

INTERNATIONAL

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by **Guido Palmieri**
Realtà Mapei International's
Editor-in-Chief

The central importance of industry for reviving the economy

High energy prices, expensive (and difficult to procure) raw materials and inflation. A combination of factors that threatens to weaken industry, the real driving force behind the post-Covid 19 pandemic recovery.

Recession is looming even more heavily against the backdrop of a war in Ukraine that is showing no signs of reaching an end. At the recent Cersaie exhibition in Bologna, the Confederation of Italian manufacturers of ceramic tiles made its views clearly heard: the situation is complicated, the risk of closing manufacturing plants is real and imminent unless the spiral of speculation is halted immediately. What is at stake now is the resilience of one of Italy's leading manufacturing sectors.

The whole of Europe is caught between the war in Ukraine and inflation. But Italy, Europe's second largest manufacturing nation after Germany, remains particularly vulnerable to what is happening in the energy sector. Signs of an economic slowdown, albeit to varying degrees, are widespread globally. In the report it published at the end of September, the OECD (Organization for Economic Co-operation and Development) warned that world manufacturing in 2023 will be 2% lower than forecast before the war in Ukraine: this will result in a slowdown in growth in 2023 and, especially in Europe, a real risk of falling into recession. A trend also confirmed by the International Monetary Fund that lowered its forecasts.

This means industry must come to term with very uncertain times. The Cersaie exhibition was an opportunity to look ahead for a sector (ceramics) that is a key player for Made in Italy manufacturing. Never more than now have research and sustainability been benchmarks for busi-

nesses planning to compete on global markets. The innovations showcased by Mapei at both Cersaie and Marmomac trade fairs and a very innovative pilot-agreement work in this direction. Mapei and Panariagroup (a leading manufacturer of ceramic tiles) are joining forces to make a contribution to the planet's wellbeing by offering the first 100% carbon neutral ceramic flooring system.

But Mapei's innovations do not stop here. Continuing its growth strategy with the aim of expanding its range of products and solutions for the building industry, the Group has taken over Profilpas, a multinational company

specialising in the manufacture and sale of profiles for floors and walls and installation accessories.

Looking "to the rest of the world", our 'Teamwork' section is focused on the Group subsidiary in Croatia, a country that is preparing (1st January 2023) to join the Euro zone and has

ambitious plans in the pipeline as regards both its infrastructure network and tourism. Prospects for growth that open up the possibility of boosting Mapei even further on the Croatian market.

The Group's 2021 Sustainability Report is also European in its scope covering Mapei SpA and all its Italian and European subsidiaries.

This year's cycling world championships were held in Wollongong (Australia) and once again (as has been the case for several years now) they showcased Mapei as Mapei Partner.

This issue of *Realtà Mapei International* also focuses on Sassuolo as it gets ready to make a real impact on the Italian Serie A league championship.

Enjoy your reading

MAPEI'S GROWTH STRATEGY CONTINUES WITH THE TAKEOVER OF THE PROFILPAS GROUP

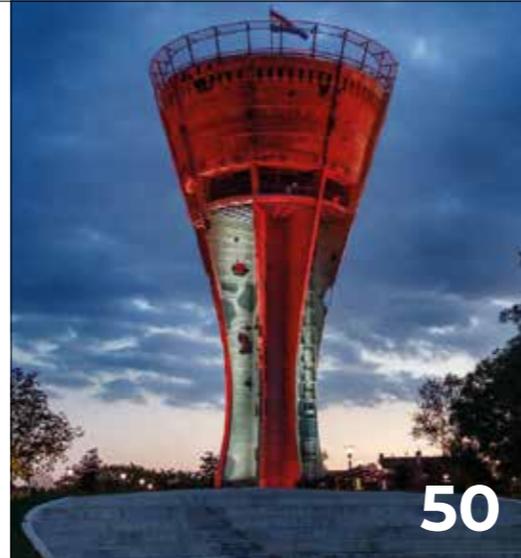
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Cover story
The focus of this issue of Realtà Mapei International is on Mapei solutions for ceramic tiles presented at Cersaie trade fair last September. In the photo: ceramic coverings were installed in the Etele Plaza in Hungary with Mapei products.

Editor in chief
Guido Palmieri

Editorial contributors and English translation
Martyn Anderson, Nicholas John Bartram, Federica Pozzi, Federica Tomasi, Tiziano Tiziani, Metella Iaconello

Production and editorial coordination
Metella Iaconello

Graphic designer
Barbara Mennuni

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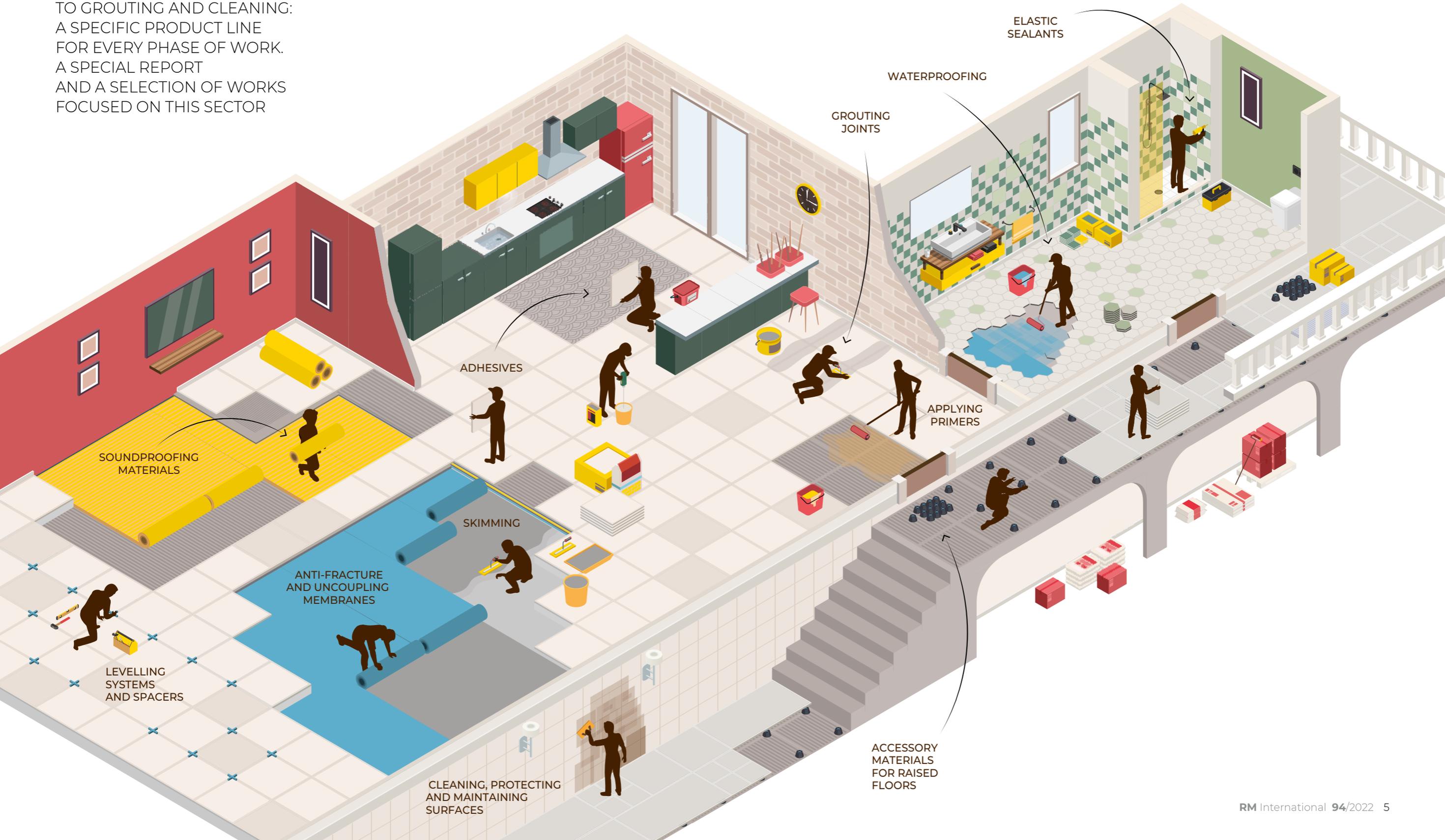
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Integrated solutions for installing ceramic tiles

FROM WATERPROOFING
TO GROUTING AND CLEANING:
A SPECIFIC PRODUCT LINE
FOR EVERY PHASE OF WORK.
A SPECIAL REPORT
AND A SELECTION OF WORKS
FOCUSED ON THIS SECTOR



Cersaie 2022

Innovation and plenty of colour

QUALITY AND TECHNOLOGY IN ALL MAPEI'S NEW PRODUCTS: PLACING THE ENVIRONMENT AND PEOPLE AT THE FOCUS OF THE BUILDING INDUSTRY

After the interruption due to the pandemic emergency and a low-key 2021 event, Cersaie's numbers are on the rise again: over 90,000 people visited the exhibition this year that was held in Bologna (Italy) from 26th-30th September meaning a 50% increase compared to last year. Businesses are back investing in the exhibition, so they can meet their clients and showcase their new products.

"I am convinced that the investments made by the 624 exhibitors at Cersaie 2022 have produced the best possible return from a trade fair that has reasserted its national and international importance," so Giovanni Savorani noted, President of Confindustria Ceramica (the Confederation of Italian manufacturers of ceramic tiles and refractory materials). "Ceramic tiles are continuing to gain a greater share of international markets thanks to the product's intrinsic properties, such as healthiness, hygiene and durability".

The event's leitmotif was the sustainability, a cutting-edge issue that was also at the focus of Mapei's presence at the exhibition: as shown by the new products and solutions on display at the two stands and all the product demonstrations; it was also at the basis of a joint project with Panariagroup – presented during the exhibition - for the supply of the first 1100% carbon neutral ceramic flooring.

Mapei's innovations at Cersaie 2022 - which we will be outlining over the following pages – notably included a revamping of the range of water-based paints, the introduction of a sealant made without the use of fossil resources, and an extending of both the ULTRACARE range and the MAPELEVEL collection of levelling systems and spacers.

THE FACTS & FIGURES

624
EXHIBITORS

237
FOREIGN EXHIBITORS

26
NATIONS REPRESENTED

91,296
VISITORS



Find out all the Mapei solutions presented at Cersaie



In its main stand Mapei showcased its solutions for installing ceramic tiles, focusing on their use in different types of environments.



Product demonstrations were held in a different Mapei stand to show visitors how to apply the company's solutions.

Together for sustainability

MAPEI AND PANARIAGROUP PRESENT THE FIRST 100% CARBON NEUTRAL CERAMIC FLOORING SYSTEM



by Mikaela Decio

KERAFLEX MAXI S1 ZERO IS TEN YEARS OLD THIS YEAR!

KERAFLEX MAXI S1 ZERO WAS DEVELOPED IN 2012: THE FIRST CERAMIC ADHESIVE WITH ZERO IMPACT ON CLIMATE CHANGE

For over 10 years now, Mapei's R&D laboratories have had the means and expertise to calculate the environmental impact of products throughout their life cycle. A decade ago, the LCA (Life Cycle Assessment) method was under debate and unknown to most. There was already talk of the Carbon Footprint of products, but the practice of declaring how much CO₂ is associated with the manufacture of a certain consumer products was not yet widespread. The events of recent years, however, have led to an increasing focus on these matters: as we know, greenhouse gas emissions (expressed as kg CO₂ equivalents) are responsible for the climate changes we are experiencing so dramatically.

Precisely 10 years ago, thanks to a project led by Roberto Leoni (head of the Safety Department at Mapei until 2015 and founder of our Sustainability team before retiring in 2018), Mapei began offsetting the CO₂ emissions associated with the manufacture of one of Mapei's best-selling adhesives for ceramics, KERAFLEX MAXI S1, so that it had zero impact on climate change. It was also renamed as KERAFLEX MAXI S1 ZERO: maxi performance, zero impact. The practice of offsetting is now widespread: you can find a lot of offset consumer goods, but ten years ago Mr Leoni's idea and the confidence in it on the part of Mapei management made KERAFLEX MAXI S1 ZERO the first offset ceramic adhesive with zero effect on climate change.

Offsetting a product (also called carbon offsetting) means offsetting residual CO₂ emissions by financing climate and sustainable development projects through the purchase of certified credits. The projects we choose generate social, economic and environmental benefits

in the places in which they are developed and are always certified in accordance with international standards.

Of course, we do not just offset: our R&D laboratories study products of high quality and durability causing reduced environmental impact, thereby reducing the amounts of CO₂ associated with the product in question during its life cycle.

As of this year, CO₂ emissions from ULTRACOLOR PLUS grout are also being compensated for in their entirety by a hydroelectric power project in Indonesia.



Corporate Environmental Sustainability Group Leader

and ULTRACOLOR PLUS grout for joints, which together enable the construction of carbon neutral floorings.

Mapei's products are in fact sustainable: the CO₂ given off during their entire life cycle, measured using the LCA (Life Cycle Assessment) method and certified with EPDs (Environmental Product Declarations), is fully offset.

Since 2004, Panariagroup has been investing in the development of large, ultra-thin tiles, with which today, through the Think Zero project (the 100% offsetting of greenhouse gases emitted during the production of laminated tiles), they have created the most sustainable ceramic surface in the world.

This is not a business deal, so Squinzi and Mussini explained, but an invitation to the entire supply chain to make more responsible choices and contribute to the ecological transition in the knowledge that the building industry is currently responsible for 36% of energy consumption globally.

"Our shared desire", so Mussini stressed, "is to guide our ecosystems towards more innovative and sustainable business models: it is by pooling the resources from our own fields of expertise that great things can be done, developing projects that impact markets on a large scale".

As of 2023, Mapei Academy, in partnership with Panariagroup, will be organising special workshops on sustainable building systems.

“Squinzi: Our daily duty is contributing through our capacity for innovation to an increasingly sustainable building industry for the benefit of people and the planet



Marco Squinzi and Emilio Mussini presented a joint project at Cersaie trade fair last September: the first 100% carbon neutral ceramic flooring system.

Choosing the right materials for sustainable building is proving to be increasingly crucial, not only because it enables the construction of buildings with low environmental impact that meet increasingly widespread and in-demand

standards and certifications, but also with a view to keeping down costs and ensuring buildings last longer, something of key importance

especially when it comes to infrastructure projects or public buildings.

