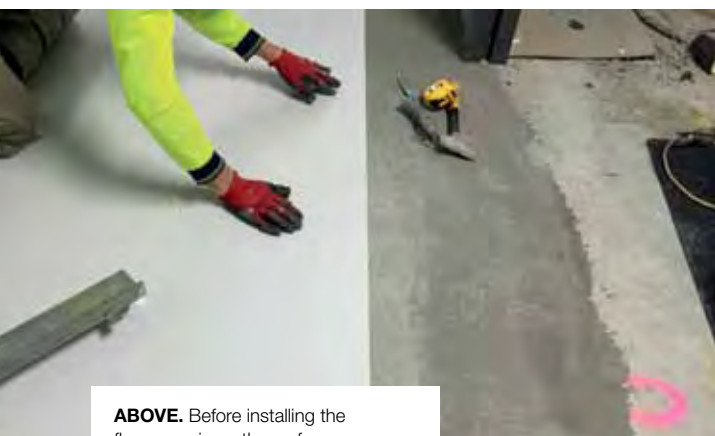
## **WELLBEING FOR THE PATIENTS AND SAFETY FOR THE HOSPITAL STAFF**

The directors and designers of the hospital specified the application of products which were not only rapid, but that also guaranteed the wellbeing of patients and the complete safety of the medical staff; which is why Mapei Technical Services proposed, where possible, a series of products with excel-



**TO THE LEFT.** A view of the exterior of the Victorian Comprehensive Cancer Centre

**ON THIS PAGE.** The vinyl floor coverings were installed with ULTRABOND ECO V4 SP multi-purpose adhesive in water dispersion.



**ABOVE.** Before installing the floor coverings, the surfaces were levelled with ULTRAPLAN. The vinyl floor coverings were installed with ULTRABOND ECO V4 SP.

lent performance characteristics that also have the capacity to guarantee a low impact on the environment and on the health of the workers using the products and the end users of the structure.

The intervention commenced by applying PLANISEAL EMB on all the concrete substrates, a two-component waterproofing primer, produced in the USA and distributed in Australia, that forms a vapour barrier and reduces the transmission of moisture.

The substrates (a total surface area of around 100,000 m<sup>2</sup>) were then treated with ECO PRIM T, solvent-free acrylic primer with very low emission of VOC. To create a perfectly flat surface before bonding the selected coverings, ULTRAPLAN

## IN THE SPOTLIGHT

### ULTRABOND ECO V4 SP

Multi-purpose, acrylic adhesive in water dispersion, with very low emission of volatile organic compounds (VOC) for bonding vinyl, rubber, polyolefin, carpets and needle-punch woven floorings on all common substrates of the building market. It has a particularly long open time. It can be used for static and dynamic loads, including intense loads, in residential, commercial and industrial environment. It can contribute up to **3 points** to obtain the **LEED** certification.



self-levelling, ultra rapid-hardening smoothing and levelling compound was applied on the substrates in layers from 1 to 10 mm thick.

In the bathrooms and in the areas with problems of damp (around 60,000 m<sup>2</sup>), the surfaces were also waterproofed with MAPEGUM WPS quick-drying, elastic liquid membrane before bonding the coverings. To provide extra strength, MAPETEX SEL non-woven polypropylene fabric was applied between each coat of MAPEGUM WPS.

In the areas around the drains, the substrates were initially primed with ECO PRIM T and then levelled off with UC LEV-ELLER quick-hardening skimming compound, produced and distributed exclusively in Australia, ideal for surfaces that require a high level of resistance to heavy loads and high volumes of traffic.

The intervention was completed by skimming all the uneven surfaces with LATEXPLAN TRADE smoothing compound with high compressive strength, suitable for substrates subjected to high volumes of traffic, and with PLANIPREP SC high-performance, fibre-reinforced skimming compound.

Once the substrates had dried out, the flooring company installed around 60,000 m<sup>2</sup> of vinyl flooring using ULTRABOND ECO V4 SP installation system - around 2,000 m<sup>2</sup> of vinyl flooring (Gertflor Taralay) was applied to the walls using ROLL-COLL acrylic adhesive in water dispersion.

To bond around 40,000 m<sup>2</sup> of self-laying carpet tiles (Interface Carpet Tiles), the product recommended was ULTRABOND ECO TACK tackifier in water dispersion for carpet tiles with very low emission of volatile organic compounds (VOC).

## TECHNICAL DATA

**Victorian Comprehensive Cancer Centre (VCCC)**, Melbourne (Australia)  
**Period of Construction:** 2011-2015  
**Year of the Mapei Intervention:** 2015  
**Intervention by Mapei:** supplying products for preparing, waterproofing and leveling substrates, for the installation of vinyl walls and floors and self-laying textile tiles  
**Project:** Silver Thomas Hanley, DesignInc and McBride, Charles Ryan

**Client:** Victorian State Government  
**Works Direction:** Plenary Health  
**Contractor:** Floor91  
**Installer Company:** Grocon  
**Mapei Co-Ordinator:** Scott Coutts (Mapei Australia Pty Ltd)

## MAPEI PRODUCTS

**Substrates preparation:** Eco Prim T, Latexplan Trade\*, Nivorapid, Planiprep SC\*, Planiseal EMB\*, UC Leveller\*, Ultraplan  
**Waterproofing:** Mapegum WPS,

Mapetex Sel  
**Installation of vinyl coverings:** Ultrabond Eco V4 SP, Rollcoll  
**Installation of textile coverings:** Ultrabond Eco Tack  
**Products for sealing:** Mapeflex PU 45

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

For further information on the products see [www.mapei.co.au](http://www.mapei.co.au) and [www.mapei.com](http://www.mapei.com)



## Building hospitals

### Safe products and solutions for installing resilient coverings on walls and floors in hospital facilities.

In those areas employed for medical use, high safety levels must be guaranteed for both patients and medical personnel alike. Mapei offers a wide range of **EMICODE EC-1** certified products for bonding every kind of resilient material.

- Very low emission level of volatile organic compounds (VOC)
- Safe for the environment, floor layers and final users
- The Mapei Eco line products contribute to obtain the **LEED** certification for the building



Learn more on [www.mapei.com](http://www.mapei.com)





## DESIGN AND SUSTAINABILITY AT ONE OF GERMANY'S BEST GOLF COURSES

Immersed in lush green hills, Cologne Golf Club is located to the west of Cologne. Voted one of the best German golf courses in 2015, the golf club has two 18-hole courses, a 9-hole course and a new Club House in a modern and minimalist architectural style. The structure includes a restaurant with an open kitchen, three dining rooms overlooking a solarium, a shopping arcade, a hotel with 34 guest rooms, a meeting room for conferences, presentations and seminars and an area dedicated to physiotherapy and coaching sessions for golfers. The entire architectural structure is characterised by the special care taken over the design details, both internally and externally, and the use of refined coverings in wood, stone and textile. A carefully designed lighting system and the attention paid to the tones and shades of the coverings combine to create an environment that is both relaxing and comfortable. The elegance of the comfortable surroundings is highlighted by the coloured finishes used in the guest rooms, each one according to its own design.

### **SUSTAINABLE DESIGN**

Mapei supplied their own brand products to make the substrates and to install wooden and textile floor coverings in the new Club House. The client specified that only products with characteristics of high quality, and eco-sustainability could be used. And Mapei was able to provide materials which were kind to both man and nature, to respect the original calling of

this project.

For the dining area, the guest rooms and other areas, such as the shops and reception area (total surface area 1,100 m<sup>2</sup>), the preferred choice was wood, considered to be "warmer" and more elegant. In the areas where the wooden flooring was to be installed, the first step was to treat the surfaces with a coat of ECO PRIM T PLUS solvent-free acrylic primer in water dispersion with very low emission of volatile organic compounds (VOC), to improve adhesion of the levelling compound (manufactured and distributed on the German market). To eliminate the uneven areas and make the installation surface flat, a layer of PLANIPATCH cementitious skimming compound was applied.

Once this had dried, around 1.100 m<sup>2</sup> of carpet was laid using ULTRABOND ECO S968 1K one-component, silylated polymer-based solvent-free adhesive with very low emission of volatile organic compounds (VOC).

Textile floor coverings were the preferred choice for the Fine Dining restaurant and hotel corridors. Decorative, hard-wearing, coloured carpet tiles were chosen for the restaurant, while for the corridors the designers proposed textile flooring characterized by an irregular pile pattern, similar to the bark of a tree. Even the fibres used to make the carpet are eco-sustainable and they are made from recycled PET water bottles.

ULTRABOND ECO 170 high-tack adhesive in water dispersion was used to bond the textile floor covering (400 m<sup>2</sup>).



**ABOVE AND LEFT.** The Golf Club and Club House  
**BELOW.** The wooden flooring in the rooms was installed with ULTRABOND ECO S968 1K adhesive.

**BOTTOM OF THE PAGE AND ON THE LEFT.** The floor in the Fine Dining restaurant was dressed with carpet bonded with ULTRABOND ECO 170 and MAPECONTACT H65.

MAPECONTACT H65 bi-adhesive strip was used to bond the skirting boards and profile pieces, which is available in various widths. To make the substrates perfectly flat, the surfaces had been previously skimmed with ULTRAPLAN ECO PLUS self-levelling, ultra rapid-hardening smoothing compound with very low emission of volatile organic compounds (manufactured and marketed on the German market by Mapei GmbH).



## IN THE SPOTLIGHT

### ULTRABOND ECO 170

Adhesive with high initial grab and extended open time, ideal for bonding textile flooring with any type of backing and needle-punch fabrics on all types of traditional internal substrates. Recommended for areas with normal or intense foot traffic, the passage of wheelchairs and heated floors. Solvent-free with

very low emission of volatile organic compounds (EMICODE EC1 Plus) and certified Blue Angel. Helps to earn up to **4 points** towards **LEED** certification.



## TECHNICAL DATA

**Colonia Golf Club, Hotel and Clubhouse, Cologne**  
 (Germany)

**Construction Period:** 2014-2016

**Period of Intervention:** 2015

**Intervention by Mapei:** supply of products to make the substrates and install wooden and textile flooring.

**Client:** AMAND GmbH & Co. Köln-Widdersdorf KG (Cologne)

**Designer:** Schönborn + Hoelscher (Velbert)

**Main contractor:** Amand GmbH & Co

**Flooring contractor:** Speer Parkett (Geldern)

**Mapei distributor:** W. & L. Jordan GmbH (Düsseldorf)

## Mapei Co-Ordinators:

Günther Hermann and Tom Schlag (Mapei GmbH)

## MAPEI PRODUCTS

Substrates: Eco Prim T Plus\*, Planipatch and Ultraplan Eco Plus\*

Bonding the wooden flooring: Ultrabond Eco S968 1K

Bonding the textile flooring: Mapecontact H65 and Ultrabond Eco 170

\* Manufactured and distributed on the German market by Mapei GmbH

For further information about our products visit our websites at [www.mapei.de](http://www.mapei.de) and [www.mapei.com](http://www.mapei.com)



BAU 2017

Installation of  
ceramic tiles and  
Stone material



# BAU 2017 MAPEI LOOKS TO THE FUTURE

80  
years  
1937-2017

AT THE TWO-YEARLY TRADE FAIR IN MUNICH, INNOVATIVE PRODUCTS FOR WORLDWIDE CONSTRUCTION SITES

For the first time ever, 80,000 of the more than 250,000 visitors who took part at Bau 2017 were from overseas (there were 72,000 in 2015).

And as such, Bau – the two-yearly trade fair dedicated to architecture, materials and systems held at the Munich Exhibition Centre from the 16<sup>th</sup> to the 21<sup>st</sup> of January – has received confirmation of being an important showcase of international significance. A new record was also set for the number of exhibitors, with a total of 2,120 exhibitors from 45 different countries.

Over a total surface area of 185,000 m<sup>2</sup>, Bau is a presentation of architecture and systems for the industrial, commercial and residential buildings sector and for interior decorating for both new builds and renovation projects. Every two years the trade fair brings together all the key players from this sector for an event that provides a complete, cross-section view covering every aspect.

Bau has a decidedly practical feel and places an emphasis on the issues of the future and, amongst these, everything that regards the field of sustainable building. The main themes at Bau 2017 (*Intelligent Facades – Digital Design, Construction and Management – Automated Buildings – Constructing and Living in 2020*) were discussed and presented during special forums.

## 80 YEARS OF ACKNOWLEDGED EXPERTISE

Mapei also participated at this edition of Bau, along with their German subsidiary Mapei GmbH, with a presenta-

tion of various new products and systems for the building industry. And the highly-qualified public at Bau – with more than 65,000 visitors coming from architecture and design studios – were highly appreciative of the modernity and innovation of the proposals offered by Mapei at the trade fair.

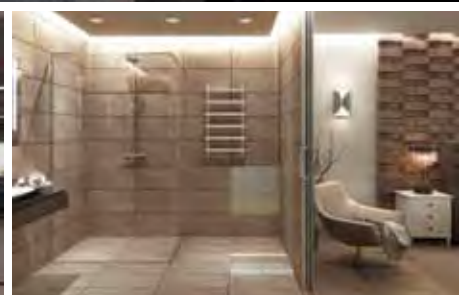
In their display area (Stand 502 – Hall B6) Mapei presented products and systems for installing tiles and natural stone and resilient, textile and wooden flooring, admixtures for concrete and sealants and building materials for every type of site.

"Mapei: Kompetenz am Bau": just like at the Domotex trade fair, this was the key claim at Bau 2017, which summarises Mapei's approach to trade fairs. "Expertise in the world of construction" is what Mapei is recognised for by users, designers, contractors and architects, and by everyone from all around the world working in this industry that chooses Mapei to get great results.

Alongside this slogan at the entrance to the stand was a special celebratory logo, a reminder that 2017 is also the 80<sup>th</sup> anniversary of the founding of Mapei.

Along with images of our most recent reference sites, certified eco-sustainable according to the most severe international standards, the stand was a meeting point for operators from various sectors of the industry; from manufacturers to designers, to those who use the products, right up to end users. The perfect place to present the wide range of solutions that make up our 15 product lines, as well as all our new products.

Products for building



Products for Underground construction

## TRADE FAIRS



BAU 2017

### SUSTAINABLE PRODUCTS FOR GREAT RESULTS

“Transparency” and “Sustainability” in the building sector and as a global approach to “doing business”: these were also the concepts and key strengths Mapei wished to highlight at Bau 2017.

All this as a reminder of how Mapei products are formulated using innovative, recycled and ultra-lightweight raw materials with a very low content of volatile organic compounds (VOC) and developed to reduce energy consumption.

### INSTALLATION OF RESILIENT AND TEXTILE COVERINGS

Also showcased at Bau were the new products and systems presented at Domotex 2017 for installing LVT (Luxury Vinyl Tiles) flooring: ULTRABOND ECO MS 4 LVT, MAPESONIC 4 LVT and PLANIPREP REMOVE 4 LVT.

The new ECO range of products was also presented at Bau, dedicated prod-

ucts for the installation of textile flooring such as ULTRABOND ECO TX 3, excellent wet grab adhesive with early build of a tough strength, and ULTRABOND 195, low-odour adhesive with high shear strength and very low emission of volatile organic compounds (VOC) for installing carpet, particularly recommended for bonding needle-punch flooring without



**EPD®**  
THE INTERNATIONAL EPD® SYSTEM

**EPDS (ENVIRONMENTAL PRODUCT DECLARATIONS) ARE FULL REPORTS DRAWN UP IN ACCORDANCE WITH INTERNATIONAL STANDARDS, WHICH OUTLINE THE ENVIRONMENTAL EFFECTS OF A PRODUCT THROUGHOUT ITS LIFECYCLE.**

the risk of shrinkage or opening at the joints.

In the field of adhesives for resilient flooring, another highlighted product was ULTRABOND ECO VS30, a highly versatile adhesive for PVC, linoleum and carpet, characterised by its high shear strength that develops a strong bond very quickly.

### NEW COLOURS FOR GROUTS AND SEALANTS

Bau was the ideal opportunity for the Mapei stand to highlight the “Set the Mood” colour chart for grouts and sealants. 50 colours, as well as a transparent version, arranged in 5 different collections: Serene, Traditional, Natural, Romance and



**BELOW.** The Mapei stand was a congregation point for various operators in the industry, including manufacturers, suppliers and end-users.

**RIGHT.** Mapei displayed its range of ULTRALITE products at the trade fair: a collection of lightweight adhesives for installing ceramic tiles, mosaics, natural stone and thin porcelain tiles.

Glamour. 5 special collections to meet all the requirements of designers and floor installers and to allow you to create the ideal atmosphere in all types of surroundings.

### LIGHTWEIGHT ADHESIVES FOR INSTALLING CERAMIC TILES

Another offer presented in the section of products dedicated to ceramics was Mapei's range of ULTRALITE products: a family of lightweight adhesives for installing ceramic, mosaic, natural stone and thin porcelain tiles. Less tiring to use thanks to the use of formulas containing tiny glass beads to improve trowellability, ULTRALITE adhesives have excellent wetting capacity on the back of tiles. Apart from offering up to 80% more yield than similar adhesives with the same classification, ULTRALITE adhesives contain 20% of recycled materials, which helps earn LEED award credits for sustainable projects. They are also confirmed as products for waterproofing work and for use with heated floors and systems specifically designed for installing stone material.