This was discussed by Marco Squinzi, CEO of Mapei, and Emilio Mussini, CEO of Panariagroup, when they presented a joint project between the two companies at

Cersaie trade fair last September: the first 100% carbon neutral ceramic flooring system including everything from installation materials to tiles.

"Mapei working with Panariagroup means sustainability," so Marco Squinzi stated at the press conference in Bologna, "contributing through our capacity for innovation to an increasingly sustainable building industry for the benefit of people and the planet is our daily duty".

Mapei's commitment to this issue has resulted in a joint project with Panariagroup for an installation system made up of ultra-thin ceramic tiles (which are distributed on the market with the Cotto D'Este, Lea Ceramiche and Panaria Ceramica brands), KERAFLEX MAXI S1 ZERO adhesive

“Mussini: Great things can be achieved by pooling our own specific resources



by Fabio Iraldo

Circular economy: a virtuous option for the building industry

CONSUMERS ARE INCREASINGLY FOCUSED ON REWARDING PURCHASES CAUSING LOW CLIMATE IMPACT: A TREND SET TO GROW

“ The European Union has an ambitious goal: to achieve climate neutrality by 2050. Is this project raising awareness in consumers?

In the past, according to numerous surveys carried out, the awareness of environmental issues, and climate change in particular, never necessarily translated into people making better choices or behaving more responsibly as consumers. There was clearly a gap between opinions expressed in relation to climate phenomena and the actual micro-behaviour of most players in society. Italians, in particular, suffered from 'verbal environmentalism': i.e. they were always keen to express their concern about the climate but never actually willing to change their lifestyle and, in particular,

“ Problems caused by the energy crisis could be compensated for by action targeted to fight climate change

their purchasing habits in order to improve the overall state of affairs. Many individuals, for example, although aware of the problem, preferred to consider climate action the prerogative (or main responsibility) of people other than consumers: the government, public administration, industry. The impetus injected by the European Commission and governments over recent years, and the voluntary efforts of many businesses, have had a disruptive effect on the market and consumers. The emergence of environmental issues linked to the behaviour of individuals (think of the traffic emergency or waste management in many cities) has triggered off a process of 'self-responsibility' on the part of ordinary people that has brought about a significant change in consumer trends. Many studies indicate that there has

been a 'quantum leap' resulting in people showing real responsibility and awareness in their purchasing habits that now reward 'green' or climate-friendly products. This trend would appear to be irreversible and destined to grow in the future.

A new approach, more attentive to the environmental sustainability of buildings, is also emerging in the building industry. How do you assess the ceramics sector in particular, which is currently suffering from the energy crisis?

The building industry has always been among the most attentive to environmental issues and, in particular, the impact on the climate of built structures and the materials used to construct them. The ceramic tiles industry has stood out for all its initiatives and a propensity for innovation on green issues ever since the early 1980s. This industry has long been looked to for inspiration as regards particularly effective action on environmental issues capable of combining sustainability and competitiveness. We need only mention, for example, the projects put in place by the Sassuolo ceramics district in the 1990s to create the Emas and Ecolabel environmental certification. My university also contributed to this project, which has enabled many companies, including small and medium-sized businesses, to develop skills and management tools aimed at constantly improving the environmental performance of production plants and products. Today, there is no doubt that the entire industry, bearing in mind how energy-intensive its processes are, is among those most under pressure in terms of rising energy costs, one of the biggest contributors to production costs in this sector. I believe that the (decidedly unexpected) crisis at the moment has, on one hand, hit companies that were not actually unprepared and had already been investing in efficiency and energy savings for years and are, therefore, able to withstand the impact, provided these are only temporary and not structural phenomena. On

the other hand, I think that yet more pressure on energy supplies will be a further stimulus to make an ever bigger qualitative leap forward, perhaps injecting even more impetus into the pursuit of supply targets in terms of renewable sources and the use of recycled materials with an eye for the circular economy and closing water cycles. All action which, either directly or indirectly, can bring relief on the energy consumption front.

How do you see the future of the building industry? Do you think it will be possible to hit climate neutrality targets in the context of an energy crisis?

Unfortunately, in the building industry, as in many other sectors, the pursuit of climate neutrality goals will be slowed down by the supply crises (as regards not only energy but also raw materials) caused by recent shock events. The way ahead will be more complicated, and the levers may be less effective.

One example is the impact on business investment capabilities in view of rises in prices. However, this should be offset by the very significant resources European and national recovery and resilience programmes will make available to businesses, focused on green and sustainable investment. If companies are able to seize this opportunity, they will be able to compensate, at least partially, for difficulties caused by the crisis. I believe that companies will have to focus their efforts on realms of sustainability that are harbingers of possible efficiency gains and cost savings.

I am referring, in particular, to the aforementioned circular economy and, in general, the productivity of natural resources. Their sustainability strategies should be focused on action that increases the percentage of secondary raw materials used in mixes, makes more use of regenerated or recycled auxiliary materials, and reduces the use of substances that may diminish the recovery and recycling potential of end-of-life ceramic materials, etc.

These measures do not require prohibitive investment in

“ The ceramics industry has led the way on the environment: the energy crisis will stimulate further progress

technology and, above all, may entail the ability to achieve margins of economic efficiency and savings that are highly desirable at this moment in time.

On the other hand, it can clearly be seen that conditions are emerging in the building industry (both the intermediate and final markets) that will reward those companies most committed to environmental sustainability, the fight against climate change and the circular economy: public tenders for works and projects increasingly include criteria focused on rewarding sustainability characteristics and performance; major operators acting as 'general contractors' for the construction of large and small works are increasingly expecting their supply chain to provide certain environmental/social guarantees as regards the products and labour supplied; 'end consumers', i.e. the people who buy houses and the professionals assisting them (architects, surveyors, etc.) are increasingly sensitive to and trained about these issues.

This means they are willing to act in ways that favour those companies able to perform better.

Sant'Anna School of Advanced Studies, Pisa (Italy)

Beautiful and functional surfaces with Ultracare



by Enrico Geronimi

THE RANGE OF CLEANERS, PROTECTIVE AND COMPLEMENTARY PRODUCTS HAS BEEN EXTENDED

The ULTRACARE range was presented at Cersaie 2021 and since then it has been extended several times. What are the latest additions?

Last year at Cersaie we presented the first products from the line: 9 cleaners to which we added seven protectors last spring, along with a complementary product. At Cersaie 2022 we presented two cleaners (ULTRACARE MOULD REMOVER for eliminating mould and ULTRACARE GROUT CLEANER for cleaning joints grouted with both epoxy and cementitious products), a new protector (ULTRACARE ANTI MOULD PROTECTOR to prevent the formation of mould) and a complementary product (ULTRACARE SMOOTH SILICONE for finishing off silicone sealants). All the new products in the range are available in 0.75 litre spray bottles. There is also a QR code on the bottles that links to the Mapei website where you can download product data sheets and view tutorials on how to apply them correctly.

So, is the range complete now?

There are currently 21 products in the range. We are also working to develop others, which will be presented in 2023.

What type of use is the range aimed at?

These products are dedicated to cleaning, maintaining and protecting surfaces, the aim being to preserve their functionality and beauty over time. From new installations to renovating existing surfaces, the ULTRACARE line is the ideal ally for commercial, industrial and residential surroundings. Products for normal cleaning operations and for deep-down cleaning once a site has been completed, anti-stain products and with an enhancing effect, cleaners and protectors for joints: ULTRACARE products are highly effective and work in maximum safety, helping to maintain the beauty of surfaces over time or to restore their original



characteristics. ULTRACARE products are suitable for a cross-section of uses and are targeted at large installation teams, retailers of building materials and ceramic tiles showrooms.

And where can you find ULTRACARE products?

The ULTRACARE range is available at the retailers/distributors of Mapei products. To promote the products a special display stand has also been created so they are easier to find in-store. The stand helps choosing which is the most suitable product according to the customer's specific needs.

Corporate Product Manager, Grouts and Ultracare Line, Mapei Group



A special "click" feature for quicker installation works



by Andrea Annoni

LEVELLING SYSTEMS AND SPACERS: SIMPLIFIED WORK OPERATIONS

Who are the products from the MAPELEVEL range aimed at? How can they help with installation work?

Both the levelling systems from the MAPELEVEL range and spacers (MAPEI TILE SPACER) are designed to help installers when installing ceramic and stone tiles by helping create perfect, flat ceramic surfaces and uniform joints.

Let's talk about MAPELEVEL EASYCLICK SYSTEM: what are the characteristics and strong points of the system?

Compared with other similar systems available on the

market, MAPELEVEL EASYCLICK SYSTEM has a special "click" feature which makes it quicker to insert the cap on the screw spacer and, at the same time, much easier and quicker to remove the disposable parts from the cap once installation has been completed.

At Cersaie 2021 Mapei presented MAPELEVEL EASY SYSTEM: can you give us a brief description of the system?

This system helps tile installers prevent lippage between tiles during installation. It is a screw levelling system, characterized by rapid-screwing of the cap which allows easy and accurate levelling off ceramic and stone flooring.

How does the MAPELEVEL range integrate with other Mapei systems?

MAPELEVEL products are a part of the Mapei product portfolio for installers, who now have the tools required to carry out the different steps of tile installation, thanks to the availability of integrated solutions from a unique supplier, a guarantee of quality.

Corporate Product Manager, Complementary Products and Tools

Interior water-based paints: the range has been improved



by Stefano Deri

NEW PRODUCTS AND FORMATS WITH MORE SUSTAINABLE FORMULATIONS AND PACKAGING LAUNCHED ON THE MARKET

At Cersaie 2022 Mapei showcased various products from the water-based paints range: what led to this new interest?

The internal wall paints market in Italy accounts for around 40% of the entire market of paints aimed at the building industry. Despite these figures – a market worth hundreds of millions of Euros every year – Mapei has never played a particularly significant role in this family of products as it has historically been more focused on technical products for external use, on elastomeric and anti-carbonation products and on external thermal insulation systems. This strategy has positioned Mapei as a brand of absolute importance in the professional world of façades with constant annual growth since the Wall Coatings line has been introduced on the market. To support this growth, it became necessary to continue expanding the product range and this year we decided to intervene on the line of interior products, optimising and improving the existing water-based paints in the portfolio.

What are the characteristics and advantages of the new DURSILITE IGEA and DURSILITE GYPSOS?

The new products are linked to two clear market trends and meet the precise needs of clients. There is a need for products that, on the one hand, contrast the formation of mould and, on the other hand, offer solutions to construction trends where drywall systems are playing an increasingly important role. In fact, both products are admixed with a component that contrasts the formation of mould on walls, an increasingly important requirement for modern and renovated buildings with thermal break doors and windows. The high efficiency of modern doors and windows in terms of airtightness reduces the exchange of air with the outside and, as a result, an accumulation of water vapour inside homes, leading to the formation of mould on walls. Also, with people spending more time in their homes because of the pandemic (smart working, on-line lessons, etc.), this has led to an increase in the formation of water vapour. Both DURSILITE IGEA

and DURSILITE GYPSOS are formulated with BioBlock technology developed by Mapei, designed to effectively counteract these unwanted effects and keep walls clean for much longer. A second market trend is the growing use of drywall systems and the widely adopted use of plasterboard panels. In this case, DURSILITE GYPSOS has been specifically formulated to simplify application on plasterboard with a very high hiding capacity and, in many cases, the possibility of painting surfaces directly without preparation of the substrates. Also, with DURSILITE GYPSOS, it is possible to reproduce, with the ColorMap® automatic tinting system, all the various Mapei colour collections and to create customized colours.

Who is the new 1 litre packaging aimed at?

The decision to introduce the 1 litre packaging is linked to two needs: the first one was to provide a tool for the creation of colour samples to help choose the right shade and to optimise the match between different colours. The limited amount of paint enables colour-match tests to be carried out without excessive costs and, more importantly, avoids wasting paint. The second reason is mainly decorative: this small format allows attractive effects and patterns to be created in a room by matching different colours and shades from the same colour palette. In such cases, you can obtain pleasant chromatic effects over a limited surface area, such as in niches or single walls, and the small format allows the preparation of only the quantity required for the project.

There are also new developments with MAPECOAT ACT enamel paints with the introduction of MAPECOAT ACT SATIN and MAPECOAT ACT MATT. What are the typical areas of use of these products?

The MAPECOAT ACT range has been part of the Mapei portfolio for several years. This is a top-of-the-range product family with exceptional characteristics in terms of cleanability and stain-removal, as well as resistance to mould, viruses and bacteria. The MAPECOAT ACT range



is divided into two distinct products, one for healthcare facilities and one for the food and beverage industry, both with the relative certifications in line with current applicable standards and the HACCP (Hazard Analysis and Critical Control Points) protocol. We found it useful to unify the two formulations into a single product to help retailers reduce the number of items in stock. At the same time, we accepted the requests from the market that was asking for a product with a more matt finish than the initial satin-finish version by introducing the new MATT version, and with the same characteristics, alongside the SATIN version.

As far as product and packaging are concerned, what kind of attention has been given to the issue of sustainability?

Sustainability and innovation are Mapei's two main drivers and water-based paints are no exception. When formulating the products, it was decided not to use components that would be harmful for the environment and people's health, while maintaining high performance properties despite more stringent legislation. The formulations were optimised to minimise emissions of volatile organic compounds (VOC), achieving the highest class, A+, in the French classification system, which guarantees good quality of the air breathed in by both professional painters and end users, ensuring a high level of living comfort.

Furthermore, the environmental impacts of our products have been calculated using the LCA (Life Cycle Assessment) method in order to design increasingly sustainable water-based paints.

The impact is declared on the product EPD (Environmental Product Declaration), environmental

The decision to introduce the 1 litre packaging is aimed at providing a tool for the creation of colour samples to help choose the right shade and optimising the match between different colours

documents certified by third-party bodies.

Mapei has already reviewed the technical documentation of its products incorporating the update published in the Italian Government Gazette on 6th August 2022 regarding Minimum Environmental Criteria (CAM) for the Italian building industry.

Attention to sustainability is not limited to the formulations, but also includes their packaging. Also in this case, it was decided to use recycled packaging, certified by the Institute for the Promotion of Recycled Plastics (IPPR): all packaging bears the "Plastic Second Life" label, the first one in Italy and Europe, which makes the materials and items made from recycled plastic waste immediately recognisable.

Corporate Product Manager, Wall coatings line



by Fabio Guerrini

A sealant with low impact on the environment

PRODUCTION VIA CERTIFIED RENEWABLE SOURCES AND A RECYCLED PLASTIC CARTRIDGE: THE NEW MAPESIL AC ECO'S MAIN FEATURES

“ At Cersaie Mapei presented MAPESIL AC ECO: what led you to create an elastic sealant without fossil-based raw materials? ”

Knowing that all mankind's actions have an impact on the environment we inhabit, and that there is a limit to the availability of natural resources, forces all of us to take a hard look at our daily behaviour. With MAPESIL AC ECO sealant, Mapei is continuing on its journey to develop and manufacture building materials as sustainable as possible through certain, repeatable and measurable performance characteristics. Sealants are construction materials widely adopted by the building sector on every market: the ability to produce a silicone sealant without using fossil-based raw materials, and to use recyclable materials for its packaging, was a natural progression of Mapei's journey. The materials involved in the production process of MAPESIL AC ECO are not fossil-based raw materials but rather come from certified renewable sources. Mapei decided to present this type of production technology to the market only once it could be combined with another important element of environmental sustainability: a packaging made from recycled plastic.

So, opting for sustainability by also using an appropriate packaging: what type of cartridge was chosen?

Packaging for sealants used in construction work is generally single-use made from HDPE (high density polyethylene) plastic and weighs around 20 grams. For years we have been asking our suppliers of plastic packaging materials to come up with alternative solutions to traditional packaging that only uses virgin plastic. The first significant

result, cartridges with the same functional characteristics, was achieved by reducing the amount of virgin plastic used to make them by replacing it with up to 50% of post consumer recycled plastics for their production. So, once our suppliers confirmed they could meet the demand in terms of volume required by the Mapei Group, we decided it would be a good idea to combine the 2 environmental benefits mentioned above: a sealant without fossil-based raw materials in a cartridge made from recycled plastic. The sum of these two benefits leads to 25% less CO₂ being emitted into the atmosphere compared with traditional acetic silicone sealant in a cartridge made from virgin plastic.

What are the performance properties of MAPESIL AC ECO like compared with “classic” MAPESIL AC?

The physical and mechanical characteristics of the new MAPESIL AC ECO are identical to the consolidated characteristics of the old MAPESIL AC solvent-free, pure acetic silicone sealant that has been highly appreciated for years and enabled millions of users all around the world create elastic seals in joints, both internally and externally.

Were there any other showcased products regarding the Mapei line of elastic sealants and chemical anchors at Cersaie trade fair?

Even though there are numerous showcased products available in the Mapei portfolio for sealing, bonding and anchoring applications (MAPEFLEX XPRESS rapid-hardening polyurea sealant for floors and MAPEFIX EP 100 epoxy resin for structural chemical anchors with guaranteed performance properties for 100 years, to name just two), we believe that, at Cersaie, the reference international trade-fair for all those operating in the ceramic sector, it was better to only focus attention on products and services pertinent to that particular area of use: which is why my “jewel in the crown” in this case was MAPESIL AC ECO.

Corporate Product Manager, Elastic Sealing and Bonding



Installing perfectly flat ceramic and stone surfaces quickly, is easy with **MapeLevel System**. Discover the new line of pro-grade installation accessories: easy-to-use levelling tools and spacers, including with large format tiles.



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Maidenhead (UK)

Braywick Leisure Centre

INSTALLATION OF CERAMIC TILES IN THE SWIMMING POOLS AND ALONG THE WALKWAYS IN A LARGE SPORTS AND LEISURE CENTRE IN THE SOUTH OF ENGLAND

Since the summer of 2020 the residents of Maidenhead, a city in the English county of Berkshire, have been able to enjoy the many attractions and leisure-time activities on offer at the brand-new Braywick Leisure Centre, a poly-functional sports and leisure complex built thanks to an investment of more than 37 million Euros. Designed by BRL Architects, the complex replaced the old Magnet Leisure Centre, offering visitors an even wider choice of sports and cultural activities over a larger area, and with energy consumption reduced by 70%. Under the centre's curved roof there is a 10-lane swimming pool, a family pool, a gym, a coffee bar, a dance school, a 2000 m² sports arena, numerous stands for the public, a synthetic grass football and rugby pitch, squash courts, an area for indoor cycling, various escape rooms, a spa and a conference room. All the areas are connected via 400 m² of walkways. Apart from attracting residents from the surrounding areas, the centre, immersed in the lush parkland of the Braywick nature reserve, also hosts national and international sports events.

From substrates to floor and wall coverings

In the swimming pools, the areas around the pools and in the changing rooms and corridors, TOPCEM special hydraulic binder was chosen to create normal-setting,

fast-drying screeds. The substrates of the walls were levelled off with PLANITOP FAST 330 fibre-reinforced, quick-setting cementitious mortar, which may be applied in layers from 3 to 30 mm thick on both internal and external floors and walls.

In these areas of the centre, as well as in the pools and along the walkways, EPORIP two-component epoxy adhesive was used to bond the screeds and fill cracks in the substrates.

The substrates for the pools and the floors in the changing rooms were waterproofed with MAPELASTIC SMART two-component, highly flexible cementitious mortar, and MAPEBAND rubber tape along the corners and edges between adjacent walls and between the floors and walls. Apart from this system, in the areas around the pools and in the changing rooms, MAPETEX SEL macro-perforated, polypropylene reinforcement was also added, which is used to strengthen flexible cementitious membranes where there is a potentially high risk of deformation and cracking.

KERAQUICK S1, a flexible adhesive distributed in the UK by Mapei UK (whose counterpart on the international markets is KERAQUICK MAXI S1), was chosen to install the ceramic tiles in the pools, the areas around the pools and in the corridors. For the walls in the same areas, on the



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ABOVE. Several Mapei solutions were employed to install ceramic tiles in different areas of the new Braywick Leisure Centre.
LEFT. The various areas of the centre are reached via a 400 m² walkway made from porcelain tiles installed with KERAQUICK XL FIBRELITE*.



The ceramic tiles in the 10-lane pool were installed with KERAFLEX MAXI S1 and KERAQUICK S1*.

other hand, KERAFLEX MAXI S1 was used to install the ceramic tiles, a flexible cementitious adhesive with Low Dust technology, extended open time, excellent workability and no vertical slip.

A long walkway

The long walkway connecting the various areas of the centre was also covered with ceramic tiles: in this particular case KERAQUICK XL FIBRELITE*, an adhesive manufactured and distributed on the British market by Mapei UK, was chosen to install porcelain tiles in various sizes (750 x 750 mm and 750 x 375 mm).

All the joints in the ceramic coverings in the Braywick Leisure Centre were grouted with ULTRACOLOR PLUS high-performance, quick-drying and setting cementitious mortar, which was also chosen for its durability, ease of cleaning and the extensive range of colours available. All the expansion joints in the ceramic surfaces were sealed with MAPESIL AC pure acetic sealant.

Not only ceramic tiles

In the areas dedicated to the various sports on offer and in the shops, the screeds were treated with ECO PRIM T PLUS acrylic primer, waterproofed with MAPEPROOF ONE COAT* and levelled off with ULTRAPLAN RENOVATION SCREED 3240*. In the shops, the vinyl floor coverings were bonded with ULTRABOND ECO VS90 PLUS, a universal adhesive specific for rubber and PVC floor and wall coverings on absorbent substrates. The balustrades used to cordon off the spectator stands were repaired with MAPEGROUT SV quick-setting and hardening, easy-flow mortar while MAPEFILL GP* mortar was used to anchor structural elements in the spectator stands. In some of the areas below ground level, PLASTIMUL bitumen emulsion was used for waterproofing applications.



Find out more
KERAFLEX MAXI S1

TECHNICAL DATA

Braywick Leisure Centre, Maidenhead (UK)

Period of construction: 2018- 2020

Design: Burke Rickhards

Owner: Leisure Focus

Main contractor: Wates Construction

Installation companies: Tiletec, T.R.I. & CSC
Screeding

Period of the Mapei intervention: 2018-2020
Intervention by Mapei:

supplying products to prepare and waterproof substrates, installing ceramic tiles, bonding vinyl floors

Mapei distributor: Techfloor

Mapei coordinator: Paul Marland, Mapei UK

Photos: Diane Auckland / Fotohaus Ltd.

MAPEI PRODUCTS

Preparing substrates: Eporip, Topcem, Planitop

Fast 330, Eco Prim T Plus, Ultraplan Renovation Screed 3240*

Waterproofing substrates: Mapelastic Smart,

Mapeproof One Coat*, Mapetex Sel, Mapeband

Installing ceramic tiles: Keraquick S1*, Keraflex Maxi S1, Keraquick XL Fibrelite*, Keraflex

Grouting joints: Ultracolor Plus

Sealing expansion joints: Mapesil AC

Underground

waterproofing: Plastimul
Building works: Mapegrout SV, Mapemortar HB R3*, Mapefill GP

*These products are manufactured and distributed on the British market by Mapei UK.

For further info on products: mapei.com and mapei.co.uk

GROUT THAT WITHSTANDS OVER TIME.
NEW COLOURS FOR EVERY ROOM.



169 | STEEL BLUE

Ultracolor Plus

The colours of **Ultracolor Plus** grouts bring out the beauty of any tiled surface and add a touch of originality to any setting. **Designed to last, Ultracolor Plus is easy to apply and clean.** Mapei colours feature across grout ranges and are matched with Mapesil AC sealant.



NEW
PRODUCT WITH FULLY
OFFSET CO₂ EMISSIONS

- **NEW COLOUR RANGE**
- **BIOBLOCK: RESISTANT TO MOULD**
- **GROUTED AREAS ARE QUICKLY READY FOR USE**
- **WATER-REPELLENT AND EASY TO CLEAN**
- **ANTI-EFFLORESCENCE FOR UNIFORM COLOUR**



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Milan (Italy)

IRCCS Galeazzi-Sant'Ambrogio Hospital

CEMENTITIOUS ADHESIVES AND ANTI-FRACTURE MEMBRANES FOR THIS NEW HOSPITAL RECENTLY INAUGURATED IN THE FORMER EXPO AREA

The new Galeazzi Sant'Ambrogio Hospital opened its doors to the public in Milan on Monday 22nd August, bringing together within the complex the Galeazzi Institute of Orthopaedics and the Sant'Ambrogio Institute of Clinical Medicine. The hospital is one of the cornerstones of the future research, innovation and healthcare ecosystem within the MIND, Milano Innovation District, based in the area that hosted the Milan Expo in 2015.

A hub dedicated to healthcare, research and teaching

The new complex now combines under one roof the IRCCS Istituto Ortopedico Galeazzi (Galeazzi Institute of Orthopaedics), the leading hospital in Italy in terms of the number of orthopaedic prostheses implanted and

the leading hospital in the Lombardy region in terms of patients undergoing orthopaedic surgery, and the Sant'Ambrogio Institute of Clinical medicine, one of the leading centres in Italy for the treatment of cardiovascular pathologies.

Apart from the orthopaedics and cardiovascular departments, there are also departments specialising in neurosurgery and bariatric surgery. Within the complex there are also large areas dedicated to university courses and scientific research because, in 2006, the Galeazzi Institute of Orthopaedics was awarded IRCCS (Scientific Institute for Research, Hospitalization and Healthcare) status by the Italian Ministry of Health for its research into illnesses and pathologies of the musculoskeletal system.

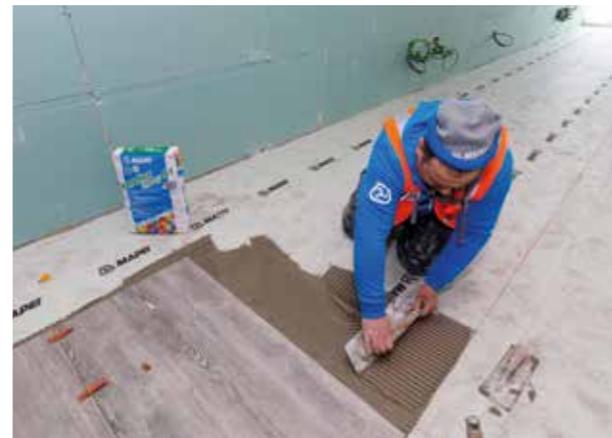


The porcelain tiles in the main entrance of the hospital were installed with KERAFLEX EASY SI.

The hospital of the future

The structure extends over an area of almost 180,000 m² and was designed according to the most advanced standards regarding sustainability and functionality. Constructed with a modern conception of architecture, the building is 16 storeys high and has a main body where the hospital departments and activities, the research laboratories and the university functions are concentrated. There are also three other buildings that provide crucial services: a technological centre, a hospital gas plant and an ecology island.

The new hospital was built applying the most modern and efficient solutions regarding energy savings and environmental sustainability in order to reduce waste, en-



ABOVE, LEFT. MAPEGUARD UM 35 and MAPETEX SYSTEM anti-fracture membranes were bonded on the substrates in the corridors to ensure safe installation of ceramic tiles.

ABOVE, RIGHT. Porcelain tiles were bonded on several floors with KERAFLEX EASY S1. The joints were grouted with ULTRACOLOR PLUS.

ergy consumption, noise pollution and the emission of pollutants in general as much as possible. The materials chosen are eco-sustainable and healthy, with the ability to absorb smog using atmospheric purification methods, as well as containing self-cleaning properties. And this is why the new Galeazzi Sant'Ambrogio Hospital has been registered for assessment and is a potential candidate to be awarded Leed Gold V4 Certification for its environmental sustainability credentials.