### INSTALLING AND TREATING WOODEN FLOORING

As far as products for installing wooden flooring are concerned, Mapei once again presented ULTRABOND ECO S968 1K, which is recommended for all types of wooden flooring, particularly large planks and to help create special patterns, such as herringbone. ULTRABOND ECO S968 1K, free of solvent content, is a hard category adhesive in compliance with EN 14293 standards, has an extended workability time, is easy to apply hard has excellent rib stability. It is certified by GEV Institute as EMICODE EC1R Plus and awarded as Blue Angel. In the section of lacquers for wooden flooring, Mapei proposed ULTRACOAT OIL COLOR, available in 7 different colours. Just 16 hours after treating wooden flooring with ULTRACOAT OIL COLOR it is ready for other care with ULTRACOAT OIL CARE, specific maintenance product. Mapei also presented an innova-

tive variation for treating surfaces, which consists of applying lacquer on wooden flooring with a coloured oil finish. This provides the the high level of protection typically obtained with two-component lacquer.

ULTRACOAT HIGH TRAFFIC is a 100% polyurethane and water-based lacquer for wooden floors with high resistance to wear and abrasion. This lacquer gives wooden flooring an attractive "natural wood" finish (0 gloss). ULTRACOAT TRAFFIC MT is a two-component, acrylic-polyurethane, water-based lacquer with very low emission of volatile organic compounds. It has excellent resistance to wear and abrasion and good resistance to streak marks from the soles of shoes. It is recommended for protecting traditional, pre-polished wooden flooring and wooden flooring in need of repair and is suitable for both civil and commercial environments, including those exposed to medium to high volumes of foot traffic. ULTRACOAT TRAFFIC MT brightens up the natural colour of wooden flooring without yellowing over the years.





BAU 2017

### **MAPEI SELF-LEVELLING AND THIXOTROPIC SMOOTHING COMPOUNDS**

Mapei markets a full range of smoothing compounds with very low emissions of volatile organic compounds (VOC)

FIBERPLAN

NIVORAPID

NOVOPLAN MAXI

PIANOCEM M

PIANODUR R

PLANEX HR

PLANEX HR MAXI

PLANEX MAXI

PLANIPATCH

PLANIPATCH FAST TRACK

PLANIPREP 4 LVT

PLANIPREP FAST TRACK

PLANOPUR

ULTRAPLAN

ULTRAPLAN ECO

ULTRAPLAN FAST TRACK

ULTRAPLAN MAXI

### **NEW GENERATION SELF-LEVELLING COMPOUNDS AND HIGH PERFORMANCE SCREEDS**

Mapei is the only company to offer a complete range of self-levelling smoothing compounds for every situation (see the box to the side).

Special attention was paid at Bau 2017 to our large family of levelling products, which now has a new addition: PLANEX MAXI multi-purpose levelling compound for internal and external use, which will be available on the market very soon. PLANEX MAXI fills gaps and levels ce-

mentitious and concrete screeds, as well as calcium sulphate screeds (internal use only), and can be applied in layers from 3 to 30 mm thick. Thanks to a formula containing special hydrating cement, selected sand and additives, PLANEX MAXI is a plastic, controlled-shrinkage levelling compound with good workability which adheres extremely well to the substrate. It may be applied under ceramic tiles and natural stone subjected to intense foot traffic and normal and heated screeds.

NOVOPLAN MAXI is another special self-levelling compound with excellent thermal conductivity for high-conductance, compact underfloor heating systems and compact, water-based underfloor heating systems.

The list of new products is rounded off by PLANEX HR and PLANEX HR MAXI self-levelling, moisture-resistant smoothing compounds for internal and external use. But without a good screed a self-levelling product is destined to have only a short life. This is why the spotlight at the trade fair was also on the new formula for MAPECEM PRONTO ready-mixed mortar with very low emission of volatile organic compounds (VOC).

### **MAPECEM PRONTO**

Without a good screed, a self-levelling compound has a short life. That is why improved formula MAPECEM PRONTO, a ready-to-use mortar with low emission level of volatile organic compounds (VOCs), was clearly on display. Ideal for creating bonded and floating screeds indoors and outdoors, which need to dry quickly ready to be immediately installed on parquet, PVC, linoleum, ceramic tiles, natural/synthetic stones, textiles etc.



## WATERPROOFING: EVEN AT LOW TEMPERATURES

Amongst the products presented at Bau 2017 were innovative, high-performance waterproofing products such as MAPELASTIC TURBO, a two-component cementitious mortar which dries quickly, including at low temperatures or if the substrate is not perfectly dry, for waterproofing terraces and balconies.

Other waterproofing products presented, in this case for constructions below ground level, underground structures and tunnels, were MAPEPLAN SYSTEM synthetic waterproof membranes and MAPETHENE SA self-adhesive bitumen membrane, suitable for application at temperatures as low as -5 °C.

MAPECOAT I 620 W is the two-component, water-repellent epoxy resin in water dispersion for protecting surfaces in areas below ground level such as garages, cellars, basements, etc.

## RESTORING MASONRY AND CONCRETE

Bau 2017 was also the occasion to highlight the MAPE-ANTIQUE line of products; cement-free, lime and Eco-Pozzolan-based products ideal for consolidating, restoring, de-humidifying and rendering old masonry buildings, including those of historical or artistic interest or with a preservation order.

Another new product presented at the trade fair was EPORIP SCR two-component, rapid-hardening silicate-urethane resin for sealing cracks and joints in screeds and for small repair work.

Amongst the smoothing and levelling products, Mapei proposed PLANITOP SMOOTH&REPAIR R4 fibre-reinforced, thixotropic cementitious R4-class mortar for repairing and skimming concrete.

Another newly-conceived product was PLANIPATCH FAST TRACK ultra rapid-drying thixotropic smoothing and levelling compound for localised repair work.

The next edition of Bau, to be held at the Messe München from the 14<sup>th</sup> to the 19<sup>th</sup> of January 2019, will include two new exhibition halls, which will increase the area of exhibition space available to 200,000 m<sup>2</sup>.

**BELOW.** Expertise also means providing technical information. The photo shows Marcus Winkler, Head of Technical Assistance and Product Manager of the Ceramic Line of Mapei GmbH at a study meeting, presenting a new manual for architects and planners.





# INDUSTRIAL BUILDING IN LORSCH, GERMANY

MAPEPLAN MEMBRANES USED TO WATERPROOF THE SAW-TOOTH ROOF

Highly specialised mechanical equipment is required to assemble automobiles. The German company Expert-Tünkers – which produces conveyor belts and automated production lines – is involved in exactly this sector, supplying the type of equipment that enables car manufacturers to mass-produce automobiles.

Expert-Tünkers, whose head office is in Lorsch, in Hessen, operates at an international level in the field of materials handling and the production of complex production equipment. The manufacturing facility in Lorsch is where all the components used to build high-precision conveyor belts are made and tested, and the finished conveyor belts are then sold to companies such as BMW, Audi, Mercedes Benz, Volkswagen, Ford, Vauxhall, Jaguar, Porsche and Maserati.

## CUTTING-EDGE LOGISTICS UNDER JUST ONE ROOF

In 2015 the management of Expert-Tünkers took the decision to completely refurbish the roof of the works, which has a total surface area of 6,000 m<sup>2</sup>. The works has a saw-tooth roof, a special type of roof typically used for industrial buildings, which allows the interior to be illuminated with an even light during the day. Saw-tooth roofs are made up of a series of ridges – 12 in this case – each with two distinct pitches. The first pitch is usually solid, that is, covered with brick, reinforced cement or other roofing material, while the other pitch, which is often vertical as in this case, is glazed.

This German company has a reputation of being one of the most reliable suppliers to international car manufac-

turers, and this reliability is also based on its capacity to provide an uninterrupted service of technical assistance, logistics support and equipment for production lines. And for this very reason the company working on the roof was required to carry out the intervention on a round-the-clock basis between May and December, and without causing any disruption to the activities in the production areas. The roofing company also had to ensure that all necessary measures were taken to prevent rain or snow disrupting the work below, and have the skill and capacity to work on such a large roof with such steeply sloping ridges.

### COUNTING ON HIGH TECHNOLOGY PRODUCTS

Mapei Technical Services was on hand to help the roofing company choose the most suitable materials for this particularly complex intervention. Mapei engineers proposed using waterproofing membranes made by Polyglass, a company belonging to Mapei Group, which is particularly renowned for its MAPEPLAN line of synthetic waterproofing membranes.

For this particular intervention MAPEPLAN ALU SK 1500 was proposed, a special vapour barrier manufactured and distributed exclusively in Germany. Ideal for roofs according to DIN 18234 with more than 2,500 m<sup>2</sup>, this membrane has excellent workability on site, is resistant to tears, self-adhesive and crack-bridging, may be applied at temperatures from +5 °C to +40 °C and, once applied, it forms an excellent vapour barrier and is immediately resistant to rain. To get sure results MAPEPLAN T I was installed, a particularly strong waterproofing membrane with excellent solar reflectance which is resistant to atmospheric agents, low temperatures, UV rays and ageing. The facility and its new roof was handed back to the client within the agreed deadline and work was completed in line with all the client's requests and specifications.



## MAPEPLAN

Synthetic waterproofing membranes.

Thanks to the use of our exclusive "multi-extrusion coating" technology, MAPEPLAN PVC-P and FPO membranes stand out for their impressive performance characteristics and durability and excellent workability and weldability, which combine to guarantee that the MAPEPLAN system forms a seamless, watertight waterproofing system. A Smart White version is also available: in this case, the top layer is in a special white colour which guarantees excellent solar reflectance and reduces the surface temperature of roofs by more than 50%.



### IN THESE PICTURES.

MAPEPLAN synthetic membranes have been chosen to waterproof the roof.

### TECHNICAL DATA

**Expert-Tünkers Works**, Lorsch (Germany)

**Period of Intervention:** 2015

**Intervention by Mapei:** supply of products to refurbish the saw-tooth roof of the main building of the production department

**Client:** Expert Tünkers GmbH

**Roofing contractor:** aTmos Industrielle Lüftungstechnik GmbH

**Mapei Co-Ordinator:** Jörg Gehring (Mapei GmbH)

### POLYGLASS PRODUCTS

**Saw-tooth roof:** Mapeplan Alu SK 1500\* and Mapeplan T I\*

\* Manufactured and distributed on the German market by Mapei GmbH

For further information visit our websites at [www.mapei.de](http://www.mapei.de), [www.polyglass.com](http://www.polyglass.com) and [www.mapei.com](http://www.mapei.com)





A view of the whole bridge after completion of the requalification work.

# THE BRIDGE OVER THE RIVER ARADE IN PORTUGAL

## RENOVATION WORK ON THE CONCRETE OF A CABLE-STAY BRIDGE OVER THE RIVER ARADE ESTUARY

The bridge over the River Arade estuary is located in the Portuguese city of Portimão in the region of Algarve. Inaugurated in 1991, it is a three-span cable-stay bridge made from pre-stressed reinforced concrete. The central span is 256 metres long and each of the two lateral spans is 107 metres long. There are also two 107 metre reinforced cement towers in the shape of an upside-down “Y” between the three spans, to which the steel tie rods for the cables are attached. The viaducts for the road access at the eastern and western ends of the bridge have spans measuring 30 metres, 24 metres and 27 metres.

The bridge has a road deck for vehicles which is supported by beams and safety parapets made from iron. The upper deck, which forms the actual road for the traffic, is from 12 metres to 17 metres wide, and has two lanes running in each direction, with a hard shoulder running alongside each carriageway. The road surface is made from reinforced cement prestressed in a longitudinal direction with steel reinforcement running transversally across the road.

The foundations for the reinforced cement towers and the support pillars sit on 1.10 metre diameter piles which are from 50 metres up to a maximum of 63 metres long.

The total length of the River Arade Bridge, including the two

access viaducts, is 842 metres.

One of the particular characteristics of the bridge, which makes it such an original structure, is the total lack of any form of rigid connection along the suspended road surface. This particular configuration impedes any movements in a horizontal direction.

The structure has a series of oscillation dampers which give the bridge – Portugal, and this area in particular, are prone to seismic activity – anti-seismic properties, so that it behaves like a pendulum and can oscillate in any direction.

### PROPOSALS FOR THE INTERVENTION

After around 25 years of uninterrupted service, it was decided to carry out requalification work on the bridge. Following a series of controls on the bridge, the surface of the reinforced concrete showed signs of ageing due to the aggressive action of atmospheric agents and the water flowing in the river below the bridge. Also, after so many years service, the level of stress in the cable-stays needed to be checked and the condition of the supports for the road decks needed to be verified. In order to identify the most suitable materials and installation techniques for the requalification work, a thorough preliminary survey was carried out.



1



2

**PHOTO'S 1, 2 AND 3.** After removing the damaged concrete by hydro-blasting, the steel reinforcement was left exposed and treated with MAPEFER 1K one-component mortar.

**PHOTO 4.** The areas of the towers where the damaged concrete had been removed were repaired with MAPEGROUT THIXOTROPIC fibre-reinforced mortar.

**PHOTO 5.** The towers during the consolidation work.

The contractor commissioned to carry out the requalification work contacted the Technical Services Department of Luso-mapei (the Group's Portuguese subsidiary), who provided support for the designers and contractor during the survey, and then for the entire duration of the work, recommending the most suitable materials to overcome the problems found on the structure.

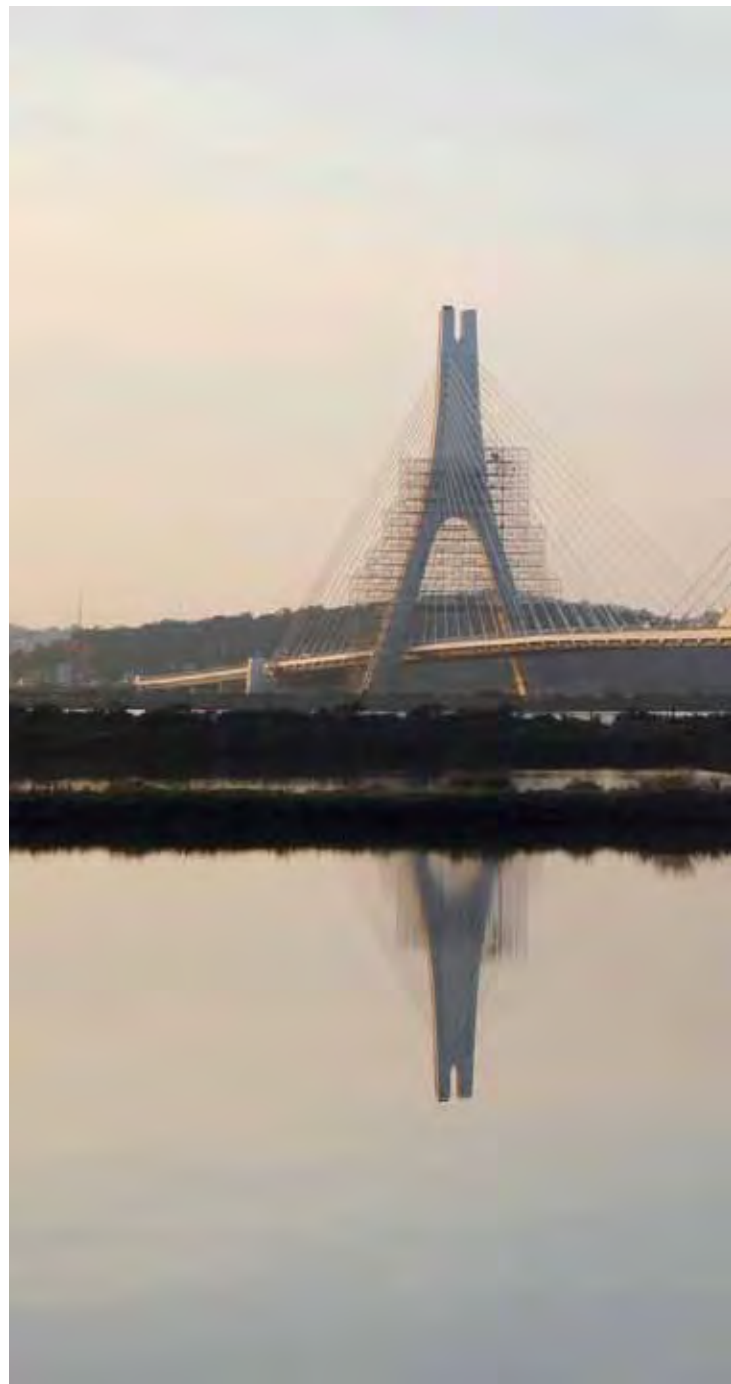
The concrete of the support pillars was locally and partially deteriorated, and portions of the material had become detached, exposing the steel reinforcement. All the damaged and detached concrete was removed by hydro-blasting to expose the steel reinforcement, which was then treated with MAPEFER 1K one-component mortar. This product, made from cementitious binders, powdered polymers and corrosion inhibitors, has anti-corrosion and re-alkalisation properties that prevents rust forming on steel reinforcement. Also, when the mortar hardens, it is impermeable to water and aggressive gases present in the surrounding atmosphere.

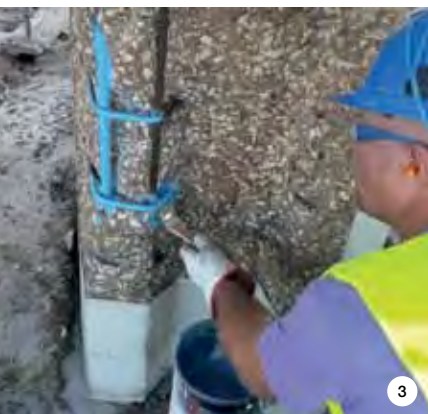
The areas of the pillars where the damaged concrete had been removed were integrated with MAPEGROUT GUNITE one-component, ready-mixed, cementitious mortar for renovating concrete, which can be applied using either the dry or damp spraying technique.