Waterproofing and installing ceramic tiles

In May, 2019 Mapei supplied admixtures (DYNAMON XTEND W500 SN, DYNAMON EW, MAPETARD) for the concrete that was used to create the largest ever foundation slab in Europe: a good 32,836 m³ of self-compacting concrete were poured non-stop for 94 hours (see

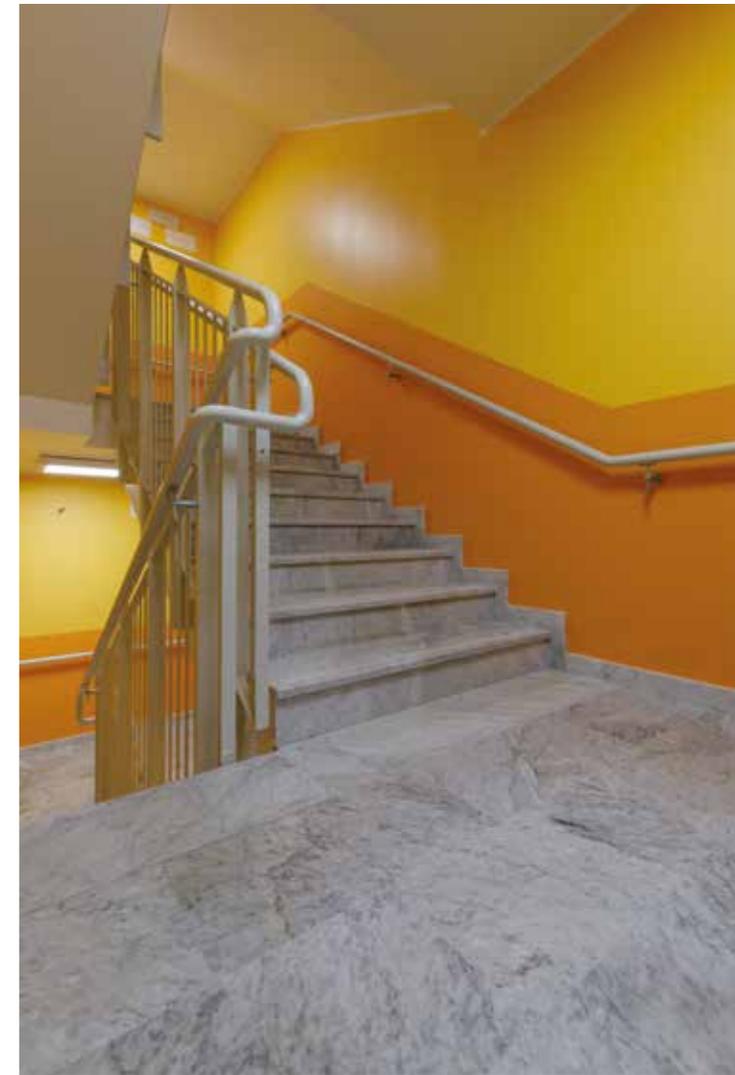
Realtà Mapei International n.76).

For the latest intervention, installation of tiles in the internal areas, there was a very tight schedule and large-size porcelain tiles needed to be installed on a substrate that had not been fully cured. To prevent having to cut the porcelain tiles to respect the shrinkage joints in the substrate, before installing the tiles in the corridors, MAPEGUARD UM 35 was applied over the surface, a waterproofing, anti-fracture and uncoupling membrane, along with MAPETEX SYSTEM anti-fracture, non-woven fabric membrane. These membranes guarantee sound, high-performance installation on cracked substrates and on substrates not fully cured, thereby preventing any irregularities in the substrates damaging the finished flooring. These membranes were bonded with KERAFLEX EXTRA S1, a cementitious adhesive with variable rheology which was chosen due to its deformability properties, and, in some areas with ADESILEX P9 EXPRESS rapid-setting cementitious adhesive with extended open time.

The porcelain tiles were installed using KERAFLEX EASY S1, an easy to apply, deformable cementitious adhesive with extended open time. The joints were grouted with KERAPOXY CQ two-component, epoxy grout, with a bacteriostatic agent and BioBlock® technology. All the expansion joints were sealed with MAPESIL AC pure, mould-resistant acetic sealant.

Carrara marble slabs were installed on the stairs and landings in the service areas with ADESILEX P9 EXPRESS rapid-setting cementitious adhesive with extended open time.

The substrates in the bathrooms had been previously waterproofed with MAPEGUM WPS ultra-quick drying, flexible liquid membrane and MAPEBAND EASY tape.



Stone coverings were installed on the stairs and landings in the service areas with ADESILEX P9 EXPRESS.



Find out more
KERAFLEX EXTRA S1

TECHNICAL DATA

IRCCS Galeazzi Sant'Ambrogio Hospital, Milan (Italy)
Period of construction: 2019-2022

Year of the Mapei intervention: 2022
Intervention by Mapei: supplying uncoupling and anti-fracture membranes and products for installing the membranes and large-format tiles

Design: Binini Partners
Owner: Gruppo San Donato
Main contractor: Edile Engineering & Construction SpA
Installed materials: ceramic tiles by Florim Ceramiche
Installation companies: ATI Tempini, Ripa SpA, Ettore Bosisio Srl, Ceramiche Frattini; STC Marmi

Mapei Coordinator: Alessio Rizzo, Mapei SpA (Italy); Andrea Lodi, Rappesentando Srl
Opening photo: Visualdron.it for GKSD S.p.A

MAPEI PRODUCTS
Application of uncoupling and anti-fracture membranes: Keraflex Extra S1, Mapetex System, Mapeguard UM 35
Installing ceramic tiles and

stone materials: Keraflex Easy S1, Adesilex P9 Express
Grouting joints: Kerapoxy CQ
Sealing expansion joints: Mapesil AC
Waterproofing the substrates: Mapelastac AquaDefense, Mapeband Easy

For further info: mapei.com

Budapest (Hungary) Etele Plaza

WATERPROOFING ROOFS AND INSTALLING CERAMIC TILES IN A BIG MALL,
THE FIRST "INTELLIGENT" BUILDING IN HUNGARY



The Etele Plaza shopping centre, opened in 2021, is the first "intelligent" building in Hungary and is able to provide clients with a better shopping experience through dedicated cloud-based apps and services, such as helping visitors find the most suitable parking space, recharging electric cars or directing them to the store of their choice. There are ten stores inside Etele Plaza, along with a restaurant, a coffee-shop, a cinema, a fitness centre and an amusement arcade.

Concrete admixtures for every season

Mapei Kft, the Hungarian subsidiary of the Group, recommended the most suitable admixtures for the mix design of the concrete used in the construction of the building. During the particularly hot weather it was recommended to use DYNAMON RC220 plasticising admixture, a product distributed on the Hungarian market by Mapei Kft.,

and the liquid retardant MAPETARD. Both products were chosen because they are suitable for applications where a high level of workability needs to be maintained, including at high temperatures.

Creating a green roof

Etele Plaza has been rated as "Very Good" according to BREEAM criteria (a voluntary sustainability rating system for buildings developed in the UK), a requirement of the client, thanks to a reduction in light pollution, the use of durable and recycled materials and the presence of "green" surfaces at the entrance to the shopping centre and on the roof.

The green roof needed to have a really efficient waterproofing system. Therefore, the contractor decided to opt for Polyglass solutions, a subsidiary of Mapei Group, POLYPRIMER bituminous primer was used to promote

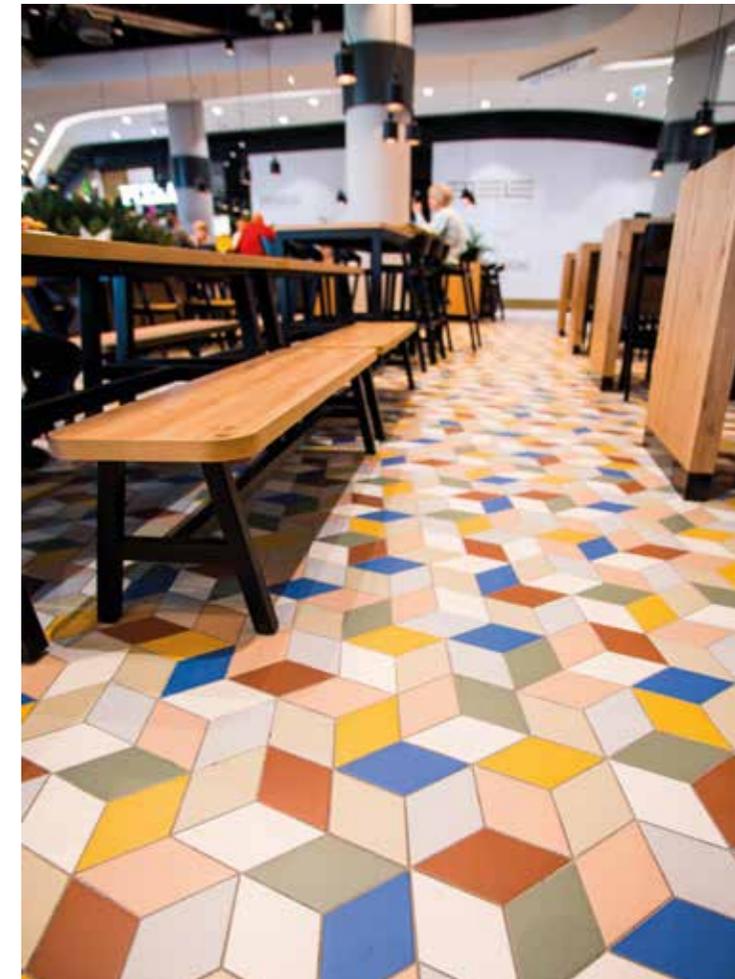
Ceramic tiles were installed in several areas of Etele Plaza with Mapei adhesives such as KERAFLEX MAXI S1 e ADESILEX P9.



adhesion of the membranes applied afterwards. FLEXO S6 PREMIUM waterproofing membrane was then applied on the surface. ANTIRADICE FLEX P was also applied to provide further protection: an elastomeric membrane ensuring high resistance to root penetration. Its special compound creates a chemical barrier, ensuring the membrane delivers perfect watertightness and resistance to aggressive chemicals and puncture by plant roots. As for other roofs, the products used were MAPEPLAN T M18 BROOF (t2) - a synthetic FPO/TPO membrane, certified to the requirements of the external fire performance standard - and MAPEPLAN T METAL SHEET, used as press-formed finishing profiles.

Installation of ceramic tiles

The floor substrates in several areas were levelled off with NOVOPLAN MAXI cementitious mortar, except in the bathrooms where PLANEX HR moisture-resistant, self-levelling mortar was recommended. Most of the ceramic tiles were installed with ADESILEX P9 improved cementitious adhesive. KERAFLEX MAXI S1 cementitious adhesive was chosen for the service corridors and bathrooms, while in the sales areas exposed to intense footfall, KERAFLEX EASY S1 was used, which is particularly resistant to heavy loads. The joints were grouted with KERACOLOR FF FLEX cementitious mortar, which is distributed on the Hungarian market by Mapei Kft.



Find out more
ADESILEX P9

TECHNICAL DATA

Etele Plaza, Budapest (Hungary)

Period of construction: 2016-2021

Period of the intervention: 2016-2021

Intervention by Mapei: supplying admixtures for concrete, waterproofing membranes, and products for installing ceramic tiles

Client: Futureal Group

Design: Pauliny and Partners

Concrete manufacturers: Unicity Kft., Bayer Construct Zrt.;

Waterproofing contractors: Tectum Kft., Hydroproof Kft., Isogenerál Kft.

Ceramic tile installing company: Dominó Kft.
Mapei distributor: Dominó Kft.

Mapei Coordinators: Viktor Kósa, József Ladics, Csaba Miklós, and Károly Habling, Mapei Kft. (Hungary)

MAPEI PRODUCTS

Admixtures for concrete: Dynamon RC220*, Mapetard
Treating and levelling substrates: Novoplan Maxi, Planex HR, Primer G
Installing and grouting ceramic tiles: Adesilex P9, Keracolor FF Flex*, Keraflex Easy S1, Keraflex Maxi S1
Sealing expansion joints: Mapesil AC

Waterproofing roofs: Antiradice Flex P**, Mapeplan T M18 Broof**,

Mapeplan T Metal Sheet**, Flexo S6 Premium**, Polyprimer P**

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

**These products are manufactured by Polyglass (Mapei Group)

mapei.com, mapei.hu



Ceramic tiles were bonded on the interior floors with KERABOND PLUS adhesive. ULTRACOLOR PLUS and KERACOLOR FF high-performance mortars were used to grout the joints.

TECHNICAL DATA

Residential complex, Milan (Italy)
Period of construction: 2018 - ongoing
Period of the Mapei intervention: 2020-2022
Intervention by Mapei: supplying products for treating and waterproofing substrates and installing

ceramic tiles
Design: Barreca & La Varra; Ariatta Ingegneria dei sistemi Srl; Arching Srl
Owner: Redo Sgr
Works director: Vito De Stefano
Main contractor: Intercantieri Vittadello Spa
Installation companies: RI.PA., Frattini, Tempini

Waterproofing companies: Consorzio Dueffe, Tecnovedil
Mapei coordinators: Francesco Di Chiara and Davide Dido, Mapei SpA (Italy)

MAPEI PRODUCTS
Waterproofing substrates: Mapeband PE 120,

Mapelastic AquaDefense, Mapeband Easy, Mapelastic Turbo, Mapenet 150
Installing ceramic tiles: Kerabond Plus
Grouting joints: Keracolor FF, Ultracolor Plus

For further info on products: mapei.com



Milan (Italy)
Social housing complex

AFTER YEARS OF NEGLECT FIVE BUILDINGS WERE REFURBISHED THANKS TO AN INNOVATIVE PROGRAMME

At the end of the 1990's in Via Antegnati, in south Milan, five buildings with internal courtyards were built for manufacturing and service use. The buildings were between three and four storeys high and were completed in 2000, but never actually used. Abandoned and in a state of degradation, the buildings had been defaced and were inhabited by squatters until 2019, the year in which the "5 Square" refurbishment programme was launched to create 500 social housing apartments, a health centre, urban residential services and retail spaces. The architectural design of the complex was by the Milan-based firm, Barreca&LaVarra.

A complex intervention

For the first phase of the work all the existing non-structural elements were removed, leaving just the structural skeleton of the complex. The remaining volumes were used to create new surfaces and to align the main perspective in Via Antegnati so that all five buildings were five storeys high on that particular side, but with the end two buildings to the south slightly smaller in size. The ground floor of the complex, made up of a mix of private and public spaces, was

transformed into a large urban-type area with spaces where people can meet up or play games and sports. The exterior is characterised by a new modular grid structure superimposed on the existing façade. The grid is made up of two systems: one featuring a series of parapets and the other with opposing roller-blinds forming a "butterfly" type system. The designers used colour to provide movement and depth to the external surfaces: a light colour for the grid and blinds and a darker colour for the backdrop of the apartments.

Waterproofing and installation of ceramic tiles in the interiors

Mapei Technical Services recommended the most suitable systems to waterproof and install ceramic tiles in the apartments and bathrooms. The substrates in the bathrooms were waterproofed with MAPELASTIC AUADEFENSE flexible membrane and MAPEBAND PE 120 PVC tape. The ceramic tiles for walls and floors in the bathrooms and floors in the apartments were installed with KERABOND PLUS improved adhesion cementitious adhesive, a class C2E adhesive according to EN 12004 standards, while the joints were

grouted with the high-performance mortars ULTRACOLOR PLUS and KERACOLOR FF, class CG2WA according to EN 13888.

Work on the balconies

To protect and waterproof the cementitious screeds on the balconies Mapei Technical Services recommended using MAPELASTIC TURBO, a two-component, cementitious mortar which dries very quickly, including at low temperatures. Two layers of mortar were applied, with MAPENET 150 alkali-resistant glass fibre mesh embedded between them. They were then sealed around the edge with MAPEBAND EASY rubber tape bonded to the substrate with, again, MAPELASTIC TURBO. KERABOND PLUS was used in this case, too, to install the ceramic tiles on the floors of the balconies, with ULTRACOLOR PLUS and KERACOLOR FF again used to grout joints.



Find out more
KERABOND PLUS

Mapei systems to install ceramic tiles

AN OVERVIEW OF PROJECTS CARRIED OUT ALL OVER THE WORLD



Blue Waters Island water features Dubai - UAE

Located at the heart of Dubai, the Blue Waters Island is a glamorous project that Mapei Construction Chemicals, the Group's subsidiary in the UAE, has proudly contributed to. The iconic 'Dubai Eye' Ferris Wheel defines this island as a memorable location aesthetically pleasing to anyone's eyes. The water fountain feature at the bottom of the wheel is where Mapei has left its footprint, supporting the application of granite tiles on 3500 m². The granite tiles were applied on both sides of the wheel using KERAFLEX MAXI S1, a high-performance, deformable, cementitious adhesive especially suitable for installing natural stone. KERAPOXY mould-resistant, epoxy grout, chosen in its grey shade, was used to grout the joints.



Sattler Optik Vienna (Austria)

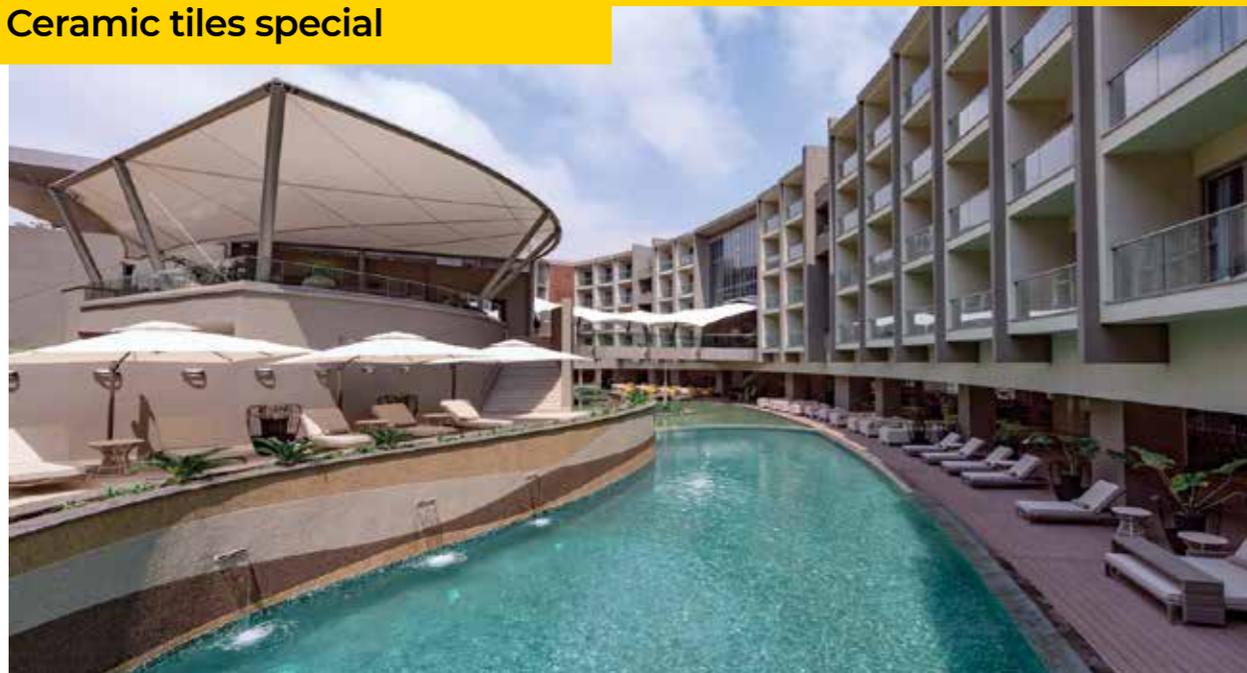
The Sattler Optik showroom offers clients purchasing a pair of prescription or sun glasses a complete service. A lot of emphasis is put on providing a sales area that is comfortable and well-lit, as well as using eco-sustainable building materials. The first step was to treat the substrates with PRIMER G, synthetic resin-based primer in water dispersion with very low emission of volatile organic compounds (VOC), which evens out the absorbency of substrates and provides uniform absorption in cementitious or gypsum surfaces. The tiles were installed using KERAFLEX MAXI S1 adhesive and the joints were grouted with ULTRACOLOR PLUS mortar. The expansion joints were then sealed with MAPESIL AC.



Bridgewater Residences on the Lake & The Pearle Hotel & Spa Burlington, Ontario (Canada)

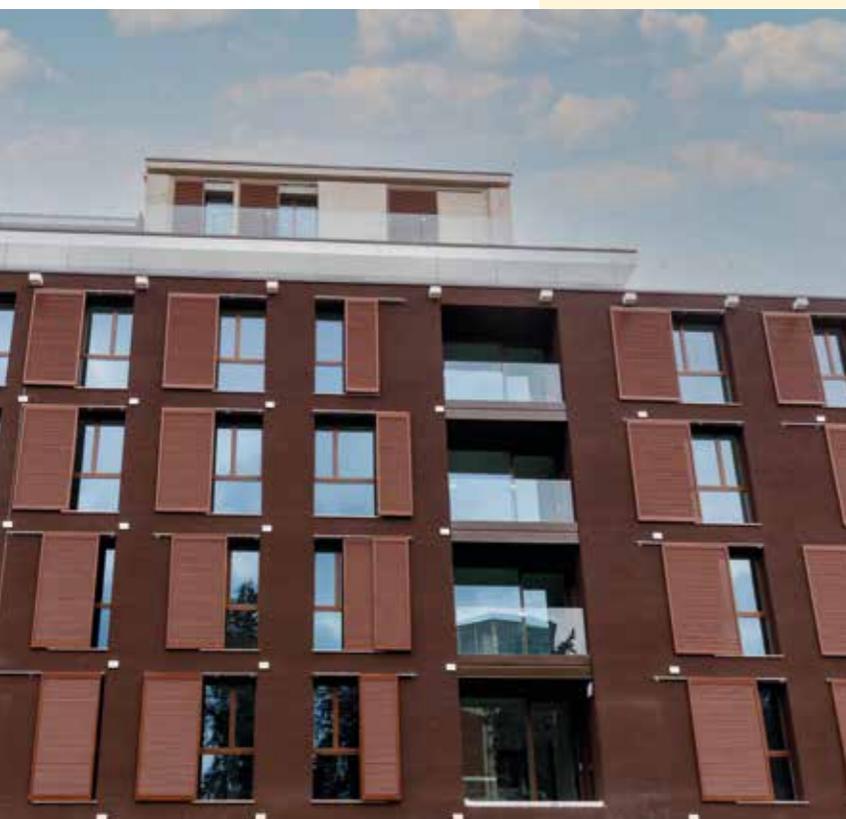
The Bridgewater Residences are 22 storeys high and comprised of 144 apartments, while The Pearle Hotel has 151 suites. Before installing the tiles with MAPEI ULTRALITE MORTAR*, the substrates in the bathrooms, swimming pool and spa area were waterproofed with MAPELASTIC AQUADEFENSE flexible membrane. In the entrance area, the large-size porcelain tiles were installed with ULTRAFLEX LFT*, while for the external areas, the products chosen were KERAFLEX SUPER* large-and-heavy tile adhesive and ULTRACOLOR PLUS FA* grout for joints. ULTRABOND ECO 811* was used to install textile floorings, ULTRABOND ECO 373* to bond vinyl composite tile (VCT) floorings, and ULTRABOND ECO 995* to install the wooden floorings.

*These products are manufactured and distributed in Canada by MAPEI Inc.



Radisson Blu Hotel & Residence
Arboretum, Nairobi (Kenya)

This luxury hotel is close to a natural reserve with forests, 300 types of trees and 100 species of birds. There are 122 rooms and suites available for the guests of the hotel, as well as a sauna, a swimming pool, a conference hall and a fitness centre. Mapei East Africa took part in the construction of the swimming pool by supplying MAPELASTIC SMART cementitious mortar to waterproof the substrates, ADESILEX P10 adhesive to install mosaics in the outdoor pool, and ULTRACOLOR PLUS cementitious mortar in a jade shade to grout the joints. For the floors of the bar and restaurant, 60 x 20 cm porcelain tiles with a wood-effect finish were bonded with ADESILEX P7 after waterproofing the substrates with MAPELASTIC SMART.



Farà House
Milan - Italy

Extensive glass surfaces, an internal garden courtyard and an excellent balance created between private surroundings and public spaces. This is casa Farà, a recently constructed building made up of 73 apartments. Porcelain tiles were installed on the façades using ULTRALITE S2 FLEX high-performance, lightweight cementitious adhesive. The joints were grouted with ULTRACOLOR PLUS and the expansion joints were sealed with MAPESIL LM. Before installing the ceramic tiles, some sections of the façades were thermally insulated by applying the MAPETHERM TILE SYSTEM XL which involved smoothing the surfaces with PLANITOP HDM MAXI mortar, reinforced with MAPEGRID G 120 glass fibre mesh and anchored into the masonry with MAPETHERM TILE-EJOT. The system ensures that the substrate will be able to withstand the load and stresses the ceramic coverings will be subjected to.

THE ADHESIVES FOR LARGE TILES
THAT LIGHTEN YOUR WORK.



Everybody likes to have innovative tiling in their home, but you need to find the correct installation products to guarantee perfect, long-lasting results. And the **Ultralite Flex** range of **lightweight, high yield adhesives** is the best choice for installing large format tiles with less effort, including thin tiles.



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Mapei takes over Profilpas

THE COMPANY SPECIALISES IN THE MANUFACTURE AND SALE OF PROFILES FOR FLOORS AND WALLS



The Mapei Group is continuing to grow through the takeover of Profilpas, a multinational company specialised in the manufacture and distribution of profiles for floor/wall coverings and installation accessories, whose headquarters are based in Vigodarzere (Province of Padua, Northern Italy) and which employs over 160 staff.

It is safe to say that internationalisation continues to be one of the pillars on which Mapei's corporate strategy is based: this new acquisition means the Group now has 100 subsidiaries located in 57 countries for a total of over 11,000 staff.

An approach summed up neatly by Veronica Squinzi, CEO of Mapei: "The takeover of Profilpas and its



by Marco Pasquali

A BOOST FOR OUR INTERNATIONAL OPERATIONS

PASSION AND ENTHUSIASM FOR WORK:
THE BASIS OF PROFILPAS'S GROWTH

You have a wide range of products: will joining the Mapei Group mean you can extend this range and in which sectors might that be possible?

Joining the Mapei Group will allow us to work in synergy to develop new integrated solutions to supply the market with complete systems for floors and walls. To give you some examples, we are already working on developing an integrated system of solutions for outdoors, such as balconies and terraces, and, as far as bathrooms are concerned, new

shower drains for thinner surfaces.

Like Mapei, Profilpas operates internationally. How will the takeover boost the internationalisation process?

Besides the one in Italy, Profilpas has a manufacturing plant in Kutno (Poland), trade offices in France, Spain, Portugal, Germany, the Czech Republic, Russia and the United Arab Emirates, and clients it works with directly in over 70 countries. We are convinced that Mapei's consolidated operations will allow

Profilpas to increase its presence abroad even more.

What other points do you think the two companies have in common, particularly in terms of corporate values?

Profilpas and Mapei are both family-run businesses inspired by tradition and family values. They are both very Italian in style as is reflected in the great passion and enthusiasm that have always guided us in our work.

CEO, Profilpas

subsidiaries falls in line with our strategy of growth through targeted acquisitions to strengthen our Group in terms of markets and products. Having two additional manufacturing facilities in Italy and Poland and working with local businesses will definitely make us more able to respond to market needs and work even more closely with our clients".

Professional solutions for floors and walls

Profilpas has been manufacturing technical/finishing profiles for floor and wall coverings made of ceramics, marble, wood, laminate, LVT and carpet since 1976, conforming to the strictest quality standards. Its catalogue also includes profiles and listello tile trims for floors and walls, skirting boards, bathroom systems and shower drainage channels, light profiles, and profiles for balconies, terraces and stairs. Its range of materials for the various designs is equally extensive: from aluminium

and stainless steel to brass and PVC. Thanks to these characteristics and their elegant versatility, Profilpas solutions are used in residential buildings, hotels, offices, hospitals, schools, health and beauty spas, and ships. The Profilpas Group manufactures in Italy and Poland at its two

sites in Cadoneghe and Kutno and has branches in France, Spain, Portugal, Germany, the Czech Republic, Russia and the United Arab Emirates. Over the years, the company has developed a network of over 17,000 distributors worldwide.

Marco Squinzi, CEO of Mapei, emphasised that "Thanks to the exclusive range of Profilpas solutions, Mapei will be able to extend its range of installation products with additional designer products, so that it can serve professionals and distribution partners even more effectively".



IN THIS PAGE.

Top of the page: the Profilpas's manufacturing plant in Cadoneghe (Italy). In the middle, a stage of the production process of profiles. Below, Glass Profile, stainless steel profiles for floor-level showers, and PP Drain Aqua, linear floor-level shower drain.