Since the structure is exposed to strong winds the mortar could have dried too quickly, so MAPEQUICK AF 300 DRY alkali-free set-accelerator, which is suitable for shotcrete, was added directly to the mixing water.

The areas of the towers where the damaged concrete had been removed, and for other areas that were not suffering from the problems mentioned above, were repaired with MAPEGROUT THIXOTROPIC shrinkage-compensated fibre-reinforced mortar.

In the areas where the site surveys had highlighted cracks on the surface of the structure, the Technical Services Department of the Portuguese subsidiary recommended strengthening and consolidating the structure by injecting the cracked areas with EPOJET super-fluid epoxy resin and ADESILEX PG1 thixotropic adhesive.





## IN THE SPOTLIGHT

### MAPEGROUT GUNITE

One component, ready-to-use, multi-purpose, fibre-reinforced, cementitious mortar, applied using either the dry or damp spraying technique. It may be used to repair concrete, damaged bridges, stone and masonry structures, to cover stone or masonry in tunnels. It can also be used as repair of hydraulic works such as canals, tunnels, reservoirs, etc. or as industrial concrete structures. Nonetheless, it can be used to build up swimming pools and to support excavation work in open-ground, in tunnels and for supporting excavation of foundation footings.



## TECHNICAL DATA

**The bridge over the River Arade, Portimão (Portugal)**

**Period of Construction:** 1991

**Period of Intervention:** 2015-2016

**Original Project:** Armando Rito  
**Intervention by Mapei:** supplying products for the protection of the reinforcing rods, for the repair of damaged concrete, for the repair and sealing of cracks.

**Client:** Estradas de Portugal

**Contractor:** Conduril

**Installer Company:** Prozinco

**Mapei Co-Ordinators:** Daniel Moreira (Lusomapei)

## MAPEI PRODUCTS

Repair of concrete: Mapegrout Thixotropic, Mapegrout Gunite, Mapequick AF 300 Dry, Planicrete  
Protection of reinforcing rods: Mapefer 1K  
Reinforcement, consolidation and sealing: Adesilex PG1, Epojet, Mapeflex PU 45

For further information on the products see [www.mapei.pt](http://www.mapei.pt) and [www.mapei.com](http://www.mapei.com)



# **SEAMLESS FLOORS: EXPRESS YOURSELF**

**VERSATILITY & DESIGN FOR  
FLOORING FROM YOUR HOME  
TO AREAS OF CULTURAL INTEREST**

Mapei now has an increasingly large number of solutions available to cover all flooring needs efficiently and quickly: durable, resistant and versatile solutions for any space or room that form part of our normal daily routine.

### ONE PRODUCT RANGE, MANY DIFFERENT RESULTS

In the seamless flooring sector in particular, the range of possibilities currently available meets the demands of every product category, thanks to the use of specific floor coverings suitable for use in numerous different types of surroundings: we just have to think of flooring in industrial environments, from the food and drinks sector to heavy industry or the chemical industry, as well as other solutions for the service sector and shopping centres, right up to floor coverings for more intimate and private areas inside the homes we live in.

### THE ARTIST'S STYLE REALISED ON SITE

Solutions vary according to their area of use and are categorised by their performance characteristics - smooth or textured surfaces, by the finish or pattern which make them unique. Never identical or repeatable, each solution is a symbol of the compromise between the craftsmanship of the floor layer (these are floors applied skilfully by hand), and the specific requirements of each and every client when creating bespoke surfaces. This is the direction Mapei proposes for renovation work on historical buildings, examples of excellence in the world of art and culture where design is bound by the constraints of conservative restoration, yet there is the desire to break with conventions and to boldly highlight the differences in the effects of the various materials employed.

### MATERIALS THAT GIVE THE FREEDOM OF EXPRESSION

And herein lies the choice, right from the very first approach to a design - to diversify the basic themes inherent to the use of the materials, not only according to their performance characteristics and the patterns or finishes governed by the colours and textures to be used, but above all according to themes more in context with the design itself: monochromatic, stripped-down resin systems or cementitious solutions characterised by soft textures and non-uniform pigmentations?

Indeed, for the two reference projects taken as examples and compared on the following pages, the design choices developed in different ways. Not so much because each project, of undeniable cultural quality and importance, involved surroundings with completely different areas of use - the Blaj Cultural Palace on the one hand and the Museum of the Innocenti on the other - but above all for the different approaches taken when tackling them. In fact, in certain cases, it is possible to maintain the old flooring to exalt the expressive differences between the old structure and the new, re-coated seamless surfaces (one of the advantages of applying resin systems is certainly the fact that the layers applied are only a few millimetres thick), allowing designers to highlight, quite clearly and decisively, the stylistic and materic difference between an existing historic structure and the smooth, simple, clean, sober flooring, albeit absolutely functional in view of its final destination as a space to be used by the community.

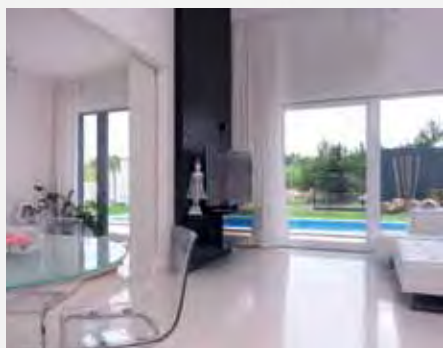
Completely different, on the other hand, are those designs which aim to achieve more stylistic continuity within the structure and where the search for just the right material leads, for example, to the use of a self-levelling cementitious formulate. In such cases, the use of cementitious mortar strengthens the historical-artistic features of the original structure (such as in the case of the museum presented on the following pages), turning it into a more orderly, silent and intimate environment where visitors perceive a strong sense of reassurance during their visit.

No longer are there clear, separate margins when proposing and choosing a flooring system: areas with the same final use can have their own identity, thanks to the choice of different materials which, for their very nature, are able to make the context perfectly congruent with the initial design choices.

Once again, Mapei can play an important part in enabling projects of undeniable cultural and artistic quality and significance to become a reality, by proposing the most suitable solutions in terms of durability, functionality, finish and pattern in compliance with the technical and stylistic constraints specified by the client.

---

**Giovanna Novella. Architect.** Technical Assistance Resin Flooring Division







# BLAJ CULTURAL PALACE

RESIN FLOORING IS THE CENTREPIECE  
OF A SPECTACULAR REFURBISHED  
HISTORICAL LANDMARK

In Blaj, a small Romanian city in the Transylvania Region, the Blaj Cultural Palace has been given a new lease of life.

The Romanian architect Vlad Sebastian Rusu has breathed new life into this "Palace of Culture", which was built in 1930 and had been left in a state of ruin after being devastated by fire in 1995.

The building was originally designed by the Bucharest architect Victor Smigelschi as the headquarters of a Transylvanian cultural association. It was then renovated in 1960 to provide the city with a cinema, a library, a wire broadcasting centre and a museum about the history and background of the region.

The architect managed to find old photos of the exterior of the building which allowed him to restore the structure to its original condition. Old photos of the interior of the building, however, could not be found. This meant that Resu had more freedom to express his creativity and he chose to create simple, spacious areas inside the building that could be easily adapted to suit different activities.

The main hall now has a stage and seating for up to 250 people. The walls of the hall were stripped of their render, which revealed solid walls incorporating large arches, multi-faceted columns and features protruding from the walls.



## MAPEI FOR ARTS

The Blaj Cultural Palace is included in the **protection area of historical monuments of national importance in Romania** being part of an architectural complex in the county of Alba (Transylvania) that includes the Sf. Treime Church (LMI code: AB-II-m-A-00187) and the Bagdi Gyorgy/Metropolitan Palace (LMI code: AB-II-m-A-00189.01). Furthermore it has been nominated for the famous **2017 Mies van der Rohe Award** (the official architecture prize of the European Union).



The roof was rebuilt which gave the hall the sensation of being more spacious, with large skylights designed to create a kind of buffer zone between the old elements and the new features and to highlight its array of different patterns. The areas used for storage and the service rooms were transferred to the basement, which meant the ground floor could be left completely free to be used as a foyer and to house all the backstage structures.

The first floor is used for extra storage space and is also home for the offices of the Alba branch of the Romanian Academy, a cultural organisation which promotes Romanian art, science and literature.

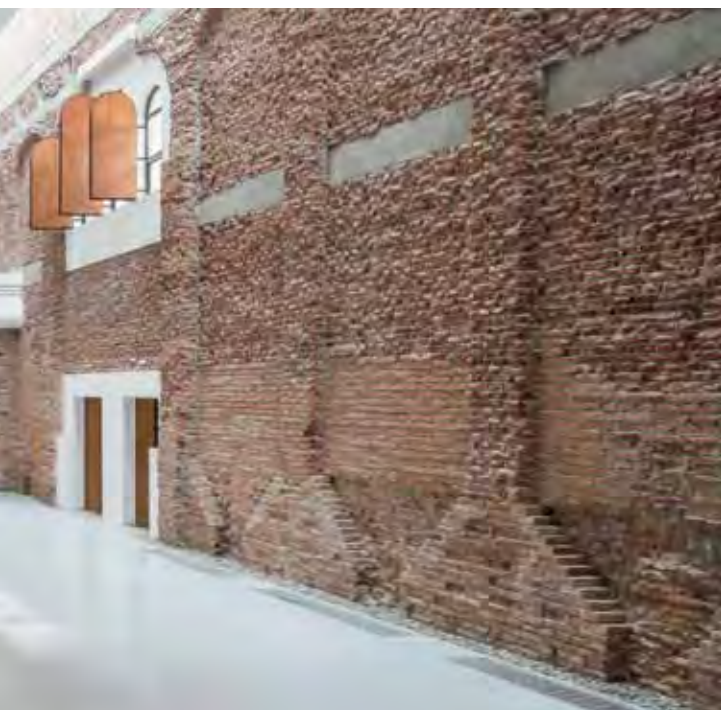
The project also included new electrics, a new heating system, new sanitary and ventilation systems and renovation work on a courtyard on the south-eastern side of the building.

### ARTS, RESINS & FUNCTIONALITY

As part of the redevelopment work on the building, a new resin flooring was designed to enhance the aesthetical beauty of this artistic palace: MAPEFLOOR I 300 SL was the best candidate for this purpose. Preliminary work involved installing a new substrate made from TOPCEM, special hydraulic binder for normal-setting, rapid-drying (4 hours), controlled shrinkage screeds.

A coat of PRIMER SN, fillerized epoxy primer, was applied on the new screed and, while it was still wet, it was immediately lightly broadcast with QUARTZ 0.5 so that the coat of resin applied later would form a perfect bond.

Once the primer had hardened, MAPEFLOOR I 300 SL, used as a self-levelling resin with 2 mm thickness, was pigmented with MAPECOLOR PASTE, coloured paste system and it was spread over the surface.



**ABOVE.** The external façade of the Blaj Cultural Palace at the end of the renovations works.

MAPEFLEX PU 45 one-component, rapid-hardening, paintable, thixotropic, high modulus polyurethane sealant and adhesive was then used to seal the expansion joints in the flooring.

MAPEFOAM foam cord was preliminary used to calibrate the depth of the sealant in the joints.

Work on the refurbishment of the Cultural Palace started in 2013 and was completed in the spring of 2016.

And today, the Blaj Cultural Palace has regained its place as one of the most significant cultural sites in Transylvania and is so important that it has been included in a list of monuments of historical interest covered by a national preservation order.

### IN THE SPOTLIGHT

#### MAPEFLOOR I 300 SL

Two-component multi-purpose neutral-coloured epoxy formulate for industrial floor coatings up to 4 mm thick in compliance with the standards currently applied in the food sector, and in the chemical and pharmaceutical industries. It has high solid content used to create self-levelling or multi-layered resin coatings with an attractive smooth or non-slip surface. This product can contribute up to **2 points** to obtain the **LEED** certification.



### TECHNICAL DATA

**Blaj Cultural Palace,** Blaj (Romania)

**Period of Costruction:** 1930

**Period of Intervention:** 2013-2016

**Intervention by Mapei:** supplying products for the preparation of resin floorings

**Client:** City Administration of Blaj

**Original Project:** Victor Smigelschi

**Refurbishment Project:** Vlad Sebastian Rusu

**General Manager:** Asiza

Birou de Arhitectură, Cluj-Napoca

**Installer Company:** K & Kis Cristuru Secuiesc, Herbau Miercurea Ciuc

**Mapei Distributor:** Szilank

**Mapei Co-Ordinator:** Cristi Horiea (Mapei Romania)

### MAPEI PRODUCTS

Topcem, Primer SN, Mapefloor I 300 SL, Mapecolor Paste, Mapeflex PU45, Mapefoam

For further information see the website [www.mapei.ro](http://www.mapei.ro) and [www.mapei.com](http://www.mapei.com)





# MUSEUM OF THE INNOCENTI FLORENCE

THE INSTITUTE OF THE INNOCENTI, THE FIRST NON-DENOMINATIONAL STRUCTURE IN ITALY DEDICATED TO THE CARE OF CHILDREN, HAS TURNED SOME OF ITS AREAS INTO A MUSEUM



### A BRIEF HISTORY OF THE INSTITUTE

In 1419, a donation from the will of the Florentine merchant, Francesco Datini, was used for the construction of an institute for abandoned children in the city of Florence. The structure, the first of its kind in the world, was named in honour of Saint Maria of the Innocents and the City Council awarded it the same privileges as all the other hospitals of the city. The Guild of Silk – one of the seven Florentine art and crafts corporations – was given the job of building the structure and they chose an area of land in what is now the central Piazza dell'Annunziata, a long way from the civil and political heart of the city, but at the centre of what was planned to be the city's medical hub, close to the Convent of San Marco, the Basilica of the Annunziata and Palazzo Medici. The Guild of Silk appointed Filippo Brunelleschi to design the structure and work continued until well



**LEFT.** A view of the external portico.

**ABOVE.** The symbol of the Hospital: a cherub wrapped in swaddling clothes by Andrea della Robbia.

**BELOW.** Before applying the coating, the surfaces were treated with PRIMER SN.

into the XVI century, although the first orphans were already provided with shelter in 1445. It was soon considered to be a model institute for the rest of the world and the Hospital, now known as the Institute of the Innocenti, continued with its mission over the centuries, coming into line with the new norms and standards regarding the protection of children and families, and even playing an active role in writing the standards. In 1890 it became what was then known as an I.P.A.B. (Institute for Public Assistance and Charity), while today the Institute is an ASP (Public Service Centre for the People) and continues its work helping children. Inside the structure there is a crèche,



an infant school, three family homes for children in the care of mothers going through difficult times and a number of UNICEF research offices. The Institute is also a central national archive and analysis centre for children and adolescents and has become a national and European reference point for the promotion of children's rights.

### A RENAISSANCE PERIOD PUBLIC BUILDING

Right from its foundation, the owners and numerous benefactors of the Institute wanted the new structure to be made more welcoming with works of art: the management committee of the Hospital, therefore, decided to contact the most well-known figures from the Florentine Renaissance movement. And so, artists such as Domenico Ghirlandaio and Piero di Cosimo, and sculptors such as Luca and Andrea della Robbia, were chosen to decorate the most important areas of the complex. Many of these works of art are still conserved in the display rooms of the new MUDI (Museum of the Innocenti).

### THE NEW MUSEUM OF THE INNOCENTI

Inaugurated on the 24th of June 2016, the MUDI now offers the public more extensive and freshly-renovated exhibition areas and new services and activities for visitors. The new Museum has an exhibition area of 1.456 m<sup>2</sup> divided over three floors, with a further 1.655 m<sup>2</sup> that are used for temporary events and educational activities, which again focus on the theme of childhood and shelter for children. Apart from the exhibition areas, the MUDI also has art studios for children and families, temporary exhibitions, a meeting point for residents and tourists wishing to visit Florence, conventions, teaching activities, a bookshop specialised in children's books and a coffee-shop in the XV century portico which is open to both visitors to the



**LEFT.** ULTRATOP self-levelling mortar applied by pump and then spread over the surface.

**ABOVE.** In the first picture, the grinding of ULTRATOP coating. In the second picture, the completion of the works by applying a coat of MAPECRETE STAIN PROTECTION finish.



### IN THE SPOTLIGHT

#### ULTRATOP

Ultra-fast setting, self-levelling mortar based on special hydraulic binders for abrasion-resistant flooring. ULTRATOP is used internally in public and industrial buildings, for levelling and smoothing new or existing concrete and ceramic substrates in thickness from 5 to 40 mm, to make them suitable for heavy pedestrian use in shopping centres, offices, shops, showrooms and areas where rubber-wheeled vehicles are in use. ULTRATOP may be left as a finished floor

due to its high mechanical strength and resistance to abrasion and thanks to its versatility, is suitable for numerous applications in the decorating sector of buildings for civil use. Helps earn up to **3 points** towards **LEED** certification.