Even apple fibers used for 'green' flooring

MAPESTONE GR-ECO AND ULTRACARE: MAPEI INNOVATION ON SHOW AT MARMOMAC INTERNATIONAL TRADE FAIR FOR STONE MATERIALS

We are going backwards to move forwards. This year's edition of Marmomac (26th-30th September in Verona), the international exhibition dedicated to the stone materials industry, has returned to pre-pandemic levels registering 47,000 professionals in attendance (+49% compared to 2021) and 1,207 exhibiting companies. The event's international vocation was once again reconfirmed: 63% of visitors came from outside Italy for a total of 132 nations, while 60.5% of exhibitors came from 47 different countries.

These results are certainly an indication of just how healthy the Italian stone materials industry is or at least was until recently. In 2021, Italy's exports of stone materials, machinery and technologies in this industry increased by 20% for a total value of almost 3 billion euros, while in the first six months of 2022 growth was con-

finied to +9.4%, due to issues related to raw materials and high energy prices.

Mapei could not afford to miss such a key exhibition in this crucial sector of the building industry.

MAPESTONE GR-ECO: apples and the future

"Sensational", "Incredible", "this is the future" are how professionals attending Marmomac commented on the latest "new entry" in the MAPESTONE line of products for architectural stone floors: MAPESTONE GR-ECO, a cement-free, pre-blended grout for architectural stone paving with filtering properties for pedestrian and light vehicle use. The novelty lies in its formula: instead of cement, it is made from apple fibres and mineral aggregates. This means a reduction in the CO₂ emissions by up to 95% compared to conventional cementitious

slurries. This highly sustainable product has already aroused plenty of interest among landscape architects, so that it is now included in the specifications of numerous projects for squares, streets and green areas.

So, it is hardly surprising that MAPESTONE GR-ECO was given pride of place at the Mapei stand at Marmomac. Its natural raw materials were highlighted by the presence of an apple tree and lots of apples were handed out as gadgets.

This was not the only product from the MAPESTONE range to make its mark. Others included MAPESTONE JOINT, a solvent-free, one-component polyurethane binder for grouting joints of setts, blocks and pebbles to create flexible and pervious architectural stone floors that drain easily and are highly durable, and MAPESTONE CALCIX system including mortars made from natural hydraulic lime and inorganic Pozzolanic materials that are designed for creating and renovating stone paving, especially those of historic importance.

ULTRACARE: care after installation

Another part of the stand showcased a wide range of products Mapei has developed for the installation of stone materials: products for the preparation of substrates, waterproofing agents, adhesives, grouts and sealants. An example? MAPESIL LM, a neutral, mould-resistant silicone sealant specifically designed for materials sensitive to acids and plasticising agents (marble, granite, sandstone and quartz). Its chemical properties prevent surface bleeding or the migration of plasticising agents which would otherwise stain the stone, so they keep looking good for longer.

But the real novelty this year that instantly caught the eye of visitors was the ULTRACARE range of products for protecting, cleaning and maintaining stone surfaces. The products were there "in person" at Marmomac on a special display stand that is available at the sales points of distributors of building materials. A special section of the stand that attracted lots of professionals was, in fact, used to host demonstrations of the application of ULTRACARE products on stone slabs: the public thus got the chance to see and feel how effective and easy-to-use these products are.



IN THE FACING PAGE. The Mapei stand at Marmomac showcased products for architectural stone floorings and solutions for installing, cleaning and protecting stone materials.

ABOVE. The main attraction at Marmomac was MAPESTONE GR-ECO, a grout for stone floors, whose formula is cement-free and apple fibre-based.



VAGA with its own green corner

Also present on the Mapei stand was VAGA, a subsidiary of Mapei Group and producer of special sands and aggregates. For the occasion, dedicated display panels and product samples were used to highlight the "fruits" of the company's commitment to sustainability: a line of silica-free and eco-compatible synthetic abrasives for special applications (Greentex, GreenGarnet and Greenjet) and two ranges of eco-friendly aggregates, SANDEX and GRAVELEX, by-products from the production of low-alloy steel in electric arc furnaces. All the products of these lines come with an EPD (Environmental Product Declaration).



2022 Landscape Festival

MAPESTONE GR-ECO FOR THE GREEN SQUARE IN BERGAMO DESIGNED BY CASSIAN SCHMIDT

Organised by Arketipos Association in partnership with Bergamo City Council and having now reached its 12th edition, the "Landscape Festival – The Landscape Masters" was held as usual in Bergamo from 8th -25th September.

A not-to-be-missed international event in the realm of landscape design attracting 270,000 visitors from 15 nations and 4 continents, the Landscape Festival is one of the most important meeting, training, technical updating and exchange of experiences event for everybody involved in promoting the landscape culture and everything associated with it.

Mapei has been a Main Partner of the festival for several years, so this year it was keen to showcase its latest product in the field of sustainability: MAPESTONE GR-ECO "the apple-fibre based trailblazer", in the event's main setting, the Green Square (centrally located Piazza Vecchia), which was transformed into a luxuriant green area for 3 weeks.

The 2022 Green Square was jointly designed by Cassian Schmidt, an internationally renowned plant designer, and Weihestephan-Triesdorf University of Applied Sciences in Freising (Germany), a globally recognised Faculty of Landscape Design, whose exclusively green, innovative and practical approach to education includes courses focused on subjects related to nature and the environment



The stone paths were grouted with MAPESTONE GR-ECO.

MAPEI LANDSCAPE TALK

In the event's main setting beneath the porticoes of Palazzo della Ragione in Bergamo overlooking the Green Square, the 2022 Mapei Landscape Talk event was held entitled "The Stones and Nature of Redeveloped Piacentinian Centre". The talk show gave Flânerie architectural designers the chance to tell their own story: the architects taking centre stage were Luigino Pirola, Maria Claudia Peretti, Simone Zenoni, Carlo Peretti, Gianluca Gelmini, and Elena Franchioni. A unique opportunity to find out about all the project's key points together with the people who designed it and also a chance to become familiar with Mapei's own innovative contribution (through products from the MAPESTONE line) to the redevelopment of one of the most important areas in Bergamo: how the project is experienced and used by the local people; environmental, economic and social sustainability; durability; decorum; and making the most iconic place in the 'lower city' as pleasant as possible.

At the end of the talk show, the project using MAPESTONE GR-ECO "the apple-fibre based trailblazer" was presented and displayed in the square, undoubtedly the most innovative and sustainable product currently available for landscape design and outdoor pedestrian and light-road traffic paving with a powerful vocation for naturalness and compatibility with green areas.



Stone pavings installed on gravel and grouted with MAPESTONE GR-ECO ran across the installation so visitors could enjoy an immersive experience as they moved from the outside to the inside of the forest

MAPESTONE GR-ECO

The result of ongoing Research & Development work, MAPESTONE GR-ECO is a pre-blended grout with a vegetable fibre binder: innovative and sustainable, it uses fibres obtained from waste apple peel left over from juice manufacturing. It is cement and lime free with CO₂ emissions reduced by 95% compared to a conventional cementitious slurry. It is the ideal solution for grouting joints of paving with filtering properties in all landscape design settings where meeting nature-related requirements is vital, such as parks, gardens and green areas.



ranging from science and art to high-tech and Land Art. The theme of the 2022 Green Square was the Forgotten Landscape, drawing attention to issues concerning more sustainable and conscientious urban design of the future, with the aim of helping us discover how the landscape influences and guides us and how, on a landscape level, we need to work from the landscape in which we find ourselves in order to emphasise and reinforce the origins of places, their Genius Loci.

The installation was actually designed to revive the old landscape that once surrounded the city of Bergamo: the riparian forest, a complex and dynamic system that once surrounded the area across the fertile Po plain along the River Po, the most distinctive feature of the landscape in Lombardy region. The route followed this partly lost ecosystem: natural islands occupying Piazza Vecchia, crossed by the River Po, with its source lying in Bergamo Baptistery. To allow people to enter and immerse themselves in this open-air work of art, stone paths laid on gravel and grouted with MAPESTONE GR-ECO ran across the installation so visitors could enjoy an immersive experience as they moved from the outside to the inside of the riparian forest. MAPESTONE GR-ECO turned pebbles from the banks of the River Po into a pebble path that collects water and gives it back into the ground while, at the same time, providing an easy pathway to and from the river.

20 years of Mapei Croatia

An increasingly decisive role in the infrastructures industry

JOZO GRGIĆ, GENERAL MANAGER OF MAPEI CROATIA:
OUR BRAND IN MAJOR PROJECTS FOR RENOVATING
AND BUILDING VIADUCTS, BRIDGES AND TUNNELS

On 1st January 2023 Croatia will join the eurozone. What does this mean for the Croatian economy and for the building industry in particular?

I believe that the introduction of the Euro will benefit Croatian citizens, Croatian economy, and Croatian society in general. Entering the Euro area results in the elimination of the currency risk and foreign exchange costs in trade with other European Union countries, which also encourages foreign direct investments. Expected decrease in interest rates will allow the availability of cheaper financing for domestic companies as well as increase the possibility of financing new projects through the capital market. We can expect an improvement in the Croatian credit rating, which will work as a positive stimulus to attract investments. The improved business environment is expected to attract a larger number of foreign investors to enter the Croatian market, providing incentives for the construction industry and overall economy. Improved financing conditions will encourage all domestic investors, led by the State, to get involved into new investments with more confidence. Additional momentum is expected for the infrastructure projects (as

for both new constructions and renovations), which had a significant setback in 2022.

As for tourism, we expect investments in refurbishment projects of accommodation facilities to raise their quality and maintain or improve their standard levels. Projects related to energy efficiency improvement are also gaining strong momentum due to the possibility of subsidised investments offered by EU funds, resulting in an increase of projects related to the renovations of public, commercial and residential complexes and private houses, as well as to the construction of low-energy buildings. All this provides an answer to the question of what will happen in the years to come and presents us with challenges that I am sure we will be able to face.

Tourism is an important part of the Croatian economy and accounts for around 20% of GDP: is it also an important sector for Mapei? What projects is the company involved in?

Tourism is one of the main contributors to the Croatian GDP and a main source of economic activities, including those in the construction industry. For example, during the first seven months of



2022, Croatia registered 10.3 million tourist arrivals and recorded 54.3 million overnight stays. It is also an important field for Mapei Croatia as we have been always involved in the most important building and renovation projects ranging from small family rental houses and hotels up to special hotels such as the Heritage Hotel Life Palace in Šibenik and large tourist complexes such as Zaton Holiday Resort. We are proud to have gained business relationships and cooperation with Croatian market leaders in the tourism industry such as the Valamar, Maistra, Falkensteiner groups and international hotel chains such as Sheraton and Hilton.

Infrastructure is another crucial factor in growing the economy: Pelješki Bridge was recently opened and could solve transport problems in the Dubrovnik region. What does this sector mean for Mapei and what are the opportunities for boosting its involvement in major works?

Being the market leader in infrastructure projects is something we are proud of. The most important projects cannot be done without us, especially in the field of the concrete repair of viaducts and bridges. Although we only played a minor role in the Pelješki bridge project, we were involved in the building of the tunnel connecting with the Pelješki bridge as for supplying products for concrete protection and for the final coating of the tunnel surfaces. We are also involved in the most important ongoing tunnel construction project in Croatia: the Učka tunnel (in Istria), where we are



Mapei Croatia's headquarters are based in Sveta Nedelja, in the Zagabria region.

supplying waterproofing agents and admixtures for concrete. For us, it is important to take part in large construction projects such as infrastructures, because they always have an extremely important role for the country. Several opportunities to increase our engagement in large-scale projects are provided, as I mentioned earlier, by tunnelling, water supply and sewerage projects, with the latter being a new niche in which we have many excellent solutions to offer the market.

“ Another of our goals is to boost our presence in tourism, a key industry for the country's economy

A well established relationship with the industry professionals

Mapei began operating in Croatia in 2002 distributing chemical products for the national building market. Mapei Croatia Ltd was first established in 2007 and then a logistics centre was opened in Kerestinec, near Zagreb, in 2009: events that really helped Mapei break onto the Croatian market and boost its sales. Now the subsidiary, which only employed 2 members of staff in the beginning, has 42 employees and can claim to be the leading building chemistry company on the Croatian market. A team of technicians and sales assistants work all over the country daily in direct contact with professionals of the construction industry. Mapei Croatia technicians regularly attend seminars, customer presentations and professional training courses. The company also enjoys an intense cooperation with Facul-

ties of Civil Engineering and Architecture through lectures and practical trainings at the Universities of Zagreb, Rijeka, Osijek and Split. Training sessions also involve visits to building sites, including those in areas damaged by the earthquakes and making use of FRCM materials supplied by Mapei.

Thanks to the strong bonds between the subsidiary and the leading players in the industry, the support provided by the mother company, and the possibility of being able to count on technologically cutting-edge products, since 2022 Mapei Croatia has progressed from just supplying products for installing ceramics and natural stone to meeting all kinds of requirements for every type of building operations all over the country. And these solid foundations certainly augur well for future growth.

“Products for cementitious and resin floors and materials for the marine industry are also part of our development plans

In 2020, Croatia was hit by violent earthquakes. What stage have reconstruction operations reached and how is Mapei involved?

In fact, in 2020 two major earthquakes hit Croatia: the former (the strongest one in the previous 140 years) in March hit Zagreb, and the latter, stronger than the former, hit an area 60 km far from Zagreb including the cities of Petrinja and Glina, while affecting quite strongly Zagreb as well and causing further damages.

Both earthquakes strongly affected all citizens and this happened during the Covid-19 crisis. Mapei Croatia technicians were available at the locations hit by the earthquake from the first day, providing the necessary technical support. Mapei S.p.A.'s long experience in post-earthquake reconstruction, especially in Italy, helped us to create a strategy with specific solutions for professionals. Our know-how helped many civil engineers, designers, and construction companies to start the reconstruction process. Besides, we shared our knowhow and experience with the whole academic society, which was priceless for all those involved during those difficult times. We took part in reconstruction projects from the very beginning, and today we are still being involved in the most important projects as for the renovation of important, landmark churches and public buildings, residential complexes, and private houses.

Which sections of the building industry does Mapei plan to focus on in order to continue growing?

Mapei Croatia will continue to focus on all segments of the building industry where it has already gained the position of market leader and built strong relationships with its partners, especially in the renovation projects. We also see potential for growth in infrastructure projects. Additionally, we will focus more strongly on sectors where we haven't been significantly present in the past, such as the segments of cementitious and resin floorings and solutions for the shipbuilding industry. Even if we are already present in these segments, we still have strong potential for improvement due to the complete range of products that Mapei can offer as for these sectors.