**ABOVE.** The walls were primed with tinted QUARZOLITE BASE COAT (left) and then painted with QUARZOLITE PAINT (right).

**RIGHT.** The same anthracite colour as the coating was used for the trowelled SILEXCOLOR MARMORINO with an antique finish.

museum and the general public. At basement level the exhibits tell the story of the evolution of the Institute of the Innocenti, while on the ground floor there is an illustrated guide of the architectural history of the Hospital, showing the renovation work carried out over the years to meet the changing needs of the shelter. On the second floor, above the façade portico, there is a Gallery that hosts the “Coretto di preghiera delle balie” (Nannies Prayer Circle) and the most precious works of art, around eighty exhibits including pieces by Sandro Botticelli, Domenico Ghirlandaio, Bartolomeo di Giovanni, Piero di Cosimo and Luca and Andrea della Robbia. And it was the latter artist who also created the symbol for the building, “Ten Multi-coloured Precious Cherubs”, which were taken down from the façade in 2015, completely restored, put on display in the Museum for 6 months and then, last December, finally put back in their rightful place.

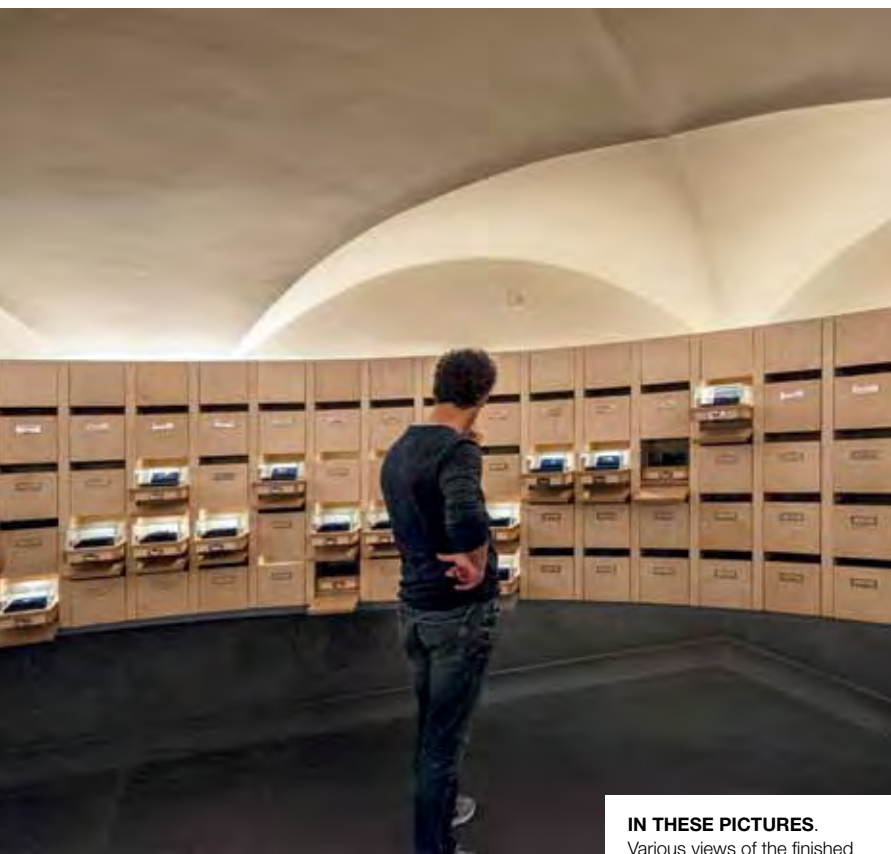
## WORK COMPLETED TO PERFECTION

At the Hospital of the Innocenti, new-born babies used to be abandoned on the “ruota degli esposti” (a kind of rotating hatch). Their parents would often leave a small sign of recognition attached to the babies in the hope that, one day, they would be in a position to take the child back if and when the situation in the family had improved, such as name tags, ribbons and blankets. These objects are now conserved in small display cabinets, along with the names of the babies the objects belonged to, in what is known as “The Room of Memories”. The entire exhibition area evokes very powerful emotions in the visitors, and this sensation is increased even more by the vaulted ceilings and lighting system. The renovation and redevelopment work on the rooms in the Museum proved to be a technically complex undertaking, as well as delicate, on a Renaissance period building within a time frame that had to be maintained in order to be ready for the inauguration planned for December 2016. The design studio that won the international tender, and the contractor appointed to actually carry out the work on the surfaces in the new Museum, were assisted by Mapei Technical Services. To make the new seamless flooring (for a total surface area of 1,700 m<sup>2</sup>), and make it highly resistant to abrasion and foot traffic, the choice went to ULTRATOP



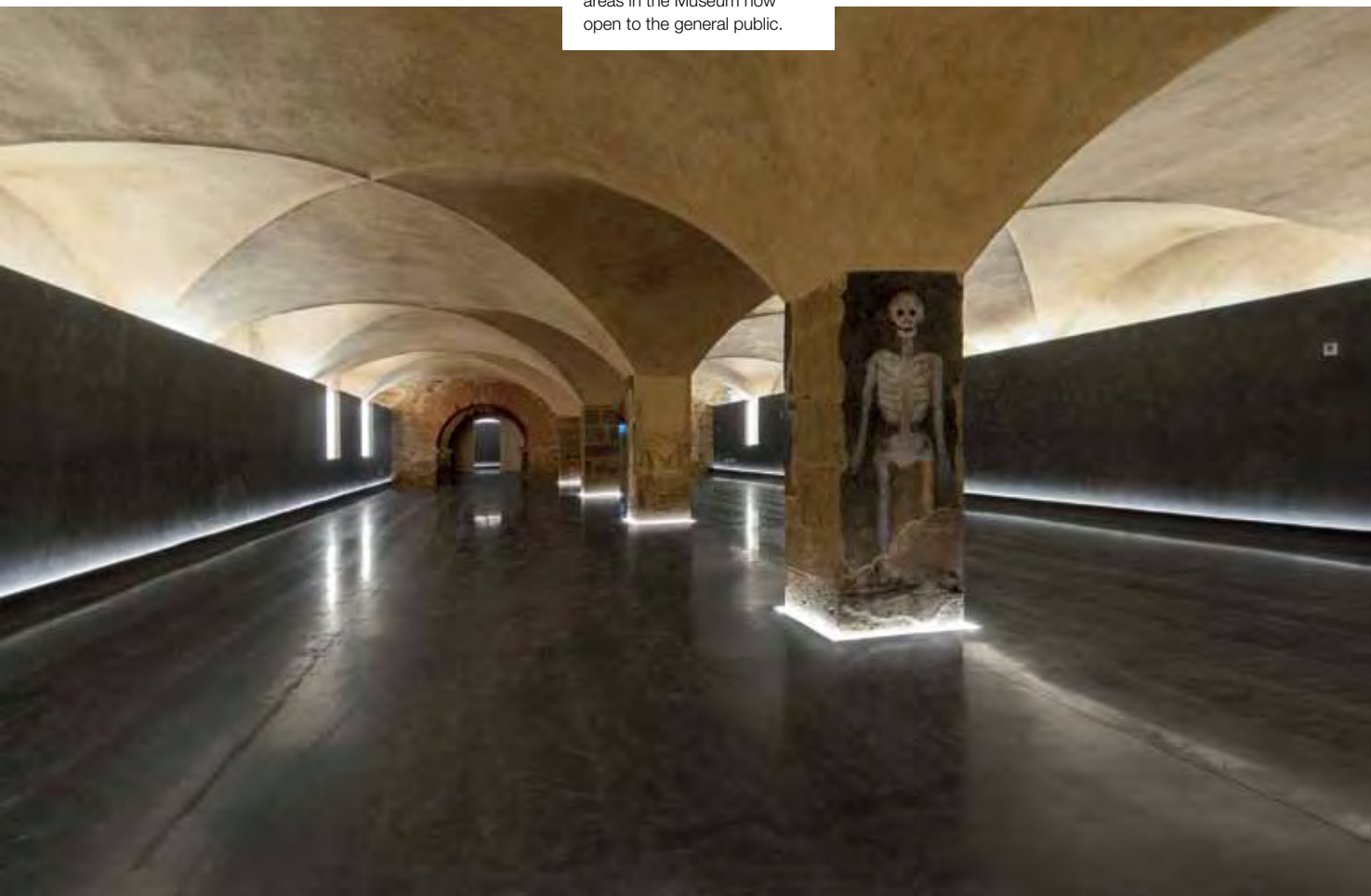
rapid-hardening, self-levelling mortar with a natural finish. The first step was to treat the laying surface with PRIMER SN two-component, solvent-free epoxy resin. Immediately after applying the primer, the surface was broadcast with QUARTZ 1.2 to help the ULTRATOP adhere perfectly. The next step was to apply a layer of anthracite ULTRATOP mortar.

ULTRATOP may be left with its natural finish or, as in this case, it may be ground so that the client can later choose the final pattern or finish. Once this phase had been completed, and the ULTRATOP had been ground with diamond disks and the expansion joints that had been formed in the mortar had been sealed with MAPESIL AC, the surface was treated with MAPECRETE STAIN PROTECTION, a stain-resistant, oil and water-repellent product made from organic polymers in water solution for surfaces in concrete, natural stone, stone material and cementitious material in general. The same shade of anthracite was also chosen by the designers for the plasterboard panels in the display galleries in the Museum (1.330 m<sup>2</sup>). In this case, they were primed with QUARZOLITE BASE COAT, an acrylic resin-based undercoat in water dispersion to even out surfaces, followed by a coat of QUARZOLITE PAINT. Work continued with the application of SILEXCOLOR MARMORINO silicate-based mineral coating paste. This product is used when, apart from good breathability, an antique finish typical of Venetian plaster is required. The SILEXCOLOR MARMORINO was mixed in tone-on-tone colours by a Colormap retailer to obtain the same shade as the ULTRATOP.



#### IN THESE PICTURES.

Various views of the finished areas in the Museum now open to the general public.



#### TECHNICAL DATA

**Museum of the Innocenti**, Florence

**Original Designer:** Filippo Brunelleschi

**Period of Construction:** 1421-1445;  
Museum: 2012-2016

**Period of Intervention:** 2016

**Intervention by Mapei:** supply of products to coat floors and finishes for the walls

**Designer:** Ipostudio Architetti

**Client:** Istituto Degl'Innocenti

**Works Directors:** Carlo Terpolilli and Elisabetta Zanasi

**Main Contractor:** Mulinari Costruzioni Generali srl

**Flooring Contractor:** Tekno Pav srl, Klinkdex Floor Treatment Specialist

**Mapei Distributor:** Costruire Materiali Per L'Edilizia

**Mapei Co-ordinators:** Massimo Lombardi, Roberto Migliorini and Denis Visani (Mapei SpA)

#### MAPEI PRODUCTS

Coating the surfaces: Mapecrete Stain Protection, Mapesil AC, Primer SN, Quartz 1.2 and Ultratop

Wall Finishes: Quarzolite Base Coat, Quarzolite Paint and Silexcolor Marmorino

For further information on these products visit our website at [www.mapei.it](http://www.mapei.it) and [www.mapei.com](http://www.mapei.com)



# FALCONE-BORSELLINO INTERNATIONAL AIRPORT

## BONDING PORCELAIN FLOORS IN THE NEW PASSENGER AREA IN PALERMO

Palermo airport is the tenth most important in Italy and, after the airports in Catania and Naples, the third most important in the south of Italy. Every day it connects the capital of the island of Sicily with major airports in Italy and Europe, as well as serving inter-continental routes and a considerable number of charter flights.

In the last few years Ges.a.p., the company that runs the airport, has put a development plan into action that includes increasing the security measures in the terminal, extending the waiting and departure areas, lengthening the second runway, creating thousands of new parking spaces and improving the access roads to the airport.

### FIRST CAME THE SCREED

Within the framework of these upgrading measures, a new passenger area was built earlier this year (over a total area of around 4,000 m<sup>2</sup>), which was handed over last July after around two months of work. The technical specifications for the work required the use of a high performance, full contact

adhesive to bond large-size porcelain floor tiles (80cm x 80cm). The flooring company carrying out the work contacted Mapei Technical Services to request their assistance on site and to provide products that met the requirements of the client. Mapei recommended building a bonded screed so that the substrate would be as flat as possible before installing the tiles.

The first step was to spread a layer of bonding slurry on the surface made from TOPCEM normal-setting, rapid-drying, controlled-shrinkage hydraulic binder, PLANICRETE synthetic rubber latex and water.

Then, to make the new screed, which varies in thickness from 1 to 3 cm, the product recommended was TOPCEM PRONTO ready-to-use, normal-setting, controlled-shrinkage mortar for quick-drying screeds, classified CT-C30-F6 A1<sub>1</sub> according to EN 13813 standards.

To make the screed stronger, 30 mm long MAPEFIBRE ST30 structural polymer fibres were added to the mix. These fibres may be used either in combination or, in certain cases, instead of conventional metal reinforcement.

After spreading the mix, cuts were made in the surface to form joints over an area of around 12 m<sup>2</sup>.

After 4 days, which are absolutely essential in order for the screed to dry and reduce its residual moisture content, the next



**RIGHT.** An external view of the airport.

**LEFT AND BELOW.** The ceramic tiles were bonded with ADESILEX P4 and joints were grouted with ULTRACOLOR PLUS.



safety. Not only does this adhesive have excellent workability, but it also guarantees rapid setting.

Mapei Technical Services suggested installing the large-size tiles using the back-buttering technique. The special characteristics of the adhesive allowed the flooring company to complete the work within the time allocated, in spite of the delays accumulated during the previous interventions.

The joints were grouted with ULTRACOLOR PLUS high-performance, anti-efflorescence, quick-setting and drying polymer-modified mortar with water-repellent DropEffect® and mould-resistant BioBlock® technology. This is a class CG2WA mortar according to EN 13888 standard, recommended for joints between 2 and 20 mm wide.

The flooring company then created a network of expansion joints in the floor, inserted MAPEFOAM closed-cell, extruded foam polyethylene cord into the joints and then filled them with MAPEFLEX PU45 paintable polyurethane sealant.

step was to choose the most appropriate adhesive according to the indications in the technical specifications.

### CHOOSING THE RIGHT ADHESIVE

The Works Director decided to test several adhesives: apart from adhesives from competitors, KERAFLEX MAXI S1 and ADESILEX P4 by Mapei were also tested. After a series of tests ADESILEX P4 high performance, rapid-setting, full contact adhesive was the one chosen. ADESILEX P4 is recommended for floors subjected to heavy traffic and is suitable for large-size ceramic tiles, which means they can be installed in complete

#### IN THE SPOTLIGHT ADESILEX P4

It is an improved (C2) fast setting (F) cementitious adhesive classified as C2F according to EN 12004 standards. It is used for floor bonding of all types of medium and large ceramic tiles, natural stone (if not sensitive to moisture or subject to surface

efflorescence), terracotta, and terrazzo in interiors and exteriors. It can contribute up to **4 points** to the **LEED** certification for eco-sustainable buildings.



#### TECHNICAL DATA

##### Falcone-Borsellino

##### International Airport,

Palermo - Punta Raisi (Italy)

**Year of Construction:** 1960

**Year of the Mapei**

**Intervention:** 2016

**Intervention by Mapei:**

supplying products for building the screeds, installing porcelain tiles and grouting joints

**Client:** Ges.a.p.

**Design:** Ges.a.p. Technical Department

**Works Direction:** Francesco Ruggeri

**Ceramic Installation**

**Contractor:** I.G. Group Srl

**Mapei Distributor:** Palumbo Piccionello Rosa

#### Mapei Co-ordinators:

Umberto D'aniello, Igor Pellegri, Maurizio Padogano, Francesco Riccioli, and Angelo Ferlisi, Mapei SpA (Italy)

#### MAPEI PRODUCTS

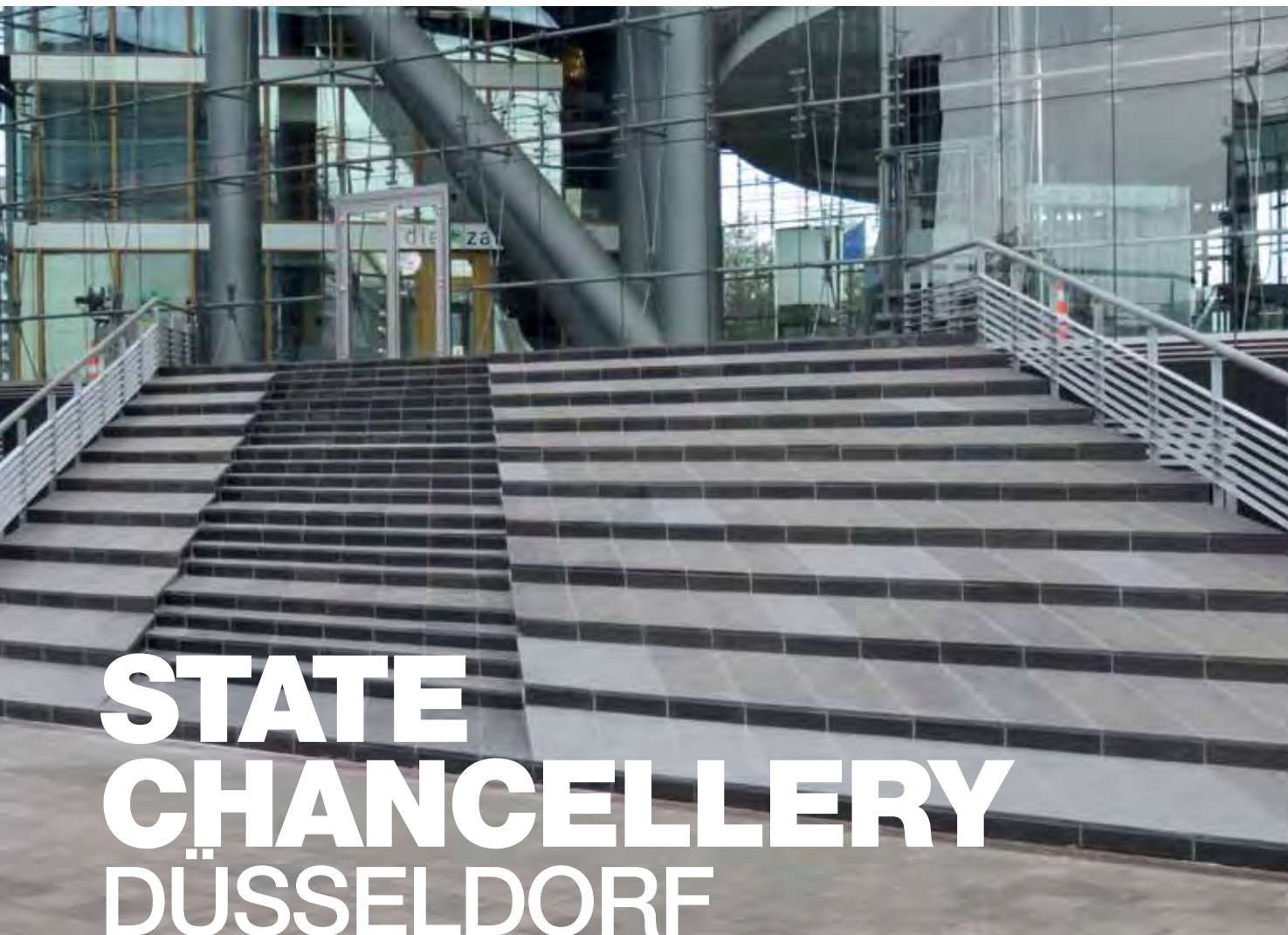
Building the screeds: Mapefibre ST30, Planicrete, Topcem, Topcem Pronto

Installing ceramic tiles and grouting joints: Adesilex P4, Ultracolor Plus

Sealing expansion joints: Mapeflex PU45, Mapefoam

For further information see the website [www.mapei.com](http://www.mapei.com)





# STATE CHANCELLERY DÜSSELDORF

## ELEGANT STEPS IN NATURAL STONE RESTORED USING A CUTTING-EDGE SYSTEM

Known to the inhabitants of Düsseldorf as the Stadttor, or “Gate to the City”, this imposing glass and steel building is shaped like a parallelogram with a large, empty space in the middle. Considered to be one of the best examples of contemporary cityscape architecture, it is 75 metres tall (20 floors above ground level) and was built above the Rheinufer Tunnel, the city’s main traffic hub.

The Stadttor complex is the headquarters of numerous companies and professional firms. Some of the floors are occupied by the State Chancellery of North Rhine-Westphalia, of which Düsseldorf is the capital city, including the head office of the Prime Minister of the Land.

Access to the complex from the road is up a series of steps in dark Gabbro stone, but the steps themselves are open to the elements and are constantly exposed to direct sunlight and bad weather. Over the years, the stone on the steps has started to suffer from the damp conditions and some of the slabs have become detached and efflorescence has also started to appear on their surface. It had become necessary, therefore, to put the steps back into a safe condition by repositioning the large stone slabs. During the intervention, while the stone

was being reinstalled, it was also planned to repair the damage caused by aggressive atmospheric agents.

### A SYSTEM WITH A GUARANTEED SERVICE LIFE

The flooring company appointed to carry out the work proposed using the MAPEI BDC SYSTEM, an innovative system marketed by Mapei GmbH for installing ceramic and natural stone in external surroundings such as balconies, terraces and steps. Thanks to a combination of carefully selected, well known products of the Mapei Group (MAPELASTIC, PLANITOP FAST 330, MAPENET 150, ELASTORAPID, ULTRACOLOR PLUS and MAPESIL LM), the system forms a rapid-drying substrate which offers high performance characteristics, good adhesion for the covering materials and excellent drainage, without having to create intermediate layers.

Work commenced with the removal of the stone from the old substrate (around 200 m<sup>2</sup>) and then a new screed was installed using TOPCEM PRONTO, ready-mixed mortar for normal-setting and quick-drying screeds, in combination with bonding slurry made from TOPCEM, normal-setting, quick-drying hydraulic binder, PLANICRETE, a special type of latex



for cementitious mixes, and water.

Once this phase had been completed, a layer of MAPELASTIC, two-component cementitious mortar, was applied over the entire surface. MAPELASTIC is applied with a spreader or by spray on clean surfaces dampened, where necessary, with water. When hardened it forms a highly flexible, protective waterproof coating.

Once the MAPELASTIC was fully cured, a layer of PLANITOP FAST 330 fibre-reinforced, rapid-setting cementitious levelling mortar was applied and then MAPENET 150, alkali-resistant, glass fibre mesh, which is used to reinforce protective waterproof layers and anti-fracture membranes, was pressed down lightly into the mortar. This intervention will guarantee

**ABOVE.** Views of the steps after completing installation of MAPEI BDC SYSTEM.

**BELOW.** The substrate, made from TOPCEM, was waterproofed with MAPELASTIC and waterproofed with MAPENET 150.



### IN THE SPOTLIGHT ELASTORAPID

Cementitious (C) adhesive with improved performance (2), rapid-setting (F) and non-slip (T) properties, extended open time (E) and high deformability (S2), class C2FTE S2. Suitable for bonding all types and formats of ceramic tiles and natural and engineered stone slabs that require a rapid-

drying adhesive on internal and external substrates. Helps earn up to **2 points** towards **LEED** certification.



that, over the years, any water will drain off quickly without harming the structure or staining the stone.

To bond the slabs of stone, it was recommended to use ELASTORAPID two-component, non-slip adhesive, particularly recommended for bonding ceramic tiles and large stone slabs rapidly on external surfaces.

The grout lines were filled with KERACOLOR FL-S quick-drying mortar for grout lines from 2 to 20 mm wide, which guarantees a high level of protection against dirt and, thanks to DropEffect technology, it also shows a water absorbency close to zero.

### TECHNICAL DATA

**State Chancellery of North Rhine-Westphalia, Düsseldorf** (Germany)

**Designer:** Petziska, Pink and Partner

**Year of Construction:** 1992-1998

**Period of Intervention:** 2016

**Intervention by Mapei:** supply of products to make and waterproof substrates and to install stone slabs on the external steps

**Client:** Hannover Leasing GmbH & Co.KG

**Flooring Contractor:** Naturstein Volker Lindholm

**Mapei Distributor:** Schmidt Rudersdorf

**Mapei Co-Ordinators:** Marcus Winkler and Volker Harter (Mapei GmbH)

### MAPEI PRODUCTS

To make substrates: Mapelast, Mapenet 150, Planicrete, Planitop Fast 330, Topcem and Topcem Pronto

To install stone slabs: Elastorapid, Keracolor FL-S\* and Mapesil LM

\* Manufactured and distributed on the German market by Mapei GmbH

For further information about our products visit our websites at [www.mapei.de](http://www.mapei.de) and [www.mapei.com](http://www.mapei.com)

# GERBER SHOPPING CENTER STUTTGART

## A NEW GERMAN SHOPPING CENTRE WITH AN EYE ON ENVIRONMENTAL SUSTAINABILITY

Inaugurated in 2014, GERBER is a large complex in Stuttgart and is divided into offices, apartments and 25,000 m<sup>2</sup> dedicated exclusively to shopping.

The three-storey structure is located in the centre of the city and has around 90 shops and several restaurants arranged along its wide corridors and parking space for 650 cars and 200 bicycles.

Constructed using only quality materials and according to eco-sustainable principles, GERBER has applied for DGNB certification, one of the various environmental certification protocols that indicate a construction's precise impact on the environment. The German Sustainable Building Council (DGNB-Deutsche Gesellschaft für Nachhaltiges Bauen e.V.) is similar to the more widely known LEED and BREEAM protocols. It adopts European standards and places more emphasis on analysing the life cycle of materials and their costs, by also tak-

ing into consideration economic and social-cultural aspects. The products used to install the hexagonal porcelain tiles along the corridors (surface area 5,500 m<sup>2</sup>), therefore, were a very important choice, and the installation bed was initially treated with PRIMER G synthetic resin-based primer in water dispersion. The surfaces were then levelled with ULTRAPLAN MAXI self-levelling smoothing and levelling mortar, characterised by its ultra-rapid hardening properties. ULTRALITE S1 one-component, high performance adhesive was used to bond the tiles and KERACOLOR FL-S quick-drying mortar – specifically developed by Mapei GmbH, the German subsidiary of the Mapei Group – was used to fill the grout lines, to provide a high level of protection against dirt and excellent waterproofing properties. GERBER was chosen as Retail Project of the Year at the London Lighting Design Awards and Architizer nominated GERBER for the prestigious international A+ Awards competition.



### TECHNICAL DATA

**GERBER Shopping Centre,**  
Stuttgart (Germany)

**Year of Construction:** 2014

**Period of Intervention:** 2014

**Intervention by Mapei:**

supply of products to make  
substrates and install tiles

**Client:** GERBER GmbH  
& Co. KG

**Designer:** EPA

Planungsgruppe & Bernd Albers  
(Stuttgart)

**Main Contractor:**

PHOENIX GmbH Real Estate  
Development

**Flooring Contractor:**

Feldmann & Meincke GmbH

**Mapei Distributor:** Wilkens  
Baustoffe GmbH

**Mapei Co-Ordinator:** Olaf  
Schröder (Mapei GmbH)

### MAPEI PRODUCTS

To make substrates: Primer G  
and Ultraplan Maxi

To install tiles: Keracolor FL-S\*,  
Mapesil LM and Ultralite S1

\* Manufactured and distributed  
on the German market by  
Mapei GmbH

For further information on  
these products visit our  
website at [www.mapei.de](http://www.mapei.de) and  
[www.mapei.com](http://www.mapei.com)

# Ultralite.

Taking your work **lightly**  
has never had so many  
**advantages.**



## Ultralite, you'll never be able to do without it.

**Ultralite Flex, Ultralite S1, Ultralite S1 Quick, Ultralite S2, Ultralite S2 Quick:** a line of **lightweight** cementitious adhesives with extraordinary performance features for all types of ceramic tiles.

- **55% to 80%** higher yield depending on products
- **Improved workability, less tiring** to apply
- **Quicker** application
- **Excellent back-buttering** capacity
- **Highly deformable** (Class S1 - S2)
- **Packaging with handles** for easier handling
- **Contain more than 20%** of **recycled materials**
- **Lighter bags: just 15 kg**
- **White and grey** colors available
- **Bright white**



**25 kg**



**just 15 kg!**



Learn more on [www.mapei.com](http://www.mapei.com)

It is available at official Mapei distributors



**MAPEI**  
www.mapei.com

ADHESIVES · SEALANTS · CHEMICAL PRODUCTS FOR BUILDING



## INTERVIEW

# WORKS OF ARCHITECTURE AS SUSTAINABLE WORKS OF ART

Simone Micheli talks about his work, including his passion for technology and eco-friendly approach

**There are many strings to your professional bow, ranging from creating master plans to design work. Lots of your work has been focused on designing for the hospitality/hotelier industry. How, in your opinion, is your work on this kind of architecture evolving?**

The evolution that the hospitality/hotelier industry has undergone over the last few years is quite startling! Nowadays places like this increasingly mix together and combine their functions and purposes, turning into interactive, hybrid spaces providing personalised solutions perfectly geared to the changing needs of modern-day people. Technology now plays a fundamental role as the silent and indispensable lifeblood flowing through any new project. Different areas and functions are no longer divided up into stagnant sections, but rather shaped into dynamic and ever-changing spaces. Attention to energy-saving and respect for the surrounding environment are now vital guidelines not just in this industry but in all design processes. Innovation is the guiding principle behind the developing of new lines of thinking and ideas. We need to keep on looking beyond the horizon! To win the commercial battles of the moment, architectural works must increasingly take on the form of authentic works of art.

**Simone Micheli and the hospitality industry: how has your way of understanding and designing hotels changed from your very first designs right down to the present day?**

It has not changed! It has, of course, evolved, become more structured and altered in relation to how demands in this sector have changed and are still changing.

So, the underlying philosophy behind my design work has basically remained the same and consists of engaging people on a sensorial level to ensure their well-being; the physical shape and form of my constructions evolves based on the territorial, cultural, social and temporal setting.

I am intellectually drawn towards creating, with ever-increasing attention, works of architecture designed to be sustainable works of art.

**How do you choose the building materials and finishes when you set about designing a hospitality facility?**

The idea of giving shape to an authentic "total work of art", as I have already said, is the driving force behind all my projects. That is why the choice of materials is not just determined by the concept of quality and sustainability - from both an environmental and economic viewpoint - but also the unifying ideal of complementarity, which must characterise every contrasting feature of the architecture.

**Attention to the environment is becoming increasingly important on all levels. How do you feel about eco-compatible materials?**

I am now increasingly opting for materials that do not harm the environment but which, on the contrary, interrelate with it. I have a keen eye for emerging trends and, without getting too carried away, I design my projects using innovative materials and always analyse and study all the latest possibilities in terms of energy-saving and environmental friendliness. Constant research and experimentation are ever-present in my design work.



### What role does materials technology play in your projects?

A fundamental role! As I have just said, research and experimentation and the search to find increasingly smart and sustainable solutions are necessary for making progress and improving over time and also for making sure people's needs and desires are increasingly met on an everyday basis. I think this is the main task of a good architectural designer.

### Your projects are all extremely distinctive and unique. How does this fit in with the client's demands and expectations and how do you adapt your approach to the different locations in which you work?

My projects derive from a harmonious combination of my design credo, the dreams and desires of the client who has decided to give shape to a given work, and the distinctive traits of each project location. The origins of works with unique features that truly stand out and are never identical but constantly changing lies in the quest for this kind of compositional perfection and constantly changing mix!

The most extraordinary projects always emerge when there is a wonderful and perfect sharing of intents and visions between the client and architect.

In this respect, I think I am an extremely lucky man.

The clients I have encountered and continue to meet as I go about my daily endeavours are always, in my opinion, responsible for breathing life into my projects.

### Based on your own experience, is it easier to work in Italy or abroad?

I do not think there is any simple answer to that ques-



## Hotel Barcelò (formerly Hotel B4) in Milan

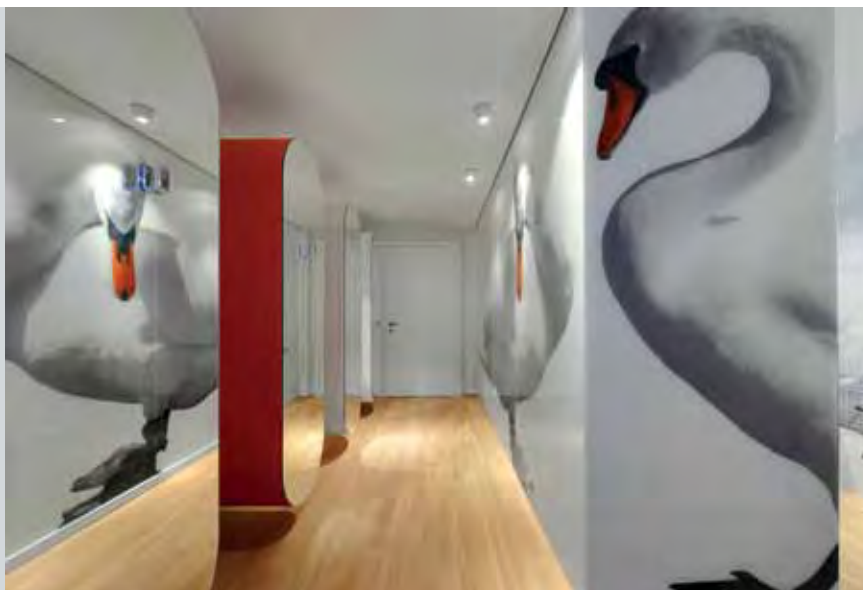
Simone Micheli designed the interiors of Hotel Barcelò in Milan, devising "Phytomorphic sculptures welcoming guests on the ground floor". Mapei contributed to this project by supplying products for waterproofing, repairing underground masonry and installing vinyl, fibreglass and cork coatings.

tion. Italy is very closely tied to its traditions, something that is not always justified and is often difficult to come to terms with. Nevertheless, there are plenty of positives, such as the real determination to redevelop our territories that has emerged over the last few years and a very special kind of craftsmanship that opens up great possibilities in terms of experimentation.

Likewise, there is a tapestry of different territories, cultures, traditions and specific features "abroad" and every region has its own distinctive traits, each with their own strengths and weaknesses. I think it is vitally important to create works that are rooted in the lands in which they are to be constructed

## Duomo Town House in Milan

Town House Duomo is a luxury hotel overlooking Piazza del Duomo in Milan. Simone Micheli designed suite No. 10 called the "Swan Room". The suite has a large mosaic wall depicting a white swan. Mapei supplied the products for installing the mosaic and grouting the screeds (see *Realtà Mapei International* no. 52).



## SM© SIMONE MICHELI ARCHITETTO

Simone Micheli set up an architectural firm named after himself in 1990 and then founded the "Simone Micheli Architectural Hero" engineering firm based in Florence, Milan, Dubai, Rabat and Busan in 2003. He has curated thematic "contract" exhibitions and other events for leading international trade fairs in the sector.

He currently teaches at Poli.Design and the Polytechnic Design School in Milan. His career has branched out in numerous directions ranging from architecture and interior architecture to design and visual design, also working in the

field of communication; his sustainable creations are always environmentally friendly, extremely distinctive and quite unique. He has created numerous works for public institutions and important private clients in the realms of residential and communal facilities.