20 Years of success in every department

Last June, Mapei Croatia celebrated 20 years' business in the local building industry. It wanted to dedicate a special day to this important milestone, first and foremost to thank its staff for their hard work that has been decisive in achieving so much success. So, each department team was given a mug in the shape of a cube (reminiscent of the Mapei "cubes") in turn made up of 20 smaller cubes symbolising the number of years Mapei Croatia has been operating. Each department was also given a special nickname in recognition of their day-to-day commitment: for example, the sales staff were jokingly called "the road heroes", the Finance and Controlling staff were nicknamed "the real problem solvers" and the customer service staff referred to as "nerves of steel". The General Manager, Jozo Grgić, received a special award for his contribution to Mapei Croatia's growth from when it was originally founded to the present day, while Severin Čamdžić, maker of a very popular video about Mapei epoxy joints, was awarded the "Youtube star" prize.



During the whole 2022, Mapei Croatia is devoting plenty of activities to its employees to provide them with a better working experience.

Mapei does not have a manufacturing plant in Croatia: which countries provide you with building materials?

Italy is, of course, our biggest supplier through our mother company, Mapei SpA. It is followed by Hungary, Germany, France, and Austria, but there are also some of our Croatian suppliers that supply the rest of the Mapei Group.

Marketing is increasingly strategic in the company's plans: what projects are you undertaking to boost the Mapei brand?

Strengthening our brand is one of the most important activities we engage in. In the last 20 years, we have built a strong brand that has helped us connecting with existing customers, reaching out new ones, and encouraging loyalty and recognition. Professionals, as well as "ordinary" people, know that they can always turn to us and receive the best possible support. We go on promoting our brand content on social media and on *Mapei Svijet*, the company magazine that we have been publishing 3 times/year since 2005, which is something that sets us apart from the competitors

and makes us very recognizable on the Croatian market.

What are you doing to attract talented and qualified staff to the company?

We invest in relationships with educational institutions such as the Faculties of Civil Engineering and Architectures of several Croatian universities, but also with professional schools in order to present ourselves to future tile installers, for example. We also participate in students job fairs where we can find new talents who want to gain experience in their future profession. Our comprehensive onboarding process trains new employees and quickly integrates them into our team, providing them with opportunities to develop through a mentoring program and internal training sessions. We constantly work to provide the right environment for employees and meet their own needs while working towards our business goals. We are confident that a healthy company culture will allow us to retain our employees and create an attractive space for new talents.

Active in cycling and triathlon

Mapei Croatia is also very active in the realm of sports: last September, the subsidiary's entire team took part in the B2Run cycling race, one of the most popular business cycling events in the country. The idea behind this initiative was to promote a healthier lifestyle among staff and boost the team spirit. This year also saw the start of a sponsorship deal with Swibir Triathlon Club, a sports association that has enjoyed plenty of success in Croatia. The triathlon is, in itself, a very dynamic sport whose aim is not so much to defeat your opponent as to overcome your own limits by relying on your endurance, ability to adapt and determination. The similarity with Mapei's corporate values (dedication, teamwork, taking on new challenges) is the main reason why Mapei Croatia decided to begin this partnership which results in Giorgio Squinzi's motto "Never stop pedalling" being officially adopted by Swibir Triathlon club.

MAPEI CROATIA

2002
THE YEAR IT WAS FOUNDED

42
EMPLOYEES

200
DIRECT CLIENTS
(+ AROUND 3,500 TRADERS/ ENTERPRISES USING MAPEI PRODUCTS AND ABOUT 300 ARCHITECTS, DESIGNERS, SUPERVISORS INVOLVED IN MAPEI ACTIVITIES)

9.2
MILLION EUROS
TURNOVER IN 2021

11.5
MILLION EUROS
EXPECTED TURNOVER IN 2022



From left to right: Nika Bošnjak, Maja Bonačić and Paula Vrdoljak (Swibir Triathlon Club), the Croatian team that won the national championship in sprint cross duathlon.

Novalja

Cultural centre

SOLUTIONS FOR DIFFERENT KINDS OF WORKS: FROM WATERPROOFING SYSTEMS TO LONG-LASTING RESIN AND WOODEN FLOORS



The Novalja Cultural Centre is a multifunctional complex with versatile spaces. It occupies two floors, with the ground floor hosting the entrance area, a multipurpose hall, an exhibition space and a bar, as well as various service areas. On the first floor, on the other hand, there are the centre's offices and spaces dedicated to the city's cultural associations.

Waterproofing for the foundations and underground structures

During the construction work on the centre, the foundations were waterproofed with solutions supplied by Polyglass (Mapei Group), such as POLYDREN PP 800 non-woven geotextile, which is applied on concrete substrates to create a compensation and levelling layer to neutralise the effect of irregularities in the substrate on the layer of MAPEPLAN UG 20 PVC-P synthetic membrane applied afterwards.

Some of the vertical surfaces were also waterproofed with MAPEPLAN UG 20, which was applied up to a height of 0.5 m above the ground and then welded to MAPEPLAN METAL SHEET, a zinc steel sheet having the surface laminated with MAPEPLAN PVC-P waterproofing membrane. The joints and details were sealed with MAPESIL AC acetic, silicone sealant.

The entire system was then protected with another layer of POLYDREN PP 500 before placing a layer of concrete and, on the concrete, a slab made from fibre-reinforced concrete. The vertical surfaces were thermally insulated with POLYFOND KIT, a protective system made from high-density extruded polyethylene (HDPE), which is ideal for protecting the waterproofing layer on underground structures or earth retaining structures in general.

Waterproofing roofs

The roofs of the structure were insulated and waterproofed with POLYVAP RADONSHIELD P-AL elastomeric-plastomeric polymer distilled bitumen waterproofing membrane to create a vapour and radon gas barrier. XPS panels were applied on the barrier to ensure thermal in-

LEFT. The new cultural centre in Novalja provides multipurpose spaces completed with Mapei solutions for various types of application.



MAPEFLOOR SYSTEM 33, a self-levelling epoxy system, was used to create highly resistant resin floorings.

sulation followed by a separation layer made from POLYDREN PP 300 non-woven geotextile. The PVC-P synthetic waterproofing membrane MAPEPLAN B 15 was then applied thereupon. The vertical hems in the waterproofing membrane were welded to the wall-mounted sheet-steel profiles with MAPEPLAN METAL SHEET and then sealed along the upper edge with MAPEFLEX MS 45 sealant and adhesive.

MAPEPLAN D 15 synthetic waterproofing membrane in PVC-P was used for the details and features. POLYDREN PP 500 non-woven geotextile was used to create a compensation and separation layer and a screed was placed on this layer.

The waterproofing system for the roof was completed by applying AQUAFLEX ROOF PLUS liquid membrane reinforced with MAPETEX 50 non-woven fabric.

Decorative solutions for resin floors

The client specified that the floors on the first floor had to be durable but highly decorative. The choice went to MAPEFLOOR SYSTEM 33, a self-levelling epoxy system used to make floor coatings with a highly aesthetic finish, that are highly resistant to chemical products, frequent cleaning operations, oil and aggressive substances and impermeable to oil.

The substrate was ground with diamond discs and any dust was removed with a vacuum cleaner. The surface was then treated with PRIMER SN epoxy primer and lightly broadcast with QUARTZ 0.5. Once the primer had set, a coat of MAPEFLOOR I 300 SL epoxy formulate was applied which has excellent mechanical characteristics and avoids Radon gas from penetrating into the building. The product was mixed with MAPECOLOR PASTE to obtain the colour specified by the client.

The next step was to create a 3 mm thick self-levelling flooring. Once this layer was dry, expansion joints were created and sealed with MAPEFLEX PU 45 FT. The last step was to treat the surfaces of the floors with a coat of MAPEFLOOR FINISH 58 W aliphatic polyurethane finish.



Parquet for the multipurpose hall

Oak parquet flooring made up of 300 x 20 x 2.1 mm elements with a density of 650 kg/m³ was chosen for the large multipurpose hall. The substrates were consolidated with ECO PRIM PU 1K polyurethane primer. The parquet was bonded in a herringbone pattern using ULTRABOND P990 1K one-component, solvent-free, elastic polyurethane adhesive with very low emission of volatile organic compounds (VOC). The joints and any uneven areas in the floor were treated with ULTRACOAT BINDER mixed with sawdust. ULTRACOAT UNIVERSAL BASE basecoat was then applied on the parquet before buffing the surface and applying two coats of ULTRACOAT HT 2K water-based polyurethane varnish with very low emission of VOC, particularly suitable for finishing off wooden floors subjected to intense foot traffic, as in this case.



The large multipurpose hall on the ground floor has wooden flooring bonded with ULTRABOND P990 1K and varnished with ULTRACOAT HT 2K.



Find out more
ULTRACOAT HT 2K

TECHNICAL DATA

Cultural centre, Novalja (Croatia)

Period of construction: 2020-2021

Period of the Mapei intervention: 2020-2021

Intervention by Mapei: supplying products for waterproofing foundations and roofs, laying resin floors and parquet

Design: Jurcon projekt d.o.o., Zagreb

Owner: Novalja city council

Contractor: Kameni zid d.o.o., Drniš

Project manager: Ivan Baljkas

Mapei distributors: B Keramika, Dubrovnik; Petrić Gradnja d.o.o., Zadar

Mapei coordinator: Antonijo Jukić, Mapei Croatia

MAPEI PRODUCTS

Waterproofing foundations:

Polydren PP 800*, Polydren

PP 500*, Mapeplan UG 20*, Mapeplan PVC P*, Polyfond Kit*, Mapeplan VB PE 0,3*, Mapeplan Metal Sheet*

Waterproofing roofs:

Polyvap Radonshield*, Mapeplan B 15*, Mapeplan Cleaner*, Mapeflex MS 45, Mapeplan D*, Polydren PP 500*, Aquaflex Roof Plus, Mapetex 50, Mapeplan B 15

Laying resin floors: Primer SN, Quartz 0.5, Mapefloor I 300 SL, Mapecolor Paste, Mapeflex PU 45 FT,

Mapefloor Finish 58 W **Installing wooden floors:** Eco Prim PU 1K, Ultrabond P990 1K, Ultracoat Binder, Ultracoat Universal Base, Ultracoat HT 2K

* These products are manufactured by Polyglass, a subsidiary of the Mapei Group

For further info on products: mapei.com and mapei.hr

Hvar

Palace Elisabeth Hotel

A COMPLEX RENOVATION OPERATION FOR THIS HISTORIC HOTEL FINANCED AT THE END OF THE 1800'S BY SISI, EMPRESS OF AUSTRIA



LEFT. The Palace Elisabeth on the island of Hvar is a 5-star hotel located within a complex dating back to the end of the 1800's, renovated with cutting-edge solutions.

The island of Hvar is a particularly desirable holiday destination for tourists because of its record annual hours of sunlight (2724) and its exclusive hospitality attractions featuring some of the most elegant hotels, restaurants and bars of the Croatian islands.

These include the Palace Elisabeth Hotel, which rose from the "ashes" of the ancient Ducal Palace built in the XII century during the era of Venetian dominance and then rebuilt in the XVI century. The hotel owes its rebirth to the transformation of Hvar into a winter tourism hotspot focusing on medical care. The idea behind it was to create the first modern hotel dedicated to healthcare according to the principles of the Health Society founded in Hvar in 1868. The Ducal Palace was demolished in 1881 and, in its place, a new hotel was built in 1898, thanks to funding

generously donated by Elizabeth, Empress of Austria, the famous "Sisi". So, it is no coincidence that, when it opened in 1899, it was named the Kur-hotel Kaiserin Elisabeth, or the Empress Elisabeth Spa Hotel.

Since then, the hotel has become a favourite port of call for Austrian, German, Czech and Hungarian tourists. The complex was then extended and modernised to its current look in 2019, maintaining lots of the architectural and design features typical of the Venetian and Austrian eras and its original name.

A new lease of life for the hotel with innovative products

Mapei Croatia, the Croatian subsidiary of Mapei Group, participated in the renovation work on the hotel between 2017 and 2019, supplying solutions for various areas of use. The existing masonry needed to be

waterproofed but, because of problems of accessibility, it could not be applied externally. A system that could be applied from the inside had to be chosen, which meant removing the render and then cleaning the substrates so that the bond between the products applied afterwards would not be compromised. The products included MAPEGROUT 430 fibre-reinforced thixotropic mortar to level off concrete surfaces, PRIMER 3296 acrylic primer to consolidate the surfaces and MAPELASTIC FOUNDATION flexible cementitious mortar, particularly suitable for waterproofing concrete surfaces subjected to positive and negative water pressure.

In the older part of the hotel, a new floor slab and new concrete walls were built and then waterproofed with two layers of PLANA P elastomeric-plastomeric polymer distilled



bitumen membrane, after treating the substrates with IDROPRIMER bituminous primer, used as an adhesion promoter. PLANA P and IDROPRIMER are both manufactured by Polyglass, a subsidiary of Mapei Group.

Design for the swimming pool

The renovation works also included installation of a new indoor swimming pool. Once the concrete shell had been completed, the surfaces were levelled off with PLANITOP FAST 330 fibre-reinforced cementitious mortar, particularly suitable for levelling off substrates to make them ready after a very short time to receive ceramic tiles or, as in this case, mosaic. The mosaic tiles were grouted with KERAPOXY DESIGN decorative epoxy grout (later superseded by KERAPOXY EASY DESIGN)

which guarantees a high level of hygiene, excellent mechanical properties, smooth finish, durability and resistance to chemicals.

In the toilets, on the other hand, the joints of the ceramic coverings were grouted with black-coloured ULTRACOLOR PLUS, high-performance, anti-efflorescence mortar to create a uniform surface finish and to match the colour of the ceramic tiles.

Thanks to the high-quality solutions employed for all the work, the Palace Elisabeth is now a 5-star hotel with modern services and, at the same time, well up to the standards of its long and prestigious history.



Find out more
KERAPOXY EASY DESIGN

ABOVE. The substrates of the hotel's new swimming pool were levelled off with PLANITOP FAST 330 and the joints of the mosaic covering were grouted with KERAPOXY DESIGN epoxy mortar (later superseded by KERAPOXY EASY DESIGN).