The international accolades he received in 2016 include:

- **Best of Houzz Award 2016** #design for the popularity of his projects selected from the over 35 million users of the Houzz community;
- **Codega Prize**, Venice - Italy #lightingdesign and **APP - American Ar-**

**chitectural Prize**, Los Angeles

- USA #interior for his wonderful project for Sarajevo Dreamy Spa;
- Architect of the year, **2016 Build Award**, BUILD Magazine, UK

His works have been displayed in leading international exhibitions and he has held conferences and lectures at universities, cultural institutes, associations and institutions in various cities around the world. His works have been published in both Italian and international magazines and journals.

[www.simonemicheli.com](http://www.simonemicheli.com)

### How do you think hospitality facilities and different ways of accommodating guests will develop in future?

I envisage increasing hybridisation and interaction; I can see changing identities adapting to people's different lifestyles and requirements. I believe that dividing up spaces and functions statically will give way to holistic and unitary approaches focused around people's inner selves and senses and all geared to their personal well-being. I think that the hospitality facilities of the future will be increasingly iconic and distinctive, they will be incredibly fascinating experiential places.

### You have helped design and build numerous hotels. Which project gave you the greatest pleasure and which, in contrast, was the hardest to build? And what kind of hotel would you like to design?

As I often say, I have no favourite architectural work. I have also approached each new project as a new challenge to be taken on, like an exciting adventure to be enjoyed to the utmost; each work is the result of some new step forward and improvement and, hence, it has its own specific values and significance. I am totally satisfied with all the projects I have created in my over-27-year career and I can assure you that they have been numerous and all very different!!

As regards my architectural hotel... yes, I do indeed have an overriding ambition: I would like to design the sea and skies!

### Which of the hotels you have designed incorporated Mapei products?

I have been working with Mapei for very many years

and our close partnership is based on mutual trust and esteem.

I use Mapei products for all my works, which include hotels and hospitality facilities, but also lots of private residences.

My partnership with the company also includes joint involvement in events, trade fairs and conferences on an international level.



## 5-star private house in Maccagno

Simone Micheli designs original housing projects as well as hotels. His project for this small apartment is based on the idea of setting down a "universal space", completely open and accessible, which contributes, together with the large windows opening onto the striking panorama of Lake Maggiore and the Lepontine Alps, to creating one unified whole together with the surrounding landscape. Mapei products were used for this project here, too.



# HERITAGE HOTEL LIFE PALACE

## RENOVATION WORK ON A XVI CENTURY PALACE IN ŠIBENIK, IN THE HEART OF DALMATIA, USING MAPEI'S MOST ADVANCED PRODUCT SYSTEMS

Just like a scene from a fairy-tale book, the Heritage Hotel Life Palace, nestling perfectly in a small, lively square in Šibenik – a Croatian city on the Dalmatian coast – was recently opened.

The original features of Palace Marenci, dating back to the XV Century, have been integrated to perfection within these exclusive interiors, where every step you take is like paying homage to the glorious history of Šibenik.

An oasis of luxury and the ideal base to explore the city and its surroundings, between 2014 and 2015 the Heritage Hotel Life Palace underwent a major overhaul, with a key role being played by the best products on offer from Mapei for upgrading structures and for renovation work.

### REPAIRING USING PRODUCTS FROM THE MAPE-ANTIQUE LINE

Once a thorough analysis had been carried out to assess the level of deterioration to the structure, renovation work commenced by preparing the surfaces of building's internal and external walls, from ground level right up to the roof. The old render had been removed and the façades

had been sand-blasted to remove all the loose or crumbly material, the areas with large gaps and/or breaks in the surface were filled and integrated with masonry mortar made from MAPE-ANTIQUE LC, a special salt-resistant, lime and Eco-Pozzolan based, cement-free hydraulic binder recommended for renovating masonry on old buildings damaged by capillary rising damp, including those of historical or artistic interest, such as was in this case.

Sand from local quarries (with a particle size of 0 - 3 mm) from Mount Svilaja was added to the mortar to give the façades a colour very similar to that of the other ancient buildings in the area.

### STRUCTURAL CONSOLIDATION

The original stone walls – from 65 to 120 cm thick and built using the double skin technique – were restored and consolidated with another cutting-edge product from the Mape-Antique line: MAPE-ANTIQUE I-15, a powdered, fillerized hydraulic binder made from lime, Eco-Pozzolan, ultra-fine natural sand and special addi-



tives according to a formula developed in the Mapei research laboratories, which is used to make cement-free injection slurry.

To overcome the problem of rising damp spreading from the foundations of the building to above the flooring level, MAPESTOP, concentrated, silane and siloxane-based silicone emulsion, was injected into the wall by gravity-feed.

Main entrance doors and surrounding windows of the building had stone features that were badly worn or broken. To guarantee their stability, and the stability of the entire building, CARBOPLATE E 170, pultruded carbon fibre plates with a double plastic protective film were applied, an alternative to the traditional method of using steel plates for cladding (béton plaqué) work; the plates were bonded in place with ADESILEX PG1 epoxy thixotropic adhesive for structural bonding.

**TECHNICAL DATA**  
**Heritage Hotel Life**  
**Palace, Šibenik (Croatia)**  
**Period of**  
**Construction:** XV  
 century  
**Period of the Mapei**  
**intervention:** 2014 -  
 2015

**Intervention by**  
**Mapei:** supplying  
 products for structural  
 strengthening and for  
 masonry restoration

**Client:** Tatami d.o.o  
 (Split)

**Project:** Studio-Studio  
 d.o.o. (Split)

**Contractor:** Dva Marka  
 d.o.o. (Šibenik)

**Installer Company:** Krs  
 obrt (Zadar)

**Mapei Co-Ordinators:**  
 Zoran Špoler, Goran Šinko,  
 Alen Sorić, Nenad Karalija  
 (Mapei Croatia d.o.o.)

#### MAPEI PRODUCTS

Mape-Antique I-15, Mape-  
 Antique LC, Adesilex PG1,  
 Carboplate E170, Epojet,  
 Mapestop

For further information on  
 products see [www.mapei.hr](http://www.mapei.hr)  
 and [www.mapei.com](http://www.mapei.com)



The original natural stone walls  
 were consolidated with MAPE-  
 ANTIQUE I-15 cement-free  
 hydraulic binder.



# SCHLOSSHOTEL FLEESEENSEE





## INSTALLATION OF PARQUET AND TEXTILE WALL COVERINGS IN A HISTORIC GERMAN HOTEL

The Schlosshotel Fleesensee has quite an adventurous story to tell: originally built in 1842 as Castle Blücher in Göhern-Lebbin – a small town between Hamburg and Berlin – it was destroyed by a fire in 1912 and then re-built in neo-Baroque style. During the Second World War it was used as a school and then as a military hospital. During the period of the DDR it was used for various purposes and, in the period before the reunification of Germany, it had been turned into a holiday home. For 15 years the Hotel Schloss Blücher was owned by the Radisson Blu hotel chain and, in 2015, it was sold to Lindner Investment who renamed it the Schlosshotel Fleesensee. Before reopening it to the public, the new owners decided to give it a complete overhaul and turn it into a design hotel.

### A COMBINATION OF MODERNITY AND TRADITION

The owners wanted to offer the clientele an environment along traditional lines, but with finishes and materials to give it a decidedly modern look. The designers opted for contemporary furnishings and fittings, a sophisticated lighting system and a complete restyling of the spaces, with special touches to give the rooms – characterised by their high ceilings – a special atmosphere. And amongst these special touches the coverings stand out for their superb quality. The entrance, foyer, reception, bar, wine cellar, restaurant and winter garden all have parquet flooring made from very special types of wood characterised by their unique finish and high resistance to wear and foot traffic. In the conference rooms, corridors and bedrooms, on the other hand, the designers decided to install high quality carpet, with each room having its own individual colour and pattern; details that transmit wellbeing to a client, with good soundproofing and a sense of tranquillity and warmth.

### SPECIAL COVERINGS FOR A REFINED HOTEL

The contractor wanted to use exclusively Mapei systems to install around 2,000 m<sup>2</sup> of wall and floor coverings – indeed, Mapei was able to offer manifold adhesives, primers, levelling and smoothing compounds with very low emission of volatile organic compounds (VOC) and with Blue Angel sign. Furthermore, Mapei specialists provided on-site tailored recommendation for choosing the right products to refurbish the

old substrates.

The first step was to treat the substrates with ECO PRIM PU 1K TURBO moisture-curing, rapid-drying polyurethane primer in combination with ECO PRIM T PLUS, acrylic primer in water dispersion. Local repairs have been carried out with PLANIPATCH, fine-graded cementitious levelling compound mixed with LATEX PLUS instead of water. Cracks have been sealed with PRIMER MF. At this point the substrates were levelled with ULTRAPLAN ECO PLUS self-levelling smoothing and levelling compound (produced and marketed in Germany). Once this had dried, around 900 m<sup>2</sup> of wooden flooring were laid using ULTRABOND ECO S968 1K one-component, silylated polymer-based, solvent and plasticizer free adhesive and free of solvent content.

ULTRABOND ECO 170 high and fast grab adhesive in water dispersion was then used to install 1,100 m<sup>2</sup> of textile floor coverings. The next step for the designers and owners is to completely renovate the sport resort next to the hotel.

### TECHNICAL DATA

**Schlosshotel Mecklenburg Fleesensee**, Göhern-Lebbin, Mecklenburg (Germany)

#### Period of Construction:

1842, re-built in 1912

#### Original Project (1912):

Ernst Paulus

#### Year of Intervention: 2016

**Project (2016):** Kitzig Architekten (Göhern-Lebbin)

#### Intervention by Mapei:

supplying products for carrying out substrates, for the installation of wooden and textile floorings

**Client:** Kai Richter and Jörg Lindner - Lindner Investment Management (Düsseldorf)

#### Installer Company:

Raumausstattung Rick GmbH (Düsseldorf)

#### Mapei Distributor: W.&L.

Jordan GmbH (Düsseldorf)

#### Mapei Co-Ordinator: Günter

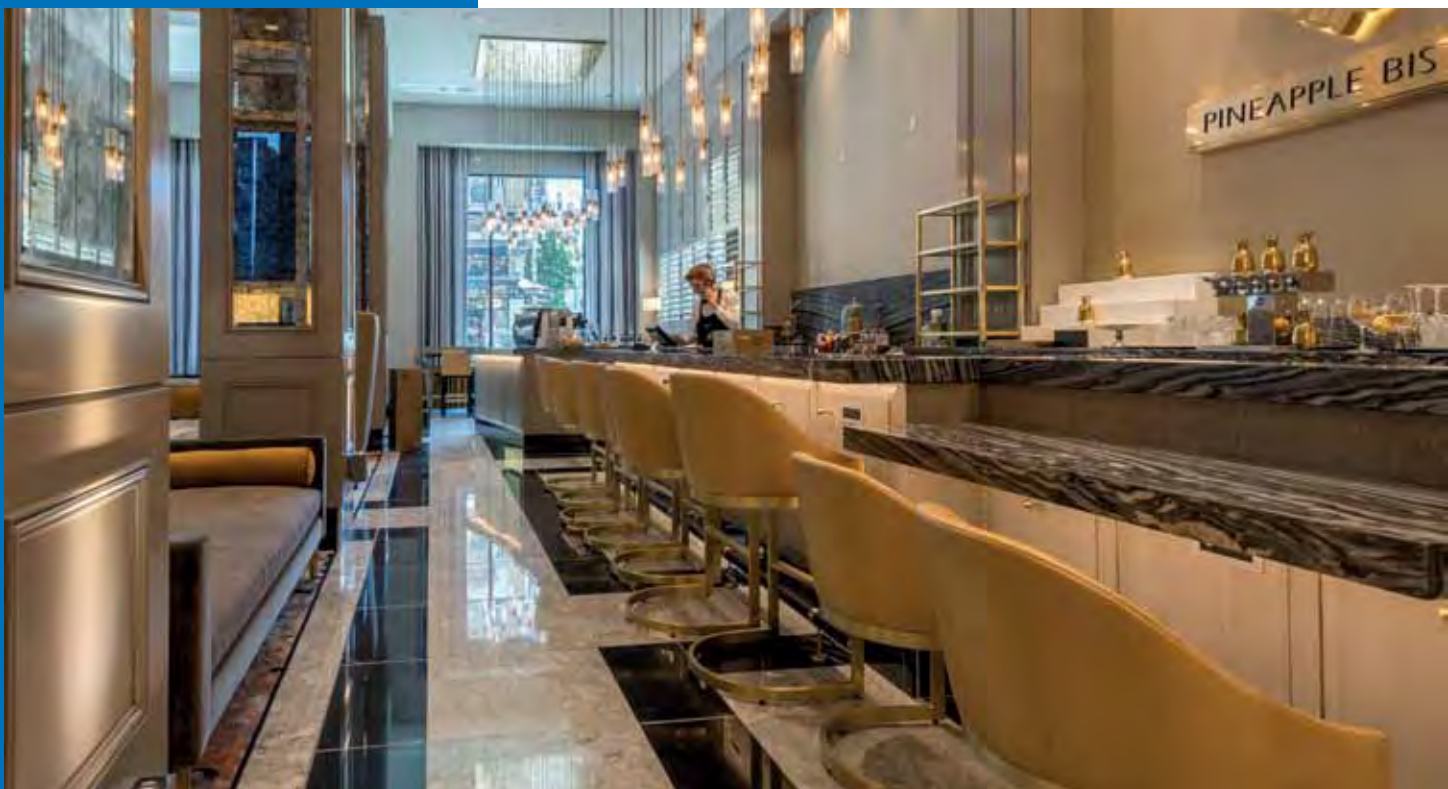
Hermann, Tom Schlag (Mapei GmbH)

### MAPEI PRODUCTS

Substrates preparation: Eco Prim PU 1K Turbo, Eco Prim T Plus, Latex Plus, Planipatch, Primer MF, Ultraplan Eco Plus\*  
Installation of wooden flooring: Ultrabond Eco S968 1K  
Installation of textile wall floorings: Ultrabond Eco 170

\*This product is manufactured and distributed in Germany by Mapei GmbH

For further information on products see [www.mapei.de](http://www.mapei.de) and [www.mapei.com](http://www.mapei.com)



# THE ALISE HOTEL SAN FRANCISCO

WATERPROOFING SYSTEMS AND FLOOR AND WALL  
COVERINGS INSTALLED USING CUTTING-EDGE PRODUCTS

The Alise Hotel is part of the Pineapple Hospitality chain. The hotel is located in a completely refurbished building dating back to the last century. The 93 rooms offer all the usual home comforts, as well as the traditional "old San Francisco" charm, with dark wood used to dress the walls, elegant lamps and bespoke fabrics. The colours used in the rooms go from pineapple yellow to grey, and the hotel's vintage look coordinates with the design furnishings and the high quality finish of the white marble tiling in the bathrooms.

## CUTTING-EDGE INSTALLATION SYSTEMS

The contractor employed to refurbish all the bathrooms and lay the flooring in the corridors, lobby and bar (total surface area 2,323 m<sup>2</sup>) proposed a unique solution to the property owner for updating the bathrooms in the 93 guest rooms. The contractor had seen a demonstration of the SHOWERPERFECT LM System during the International Surfaces Event trade fair in the United States and was convinced that it was the best possible solution to bring the hotel's bathrooms up to date. The SHOWERPERFECT LM System consists of a kit with drain fit-

tings that are used in combination with the waterproofing membrane MAPELASTIC AQUADEFENSE. Before commencing work in the bathrooms and shower areas, the contractor had to repair the worn substrate. After removing the old flooring, some areas of the substrate needed to be repaired to make the floors perfectly flat. For this operation it was decided to use MAPECEM QUICK-PATCH high-performance patch and PLANIPATCH cement-based patching compound.

The final levelling was then done with NOVOPLAN 2 PLUS self-levelling underlayment (these and some of the following products and systems are manufactured and distributed in the USA by Mapei Corp).

After this phase had been completed, work started in the showers by installing SHOWERPERFECT LM drain kits in combination with MAPELASTIC AQUADEFENSE for waterproofing.

The walls and floors in the showers and bathrooms were then tiled with white marble. Mapei Technical Services recommended setting the marble with ULTRALITE MORTAR PRO high performance cementitious adhesive and grouting the gaps with ULTRACOLOR PLUS, the most



#### TECHNICAL DATA

**The Alise Hotel,** San Francisco (USA)

**Year of Construction:** 1913

**Period of Intervention:** 2015-2016

**Intervention by Mapei:** supply of products to prepare substrates, waterproof floors and walls and to install tiles in the bathrooms

**Client:** Pineapple Hospitality

**Project:** Glenn Texeira – Stanton Architecture

**Main Contractor:** CCI General Contractor

**Installer Company:** Rubenstein's

**Mapei Distributor:** Systematic Supply

**Mapei Co-Ordinator:** Chris Anderson (Mapei Corporation)

#### MAPEI PRODUCTS

**Substrates:** Mapecem Quickpatch\*, Novoplan 2 Plus\*, Planipatch and Mapeguard 2\*  
**Waterproofing:** Mapelastic AquaDefense and ShowerPerfect LM\*

**Tiling:** Eco Prim Grip, Ultracolor Plus and Ultralite Mortar Pro\*

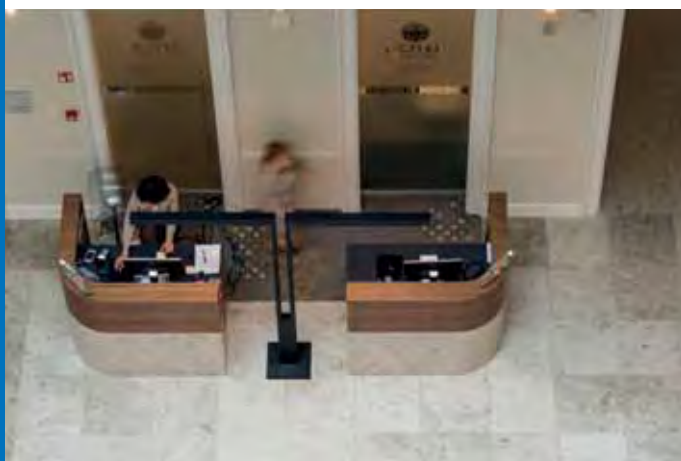
**Fabric floor coverings (carpet):** Ultrabond Eco 120\*

\*Manufactured and distributed on the American market by Mapei Corporation

For further information on these products visit our website at [www.mapei.com](http://www.mapei.com)

popular grouting product of the whole Mapei Group, which, thanks to the use of DropEffect® technology, forms grout lines which are highly water repellent and, therefore, less prone to becoming stained or dirty. The marble tiles came with a resin backing, so ECO PRIM GRIP was applied to the backs of the tiles to provide a suitable bonding surface for the ULTRALITE MORTAR PRO. Elegant black and white tiles were installed in the hotel lobby and bar directly on top of MAPEGUARD 2, an anti-fracture membrane with soundproofing properties. These tiles were also bonded with ULTRALITE MORTAR PRO and grouted with ULTRACOLOR PLUS, and the same system was used again for the large tiles on the stairways in the lobby. In hallways and common areas on the guest floors, carpet was installed using ULTRABOND ECO 120 adhesive.





# HOTEL MOMENTS BUDAPEST

IN THE CAPITAL CITY OF HUNGARY AN HISTORICAL BUILDING HAS BEEN RESTORED TO ITS ORIGINAL SPLENDOUR THANKS ALSO TO THE MOST ADVANCED SYSTEMS FOR INSTALLING CERAMIC TILES

Located in the heart of Budapest, Hotel Moments is one of the most important and most successful hotel renovation projects completed in the Hungarian capital in recent years. The architectural solutions adopted during the renovation of this building – built between 1880 and 1882 according to a design by the architect Adolf Feszty – are also an example of the professionalism and competitiveness of the Hungarian construction sector. And there really were numerous Mapei solutions used to both lay wall and floor coverings and install tiles.

In the basement of the building, where the dedicated wellness areas, the kitchen and various service rooms are located, the walls were covered with glass mosaics and ceramic tiles, while porcelain tiles were installed on the floor. Wherever the surface of the floors needed to be levelled, the solution adopted was ULTRAPLAN ECO 20 rapid hydrating self-levelling compound. To repair the concrete in the basement wellness area, the sur-

faces were initially treated with PRIMER G and then a layer of PLANITOP 400 fast-setting mortar was applied. Some of the reinforced cement and brick walls were repaired with NIVOPLAN, indoor and outdoor levelling mortar for walls and ceilings. The wellness area was then waterproofed with MAPELASTIC cementitious mortar in combination with MAPEBAND, rubber tape with alkali-resistant fabric. Also in the wellness area, 60x60 cm porcelain tiles were bonded on the walls and floors with KERAFLEX MAXI S1, high-performance, cementitious adhesive with no vertical slip and LowDust technology, particularly recommended for bonding large porcelain and natural stone tiles and grouted with KERACOLOR FF FLEX, flexible cement-based grout with DropEffect, for joints from 2 to 6 mm.

The expansion joints were sealed with MAPESIL AC, pure, mould-resistant, acetic silicone sealant, which has been used



for the rest of the building as well.

ADESILEX P10, high-performance, white cementitious adhesive, was chosen to bond glass mosaic, while KERACOLOR FF FLEX was used again for the grout lines.

The MAPELASTIC-MAPEBAND system was also used to waterproof the kitchen in the basement.

All the surfaces on the ground floor were initially consolidated with PRIMER G and then levelled with ULTRAPLAN ECO 20, except for the indoor entrance door area where, due to the continuous indoor-outdoor temperature variations, the solution chosen to level the surfaces was PLANEX, a specific self-levelling product for external areas, which is also available on the Hungarian market. In this area, and also in the corridors, 30x30 cm ceramic tiles were installed with ADESILEX P9 and grouted with KERACOLOR FF FLEX.

In the kitchen on the ground floor, the tried and trusted combination of MAPELASTIC and MAPEBAND was used to waterproof the surfaces and the wall and floor tiles were bonded with ADESILEX P9 and grouted with KERACOLOR FF FLEX.

For the floors in the corridors, the atriums around the lifts, on the staircases and in the service rooms, various products were used to prepare surfaces and install porcelain tiles: PRIMER G, ULTRAPLAN ECO 20, ADESILEX P9, KERACOLOR FF FLEX and MAPESIL AC.

All the damp areas were waterproofed with MAPELASTIC AQUADEFENSE, ready-to-use, ultra quick-drying, flexible liquid membrane, suitable for waterproofing internal and external surfaces, in combination with MAPEBAND PE 120 PVC tape.

## TECHNICAL DATA

**Hotel Moments, Budapest**  
(Hungary)

**Period of Construction:**  
1880-1882

**Period of Intervention:**  
2015-2016

**Intervention by Mapei:**  
supplying products for waterproofing and laying wall and floor coverings and for the installation of ceramic tiles and for bonding glass mosaics. Products for repairing, consolidating, priming and leveling basements and ground floor surfaces.

**Client:** Continental Group

**Project:** Archi-Kon LLC

**Works direction:** Csaba Nagy

**Contractor:** Market Építő Zrt.

**Installer company:** Ratskó-Bau LLC

**Mapei Co-Ordinators:** Gergely Garay, László Nagy (Mapei Kft.)

## MAPEI PRODUCTS

Substrates preparation and concrete repair: Ultraplan Eco 20\*, Primer G, Planitop 400, Nivoplan, Planex\*

Waterproofing: Mapelastic, Mapelastic AquaDefense, Mapeband, Mapeband PE 120  
Installation and grouting of tiles: Keraflex S1, Keracolor FF Flex\*\*, Mapesil AC, Adesilex P10, Adesilex P9

\*These products are manufactured and distributed in the Hungarian market by Mapei Kft.

\*\*This product is distributed in the Hungarian market by Mapei Kft.

For further information on products see [www.mapei.hu](http://www.mapei.hu) and [www.mapei.com](http://www.mapei.com)




 ABU DHABI

# C-ADD TEAM

## AT THE 21<sup>ST</sup> ARAB INTERNATIONAL CEMENT CONFERENCE AND EXHIBITION

From 16<sup>th</sup> to 18<sup>th</sup> November 2016 the Italian Mapei's C-ADD team participated in the twenty-first edition of the Arab International Cement Conference and Exhibition (AICCE21), which was organized by AUCBM (Arab Union for Cement and Building Materials) and held at the Abu Dhabi National Exhibition Centre (AD-NEC).

Once arrived in Abu Dhabi, foreign colleagues from Mapei Constructions Chemicals L.L.C Dubai and Vinavil Egypt have joined the Italian team.

As usual, the Exhibition has attracted a wide audience offering several networking and business opportunities. AICCE is in fact one of the most famous and important conference on cement all over the world, bringing together not only the biggest Arab cement producers, but also all the major manufacturers of technologies related to cement production process.

Many companies were present with their own booths and made their speech during the conference. On Mapei booth sev-

eral posters were showing the C-ADD logo and attesting to our commitment on important themes such as Security and Sustainability. Indeed, we strongly believe that human and environmental health, along with social and economic issues are an integral part of all our business activities. For that reason, C-ADD team closely operates with the cement industry for the continuous improvement of the safety standards and the achievement of more and more important objectives in terms of environmental, economic and social sustainability.

AICCE21 has been also an outstanding opportunity to strengthen our sense of belonging to the C-ADD's family, making us even more aware of the importance of being a great "team" - the C-ADD team, where co-operation and mutual support are the main driver of our success and where interaction and ideas exchange are essential elements for continuously improving. As a natural consequence, participation in this important event has strengthened everybody's feelings of be-

ing part of the bigger Mapei's family.

During the first session of the Conference, Mapei's C-ADD team (our colleague from Mapei Dubai, Fakhraldin Awadalkarim) delivered a speech about "Fly ash blended cements: process and hydration improvement through the use of cement additives".

In this regard, it is necessary to previously remind that one of the main objectives of C-ADD team is to become a long term technical partner for the cement industry. During the speech it was therefore stressed the importance to understand cement plant needs, which can be summarized in the following main points:

- Process optimization: energy savings in clinker and cement production, introduction of alternative fuels, reducing environmental impact.
- Reduction of CO<sub>2</sub> emissions thanks to low clinker cements production and thus to the increased employment of additive materials (limestone, slag, fly ash, etc.) and development of alternative hydraulic binders (aluminous or sul-



**LEFT.** Mapei's C-ADD team at the 21<sup>st</sup> Arab International Cement Conference and Exhibition with their customer Al Arish Cc. From the left: Davide Padovani (Director of Cement Additives Division), Cristiana Galli (Head Office Coordinator), Giovanni di Gennaro (Technical Engineer), Mr. Mohamed Shoaib (General Production Manager), Muriel Costi (Area Manager), Abdel Rhman Osama (Sales Engineer), Usama Abdel Hamid (Area Manager) and Mohamed Jaleel (Technical Sales Manager).



**BELOW.** Fakhraldin Awadalkarim from Mapei Construction Chemicals LLC is delivering the speech "Fly ash blended cements: process and hydration improvement through the use of cement additives" for the Mapei Group.



fo-aluminous cements, geopolymers, etc.).

- Improved understanding of the cement hydration mechanism.

This technical work is included in a major project focused on the reduction of the environmental impact related to the whole cement production process.

Cement manufacture accounts for a significant part of man-made CO<sub>2</sub> emissions. It is currently estimated that *the cement industry is globally contributing to 5% of the total anthropogenic CO<sub>2</sub> emission.*

This value is given by the sum of CO<sub>2</sub> deriving from *limestone decomposition* and the one connected to the use of fossil fuels, both related to the clinker production process.

It can be estimated that, for each ton of clinker produced, an associated CO<sub>2</sub> amount of 700 to 1000 kg is released into the atmosphere.

Because of increasingly stringent regulation on greenhouse gas emissions, reduction of CO<sub>2</sub> is the biggest challenge that the world cement industry will face

in the upcoming years.

Since the efficiency of the clinker production technology has probably reached the highest levels, the most useful strategies to achieve this goal are attributable to the production of cements with reduced content of clinker, that is with a higher content of other constituents.

The use of additive materials such as fly ash, slag, pozzolan and limestone in the cement production has increased greatly and is expected to rise again. On the other hand, it is known that when the amount of clinker within the cement composition is reduced, performance is penalized, especially from the mechanical strength (which are significantly lower) and workability point of view.

It becomes therefore necessary to find and develop new technologies that could allow the use of higher quantities of secondary components, minimizing the negative effects on cement performance.

In this presentation we have described the benefits that can be obtained with the use of *Mapei Cement Additives* in the

production of *fly ash blended cements*, in terms of grinding process and control of clinker/fly ash hydration, investigating also the effect of limestone addition in different amounts.

It results from our researches that thanks to the use of C-ADD new technologies, considerable economic savings and CO<sub>2</sub> emissions reduction can be achieved mainly from:

- Reducing the clinker factor (3 to 10%)
- Activating the hydraulic properties of fly ash
- Optimizing the grinding system

Further details on this topic, along with specific data and laboratory test results can be found in the full article, which is available at our web site <http://C-ADD.mapei.com/en/>.

The next Arab International Conference and Exhibition (AICCE22) will be held in Sharm El Sheikh, Egypt in 2017.

**Giovanni di Gennaro, Cristiana Galli.**  
C-ADD Division, Mapei

# SASSUOLO

## THE FIGHT BACK HAS BEGUN

### CRUCIAL LEAGUE POINTS THANKS TO MATRI'S GOALS AND BERARDI'S FITNESS

The middle part of Sassuolo's fourth season in the Italian Serie A has been a better-sweet period. Despite a long list of injuries, the club sponsored by Mapei has won some important matches to keep the team well away from the relegation battle. Luckily for Sassuolo, several injured players are now ready to get back into action, most notably Domenico Berardi. "It is great that he is fit again - so Giovanni Carnevali, Sassuolo's managing director and CEO, commented - but Domenico is one of those players who take several weeks to get back into top shape. It will be the end of February before Berardi is back at his best".

#### MATCH REPORTS

Sassuolo lost 4-3 to Cagliari at Sant'Elia Stadium just before Christmas. This was a heavy defeat for the team from Emilia in a match that certainly was not for the faint-hearted. When Acerbi scored from a penalty in the 13<sup>th</sup> minute of the second half Sassuolo was winning 3-1, but eventually ended up losing the match. "We made all kinds of mistakes - so Mr Carnevali admitted - as we have done in the past, and the situation got out of hand". Cagliari initially took the lead at the beginning of the match when Sau scored the opening goal, but Sassuolo's young player Adjapong equalised. Sassuolo midfielder Pellegrini

was then both the hero and villain around the half-hour mark: first he scored the goal to give his team a 2-1 lead but then, just two minutes later, he was sent off for a foul on the Cagliari player Di Gennaro. The team from Sardinia failed to take advantage of the extra man, but after scoring a penalty to take a 3-1 lead Sassuolo faded badly: a goal by Borriello and two goals by Farias gave Cagliari the win.

In the following game Sassuolo drew 0-0 with Torino at the Mapei Stadium.

"Getting a point against an excellent team like Torino at such a tricky moment in the season - so Mr Carnevali went on to say - was definitely a good result. We managed to move up the table at a time when we had lots of players out injured". The team then won its next two matches. In the first game of the second half of the season Sassuolo beat Palermo 4-1 in Reggio Emilia. After Quaison scored for Palermo, Sassuolo replied with first-half goals by Matri and Ragusa and then further goals by Matri (again) and Politano in the second half. "Sasol" (as the team is affectionately called by its fans) then won an away match against another team for points: Pescara. Alex Matri scored for Mapei-sponsored Sassuolo in the first minute and then, after Baheback momentarily equalised, Pellegrini and



**ABOVE.** Eusebio Di Francesco.

**LEFT.** Domenico Berardi in action against Palermo.

**BELOW.** Alessandro Matri organising play with his teammate, Alberto Aquilani, behind him.



Matri, with his second goal of the game, ensured the match ended in a flourish. "The best thing about the matches against Palermo and Pescara - so Giovanni noted - was the fact that Matri scored twice in two games after a lengthy period without scoring". Here is what the manager, Mr Eusebio Di Francesco, had to say after the match against Pescara: "We started the match well, only allowing Pescara to make the odd counter-attack after the ball broke in their favour. We deserved the win. I changed our tactics slightly and it paid off. What do I think about Alessandro Matri? He is now fitter and moving better and you can see the difference."

### THE MIGHTY JUVENTUS COMES TO PLAY

The third game of the second half of the season saw Juventus come to play at Mapei Stadium. Sassuolo fans were hoping for the same result as on 28<sup>th</sup> October 2015, when Sassuolo won 1-0, but it was not to be. Before the start of the match at Mapei stadium that was a complete sell-out, Mr Di Francesco made it clear that "if you make any mistakes against Juventus, they will punish you": how right he turned out to be. During the first 25 minutes of the game Juventus took complete control of the left-hand side of the pitch and scored twice to take a 2-0 lead. Some magical assists came from the left allowing Higuain and Khedira to both score. As Mr Di Francesco went on to note, "we made mistakes straight away and after Juventus after took a 2-0 lead it all became more complicated". Without Gazzola, Lirola and other injured defenders, the Sassuolo manager decided to play Antei at right back: "He is actually a central defender, but I had to play him out wide because I had no other alternatives. I did it because I knew Antei could win a lot of balls in the air. Both Juventus's goals resulted from our mistakes. And let's not forget that, as well as having some great forwards, Juventus had two giants like Bonucci and Chiellini in defence. After the deadlock was broken by Higuain's goal our forwards and midfield players never really reacted. I expected the team to play better and show more fight. Last year we played the perfect defensive match at home against Juventus, this time we didn't". In the second half Matri had a great chance to pull one back: unfortunately, Buffon once again showed what a great goalkeeper he is and made a crucial save. "I am sorry - so Alexandro Matri, a former Juventus player, said after the game - we did our best but we could not turn things around". Aquilani, another former Juventus player, was also disappointed: "Juventus's pressing caused us problems: they proved they are champions".

### CONFIDENCE IS RUNNING HIGH AGAIN AFTER THE WINTER BREAK

After the fourth game of the second half of the season, Sassuolo was lying 14<sup>th</sup> in the league table with 27 points. The three points deducted for some dubious bureaucratic reason after the team had won the match against Pescara earlier on in the season had turned out to be a severe handicap. Nevertheless, in the sequence of games from the 17<sup>th</sup> to the 22<sup>nd</sup> week of the season, Sassuolo won 7 points taking the team up to 12<sup>th</sup> place in the table alongside Cagliari and Crotone. It is true that some teams have played a match less, but having six clubs below you at the winter break (after playing matches against both Inter Milan and Juventus) was encouraging for a team hoping to move up into the top half of the table in the Spring. As Mr Carnevali noted, "it's true that this has been a difficult season for Sassuolo, although the team has played some good matches and certainly performed admirably in the Europa league".

### ITALIAN CUP

After finishing sixth in the 2015-16 Italian League, Sassuolo was one of the seeded teams in the 2016-17 Italian Cup. Its Cup campaign got under way in the round of the last 16 in a match against Cesena at Mapei Stadium. Unfortunately, "Sasol" lost 2-1 and was knocked out. Pellegrini (Sassuolo) and Cesena's Ciano (penalty) and Laribi were the goal scorers.

## SASSUOLO WOMEN'S FOOTBALL

### THE WOMEN'S SECTOR IS TAKING OFF

The Mapei Group has chosen football as its main means of communication and is really helping it develop - this season the Sassuolo football club holding also includes a women's sector.

This project first began when UEFA decided to hold the 2015-16 Women's Champions League final at Mapei Stadium in Reggio Emilia. The team organised in partnership with Reggiana Femminile finished the first half of the season at the top of Group B of the Serie B championship, setting a goal-scoring record: a total of 60, ending the first half of the Serie B season with ten wins, two draws and just one defeat. Might the team get promoted into Serie A? Sassuolo women's football team's home kit is sky-blue: "Reggiana Femminile's famous old club colours - so Elisabetta Vignotto told us, a former footballer, who is now the president of Sassuolo women's football club - and so is the away kit of the men's team, so this is anything but a random choice".

The women sector of Sassuolo football club has seven teams: ranging from the girls' under 12s to the senior team that plays in the Italian Serie B.

## THE "SERIE B" FOOTBALL GIRLS

**GOALKEEPERS:** Ierardi Francesca (30-6-'96), Alice Lugli (14-10-'96), Sabrina Tasselli (3-4-'90).

**DEFENDERS:** Benedetta Brignoli (4-10-'99), Giulia Bursi (4-4-'96), Roberta Casile (20-3-'86), Ginevra Costantino (7-5-2000), Zoi Giatras

(3-11-'91), Paola Gobbi (25-6-'98), Greta Maretti (29-7-2001), Rebecca Poluzzi (13-4-'97), Stefania Zanoletti (4-3-'90).

**MIDFIELDERS:** Lara Barbieri (2-2-'86), Martina Corradini (26-3-'97), Atdhetare Halitjaha (2-11-'93), Eleonora Prost (30-3-'90), Sara Tardini (8-7-'96).

**FORWARDS:** Fabiana Costi (6-10-'86), Giusy Faragò (26-12-'93), Francesca Imprezzabile (7-1-2001), Gaia Mastrovincenzo (27-7-'89), Sara Orlandini (8-8-'96), Benedetta Orsi (25-2-2000).

# SASSUOLO

## TRANSFER MARKET WITH AN EYE FOR THE PRESENT AND THE FUTURE

### AQUILANI AND SCAMACCA NOW PLAY FOR THE GREEN-AND-BLACKS

Sassuolo focused on both the present and future during the winter transfer campaign. The football team owned by the Mapei Group signed the midfielder Alberto Aquilani, aged 32, and the big centre forward, Gianluca Scamacca, who is 1 m 95 cm tall and only turned 18 this January; both players were born in Rome. Aquilani was signed on loan from Pescara and has a very distinguished past. He came from AS Roma's junior ranks and made his debut in the Italian Serie A on 10<sup>th</sup> May, 2003, in the home match Roma won 3-1 against Torino. Roma then sent Alberto to play for Triestina for one season in the Italian second division to gain experience. Aquilani played for AS Roma for the next five seasons before moving to Liverpool in summer 2009. When he came back to Italy he played for AC Milan (2011-12 season) and then joined Fiorentina for three seasons. He also played for Sporting Lisbon (2015-16) before transferring to Pescara. He won an Italian League Super Cup and Italian Cup playing for AS Roma. Alberto has also won 38 international caps and scored five goals playing for Italy.

"Aquilani needed to be included in the squad - according to Giovanni Carnevali, the managing director of Sassuolo - because of all the injuries to our midfield players. Tactically speaking, Alberto is perfect cover for our captain Magnanelli. Aquilani will be extremely useful to Sassuolo, because of all the experience he has: he can set an important example to our younger players and, considering everything he has achieved, he will help boost the club's image". The player who

at Roma was nicknamed "the Prince" was one of the first transfers on the winter market. After arriving at Sassuolo in early January, he was immediately included in the team by Mr Di Francesco. "Thanks to Aquilani's contribution - so Mr Carnevali went on to say - we have seen some clear improvements and we have won some important matches". Scamacca, on the other hand, joined Sassuolo right at the transfer deadline on 31<sup>st</sup> January, just a few hours before the market closed. This goal scorer comes from the Dutch club PSV Eindhoven, well-known for being sponsored by Philips and for having won a European Cup and UEFA Cup. Scamacca began his football career in Roma's youth teams. He was extremely successful as a young player: playing for the AS Roma youth team,



this big, strong young striker won the Italian Youth Championship, scoring 34 goals in 30 matches. He moved to PSV in January 2015. "The fact that Scamacca comes from a foreign club - so Mr Carnevali continued - is something in his favour: it means he has already gained some excellent experience that will serve him both in football and in life". Gianluca has won lots of caps for various Italian youth and junior teams. "He has the ideal profile for a club like ours: he is Italian, young and a real prospect".

The class of '99 is turning out to be something special: other outstanding talents include AC Milan's young goalkeeper, Donnarumma, who is already in the Italian senior squad, and Inter Milan's young striker, Pinamonti, who has already caught the eye playing in the Europa League. Scamacca is a different kind of player than the rest of the strikers in the Sassuolo squad and many people believe he will be a real asset to the team. "That's true - so Carnevali was quick to note - but I do not want Gianluca to be seen as the new signing who solves all our problems, getting promoted to the



**LEFT.** Gianluca Scamacca, 18 years old, 1 m 95 cm tall.  
**ABOVE.** Albero Aquilani facing the Juventus player Khedira at Mapei Stadium.

first team straight away or, in any case, placed on the bench ready to come on. For us he is a great young prospect, who still needs to develop, so to begin with he will play for the youth team, and then we will see. He will definitely need time to settle in and learn his trade". Scamacca is owned 100% by Sassuolo.

The club managed to hold onto its striker Gregoire Defrel in January; various Italian and foreign clubs offered lots of money to sign this centre forward, who originally comes from Martinique (an island in Central America, which is part of France), but the boss, Mr Squinzi, and his staff rejected all the offers.

On the other hand, the outside defender, Emanuele Terranova aged 29, is no longer part of Sassuolo after signing for Frosinone. Emanuele joined Sassuolo in summer 2011 and scored lots of goals to help get the team promoted into the Italian Serie A. He has also been a useful player in the top division.

## SASSUOLO: TOP OF THE LEAGUE IN CHARITY WORK

Sassuolo has an increasing number of admirers both in Italy and abroad. But it is not just the team's results that have made the club so widely admired and popular: Mr Giorgio Squinzi's club is top of the league in charity work and wasted no time in sending aid to the people in central Italy suffering due to the bad weather and earthquakes. In December, the team donated a coach for the kids at Arquata del Tronto Football Club, a team in the Marche region. This was partly thanks to the sale of mini-subscription tickets for the Europa League. Genk, the Belgian team Mr di Francesco's men faced in the group phase of this European competition, joined Sassuolo in this charity project. The young players from Arquata del Tronto had been left with no training pitch. Unfortunately, the earthquake had forced the local civil protection service to convert Arquata sports ground into a rescue centre for homeless families. But using the coach given to them by Sassuolo, the kids from Arquata were able to travel to the football pitches in Ascoli Picchio, where they could carry on with their training. Their football practice and dreams now each other continue, thanks to the love shown by Sassuolo.

The club, whose managing director and CEO is Giovanni Carnevali, also donated a snowplough to Visso, a small town in the province of Macerata. The snowplough turned out to be vitally important for shifting all the snow that fell in January in Visso and other villages up in the hills around Macerata, frequently cutting off entire communities.

But that is not all. A project being organised by the Italian Football Association called "#iovogliogiocarecalcio, calcio e disabilità: fischio d'inizio per Quarta Categoria" about football and disability was officially presented at the Italian Senate on 18<sup>th</sup> January in the presence of the President of the Senate, Pietro Grasso. Sassuolo and seven other teams from the Italian Serie A have agreed to support the Italian Football Federation's project to promote football among differently abled people. Indeed, a league for mentally challenged players began on 21<sup>st</sup> January (with 8 teams playing every two weeks). Each team has been adopted by an Italian club from the Serie A, playing in the club colours of the team sponsoring them. Sassuolo has adopted Tukiki Minerva of Milan.

We are publishing a letter sent to Sassuolo football club by Christian Brigladori from the company "Around Asca" in Savignano sul Rubicone (Forlì -Cesena) following the "Tutti al Mapei Stadium" meet-up, a weekly event for children from local football schools .

Hi Jessica, I just wanted to write a couple of lines to thank you all for Sunday. As well as offering us this great opportunity, I wanted to congratulate you on how well you handled a more difficult day than usual on an organisational level. Anybody familiar with sports events and stadiums knows that in 'tense' situations it is unusual to find all the STAFF being so helpful, polite and, above all, KIND-HEARTED.

The way you treated our differently-abled kids and the stewards' kindness to all the younger children certainly did not go unnoticed. They behaved impeccably and always had a smile on their faces. When company staff show that much kindness towards children, then, despite all its faults, we are entitled to dream of an even better kind of Sport. All those people who came on Sunday, mostly families, got to enjoy something positive and very special. And that is something that not even the wind, bad weather and tiredness could take away from us. None of us will ever forget how you treated us. I think I can safely say that what you did was "educational". And if, one day, somebody fails to see that, then that is when I hope you will believe even more deeply in the values you conveyed through the example you set us.

Thanks to the whole of Sassuolo football club.

Christian

# GIORGIO SQUINZI wins the “Brera Prize”

IMPORTANT SPORT’S GALA HELD AT “DAL VERME” THEATRE



**ABOVE.** Giovanni Carnevali and prize-winner Giorgio Squinzi up on stage.

Giovanni Luigi Brera known as “Gianni” (born in 1919) was a great journalist and writer. He worked for important Italian newspapers - the *Guerin Sportivo* (where he was the editor-in-chief), *La Gazzetta dello Sport* (joint editor-in-chief) and *Il Giorno*, *Il Giornale* and *La Repubblica* newspapers. Gianni Brera was famous for introducing neologisms into the beloved world of football, but he also wrote books on nonsporting subjects. Gianni passed away in 1992 in a tragic road accident. The Brera Prize is organised by the “Navigli Cultural Circle” founded by Giuseppe Zaccheria and currently presided over by Carlo Bozzali. The Brera Prize - so Mr Bozzali explained - was set up so that good old Gianni’s example, inspiration and values would not be lost as time goes by.

That is why, ever since 2001, our Cultural Club has been awarding accolades to sportsmen and women, who have achieved outstanding results in particularly inspiring ways and have also helped promote sport’s image”. It was mainly the notable achievements of Sassuolo F.C. that convinced the

highly-qualified panel of judges to award the “Brera Prize” to Mr Giorgio Squinzi. Sassuolo qualified for the Europa League, eventually getting through to the group stage where the team performed honourably. Mapei is also extremely well-known in the world of sport for the outstanding successes of the international cycling team it sponsored from May 1993 to October 2002.

The boss, Mr. Squinzi, took the stage at Dal Verme Theatre accompanied by Giovanni Carnevali, Sassuolo’s managing director and CEO. “When I used to get home late from high school – so Mr. Squinzi told us after the former canoeing champion, Antonio Rossi, now a Sports Councillor for the Lombardy Region, had handed over the Prize - I would have my lunch and then start reading Gianni Brera’s articles. Brera was one of my heroes”. As well as Mr Squinzi, several other leading personalities were awarded the “Brera Prize” for 2016; they included the football manager Claudio Ranieri, who miraculously won the 2015-2016 English Premier League in charge of Leicester City.

“I have great respect for Mr Ranieri – so Dr. Squinzi went on to say - who I think is

the very best football manager at applying science and meticulous planning to training methods”. “Mapei’s boss” was asked plenty of questions about the future of Eusebio Di Francesco, Sassuolo’s manager. Mr Squinzi pointed out that he still has two years to run on his contract with Sassuolo F.C. For him, we are certainly a top team”. Silvio Berlusconi was also awarded a “Brera Prize” for his incredible achievements as president of A.C. Milan over the last 30 years. Due to prior commitments Silvio could not be present at Dal Verme Theatre, so his brother Paolo accepted the award on his behalf in the company of Franco Baresi.

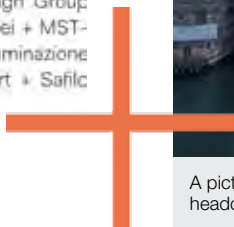
Elisa Balsamo, a prodigious young cyclist, also received a “Brera Prize”. In 2016 Miss Balsamo won the girls’ Junior Road World Championship in Doha that was sponsored by Mapei, as well as the gold medal in the team pursuit and omnium at the Track World Championships in Aigue. The Navigli Club also awarded prizes to amateur sportsmen and women, such as Lodi (roller hockey), Federico Arnaboldi (tennis), Fabiano Basile, who won a gold medal in judo at the 2016 Rio Olympics, and other deserving sportsmen and women.

**BELOW.** In the front row, Carnevali, Squinzi, the football manager Claudio Ranieri and, behind them, Claudio Pecci (Mapei Sport).





Acqua di Parma + Aermec + Allegrini  
Apice + Arclinea + Arper + Corriere della Sera  
Distilleria Nardini + Florim + Foodies Bros  
Gruppo Campari + Hangar Design Group  
Istituto Europeo di Design + Mapei + MST-  
Gruppo Maccaferri + Reggiani Illuminazione  
René Caovilla + Rubelli + Ruinart + Safilo  
Group + Swatch + Trend



© Ph. David Heald

A picture of Palazzo Venier dei Leoni in Venice (Italy), headquarters of the Peggy Guggenheim Collection.

# HAPPY BIRTHDAY GUGGENHEIM INTRAPRESÆ

25 YEARS OF CREATIVITY AND  
PASSION TOGETHER AT THE PEGGY  
GUGGENHEIM COLLECTION

2017 marks a memorable milestone for Mapei which, apart from its first 80 years in business, will also be alongside the **Peggy Guggenheim Collection** to celebrate the **25<sup>th</sup> anniversary of Guggenheim Intrapresæ**.

Guggenheim Intrapresæ was founded in 1992 as an experiment in collaboration between a private museum and a group of companies, a project taking its first steps towards a long-term investment and with the capacity to promote the activities of all those involved.

Mapei chose to become part of this project in 2008 and joined the other member companies to share a path of cultural and creative growth, developing joint projects, along with the other companies in the group and the museum, in a relationship of shared and equal values.

**Guggenheim Intrapresæ** is made up of **twenty two companies**, both Italian and from abroad, with each one representing their particular sector of business according to the principle of product uniqueness. They are all examples of excellence that stand out for their patronage and their conscious contribution aimed at promoting cultural and social development within the territory in which they belong and operate. And so, along with **Mapei**, the master perfumers of **Acqua di Parma** come together with **Aermec** from the air-conditioning field, the antique art of wine represented by **Allegrini** and **Apice**, a consolidated transport company specialised in handling works of art. The sophisticated kitchens by **Arclinea**, design tables and chairs by **Arper**, **Corriere della Sera**, the historic Italian daily newspaper, and the grappa, spirits and liqueurs from **Distilleria Nardini**. Also coming together are **Florim**, the renowned Italian ceramics group, **Foodies Bros**, a new brand in the gastronomic field, **Gruppo Campari**, the leading

beverages company, and **Hangar Design Group**, which for years has been promoting the image of the Venetian museum. And then the creativity of the **Istituto Europeo di Design**, Tuscan cigars by **MST-Gruppo Maccaferri**, **Reggiani Illuminazione**, a reference brand in the lighting sector, the precious footwear creations of **René Caovilla**, the elegant fabrics by **Rubelli**, the prestigious champagne of **Ruinart**, spectacles from the giant of the sector **Safilo Group**, original watches by **Swatch** and the mosaics and tiles from **Trend**.

**“MANUFACTURERS OF CULTURE. From the Guggenheim Intrapresæ model to new forms of corporate creativity”** will be the most important appointment of the anniversary celebrations. On **Wednesday the 15<sup>th</sup> of March**, in collaboration with the **Bologna Business School**, **Guggenheim Intrapresæ** will stage a dynamic, captivating event which, starting with the experiences of the Guggenheim Intrapresæ model, will feature entrepreneurs and innovators who have been invited to present their personal stories of philanthropic gestures and activities and the role of creative inspiration in industrial processes. The initiative will also have the support of BSI, a private Swiss bank from the EFG International Group, which has been a strong supporter of the Venetian museum and the Intrapresæ project for many years.

[www.guggenheim-intrapresae.it](http://www.guggenheim-intrapresae.it)

#guggenheimintrapresae

#disegnamoilfuturo

#25anniversario



Mapei's interest in art and culture is based on a long-standing business credo born of a firm conviction that work can never be separated from art. This strong bond to the world of culture derives from the company's own business activity. For years Mapei technologies have been used in projects that are integral to the cultural and artistic heritage of many different countries, among which the worldwide-known Guggenheim Museum of New York.



**80**  
*years*  
**1937-2017**

MAPEI. TO BUILD EXPERTISE.

**80 years** of **professionalism** and **expertise** for successful construction projects and for the renovation and conservation of important works from Italy's and the world's artistic and cultural heritage.