TECHNICAL DATA Palace Elisabeth Hvar heritage hotel, Hvar (Croatia)

Period of construction: 1898

Period of renovation: 2017-2019

Period of the Mapei intervention by Mapei: supplying products for preparing and

waterproofing substrates of walls, slabs, as well as grouting joints in the swimming pool and bathrooms

Design: Neda Balog Dolečki, Zagabria

Owner: Sunčani Hvar d.d., Hvar

Contractor: Kvantum d.o.o., Prelog

Mapei distributor: TSH d.d., Čakovec

Mapei coordinators:

Fausto Ferlin and Antonijo Jukić, Mapei Croatia

MAPEI PRODUCTS

Preparing substrates: Planitop Fast 330, Mapegrout 430, Primer 3296

Waterproofing: Idroprimer*, Plana P*, Mapelastical Foundation
Grouting joints: Kerapoxy

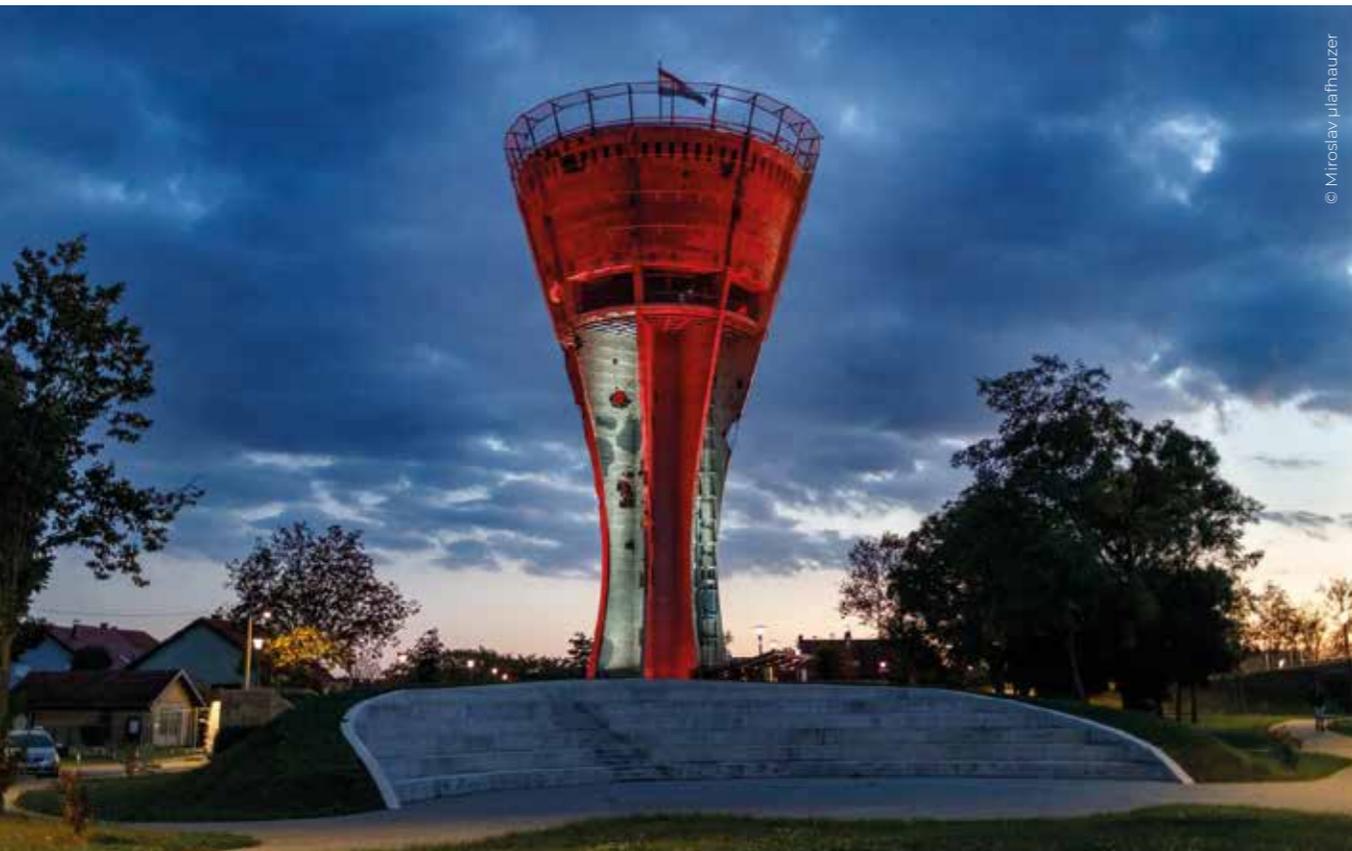
Easy Design, Ultracolor Plus

* These products are manufactured by Polyglass, a subsidiary of the Mapei Group.

For further info on products: mapei.com and mapei.hr

Projects across the board

FROM RENOVATION WORK ON HISTORIC BUILDINGS TO NEW PROJECTS:
WHERE MAPEI PRODUCTS HAVE BEEN USED



© Miroslav Julaufhauzer

Water tower, Vukovar

Constructed between 1963 and 1968, the tower has become a symbol of the city of Vukovar and its resistance during the Homeland war (1990-1995) when it was hit 640 times. It was lately converted into a museum with a restaurant. PLANITOP SMOOTH & REPAIR R4 was used to repair the structure's reinforced concrete shell and then the surfaces were finished off with MAPECOAT TNS FINISH. MAPEFIX VE SF, MAPEFILL, EPORIP and PLANITOP SMOOTH & REPAIR R4 were used to strengthen the structure. The challenge of waterproofing the roof was overcome thanks to PURTOP EASY and MAPEBAND, after treating the substrates with PRIMER SN and MAPEDECK PRIMER 200. The resin floors in the restaurant were created using MAPEFLOOR COMFORT AR/X elastic, flexible, self-levelling system.

Bridge and overpass at the Jankomir interchange, Jankomir

The bridge and overpass at this interchange were showing signs of degradation due to the atmospheric conditions and the use of de-icing salts. The damaged concrete on the upper sections of the bridge were repaired with MAPEGROUT T60 thixotropic mortar. A new waterproofing layer was then created using MAPELASTIC flexible membrane. The damaged areas of concrete in the lower part of the overpass were removed before protecting the reinforcement rods against corrosion with MAPEFER 1K. All the repaired concrete surfaces, including those of the piles, were protected with ELASTOCOLOR PAINT anti-cracking, elastomeric paint with high resistance to chemicals.



National theatre, Split

The National Theatre of Croatia opened its doors to the public in 1893 and underwent restoration work in 2020. In the foyer, after removing the render and some of the stone elements from the east walls, the substrates were treated with PRIMER 3296 acrylic primer. The stone elements were repositioned using a mixture of natural lime and MAPE-ANTIQUÉ ALLETTAMENTO before applying PLANITOP HDM RESTAURO fibre-reinforced mortar. MAPEGRID G 220 glass fibre mesh and a further layer of PLANITOP HDM RESTAURO were then applied to complete the strengthening work. Localised cracking in other parts of the masonry was repaired using the same procedure, before levelling off the surfaces with PLANITOP HDM RESTAURO and applying MAPEWRAP C BI-AX balanced, high-strength, bidirectional carbon fibre fabric. The final step was to apply a layer of MAPE-ANTIQUÉ STRUTTURALE NHL rendering mortar over the wall surfaces.



Sports centre, Zlatar Bistrica

This sports centre, which opened in May, 2021 following a fire that burned the old one to the ground, was completely rebuilt starting from the foundations which were waterproofed with products by Polyglass (Mapei Group). POLYDREN PP non-woven geotextile was used to form a compensation/protection layer for MAPEPLAN UC waterproofing membrane, while the details and features were sealed with MAPEFLEX PU 45 FT.



Faculty of medicine, Zagreb

The Faculty of Medicine at the University of Zagreb, established in 1918 and one of the oldest in Croatia, was hit by the earthquake in 2020. Renovation work on the complex included the use of several solutions from the MAPE-ANTIQUE line for restoring masonry and a structural strengthening and seismic upgrading system based on FRCM (Fibre Reinforced Cementitious Matrix) materials. The system included the use of PLANITOP HDM RESTAURO mortar, MAPEGRID C 170 carbon fibre mesh, MAPEWRAP C FIOCCO carbon fibre cord, MAPEWRAP 31 epoxy adhesive and MAPEFIX VE SF adhesive for chemical anchors.

FOR THE BEST LOOKING BALCONY,
ONLY THE BEST WATERPROOFER WILL DO.



Everyone likes to add a personal touch to their balcony, but you also need to choose the correct eco-sustainable products, if you want to waterproof it both safely and permanently. There's no better solution than **Mapei's range of elastic cementitious waterproofer**s to protect your home.



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Parquet as a designer furnishing product

EXPERTS EXCHANGE VIEWS AT A SEMINAR HELD IN MILAN ENTITLED "WOODEN FLOORING: THE PRESENT RECAPTURING THE PAST"

Wood. A material that evokes ancient traditions but is also an integral part of our daily lives, found in the buildings in which we live, for example, as a raw material in our floors. And it was precisely to parquet, its history and its future, that Mapei decided to devote a training event and meeting on 1st July.

The Mapei auditorium in Milan opened its doors to the leading players in the wooden flooring industry (representatives from institutions, businesses, associations and magazines), who met to discuss various topics related to parquet.

The event was chaired by Angelo Giangliulo, Corporate Product Manager of the Mapei product line for wooden floorings, who also recalled Mapei's ongoing commitment in this important segment of the building industry. "A meeting that we organised not to present a new product line or talk about Mapei," so Giangliulo

stated, "but to take stock of our sector and our fine product in the company of people who know all about it and are constantly involved in this sector. In the year of Mapei's 85th anniversary, we are continuing our commitment to training, innovation, research and cultural interaction".

Challenges and opportunities for an expanding sector

The seminar began with an analysis of the current situation of the Italian building industry and of the wooden flooring sector conducted by **Francesco Doria**, Market Research Manager at Mapei SpA (Italy). Doria highlighted the fact that parquet has a 6.2% share on the flooring market which in 2021 reached a total size of 150,375 million m². Wooden flooring is the third largest market segment, after ceramic tiles and natural stones.

Since it reached a growth of almost +21% last year, Doria concluded that: "Overall, the prospects for the sector are good through to 2024".

The floor was then taken by **Renza Altoè Garbelotto**, Director in charge of the Edilegno/FederlegnoArredo Wooden Floors Group and CEO of the parquet manufacturer Garbelotto, who focused on benefits offered by parquet: "A product that increasingly embraces research, culture, beauty, fashion and design. Parquet is no longer just a type of floor; it is now a furnishing accessory. No other floor covering offers customisation possibilities comparable to those of a wooden floor".

A speech by **Lorenzo Onofri**, President of FEP (European Federation of the Parquet Industry) and

Speakers at the seminar. From left: Angelo Giangliulo, Renza Altoè Garbelotto, Lorenzo Onofri, Rita D'Alessandro, Fabio Braga, Francesco Doria. Mikaela Decio also spoke at the event.

CEO of Stile Società Cooperativa presented the audience with the current international scenario: the European parquet industry, which, after a stable 2020, then recorded 5.8% growth in sales, primarily due to how homes have been adapted to post-pandemic lifestyles. In addition to reiterating the important role of associations at this historic moment in time, Mr. Onofri focused on the purchasing habits of parquet consumers and the current availability of raw materials, such as oak, in Europe. "There is a need," he said, "to regulate the export of logs from Europe, but also to overcome cultural shortcomings on the part of distributors. We need to reinvent ourselves, carry out research, introduce innovation and come up with alternatives".

**9,250
MILLION M²
WOODEN
FLOORING
INDUSTRY
IN ITALY**



by **Renza Altoè Garbelotto**

RENZA ALTOÈ
GARBELOTTO, DIRECTOR
OF EDILEGNO/
FEDERLEGNOARREDO
WOODEN FLOORS
GROUP, SHARES HER
VIEW WITH US

THE INDUSTRY IS BEING HAMPERED BY DELAYS AND UNCERTAINTIES

What are your forecasts for the last few months of 2022 as regards the Italian parquet industry?

Unfortunately, we are beginning to experience a drop in orders. The outlook is not very promising: we are in a 'stalemate' caused by both political uncertainty and the chaos surrounding governmental incentives. Building sites are advancing at a sluggish pace and wooden manufacturers like us, who come into action at the end of the process, the last link in a chain in which a domino effect of delays has been triggered, end up bearing the brunt

of this. We are forced to delay the delivery of orders by many months. In fact, there are thousands of square metres of parquet in our warehouses just waiting to be delivered. Another problem encountered is a real lack of liquidity: an alarm bell warning us that we must pay attention to the issue of customer solvency. Although I find it hard to be a negative person, I must mention another worrying matter: so-called 'Made in Italy', of which I am a strong promoter, is very much at risk due to the increase in imports of products from foreign countries.

We often come across uncontrolled goods, whose production chain is a mystery and which frequently turn out to be of poor quality. To all this I must add the destabilising issue of high energy prices. I even wonder whether we will be able to keep all our production lines running. We will have to show real goodwill, for the sake of our staff and their families! We will have to do all we can, hoping that all the problems that have been plaguing us for months now will sort themselves out.

What lies ahead in 2023 for the

wooden flooring industry?

2023 will be a year full of uncertainties. I have a hard time making predictions and I think it is early days to make forecasts. My instinct tells me that once this conflict is over, everything will slowly get back to normal. With patience, goodwill and perhaps a government that is able to protect our companies and above all 'Made in Italy manufacturing and design.

How much have the incentives and bonuses provided by recent governments contributed to the growth of the parquet

market in Italy?

Allegedly, incentives have been good for everyone. But that's not exactly the way it is. The so-called "Bonus 110" has created several issues of its own and we are, indeed, now paying the consequences. However, the government led by Mario Draghi has shown that it wanted to continue in this direction with new incentives that definitely help our industry. We need to start talking more and more about parquet in terms of sustainability and the added value it also offers in terms of health.

WHAT THEY HAD TO SAY



Rita D'Alessandro
Standards Department, Edilegno/
FederlegnoArredo

"It is vital to know the rules of the game. Raising the bar at the level of European Union regulations means, first and foremost, protecting consumers and then national manufacturing".



Gaetano Milizia
Head of FederlegnoArredo

"We are convinced that wood creates healthier and more pleasant products and buildings. That is why we are doing everything we can to promote its use now and, even more so, in the future".



Fabio Braga
Florence Fine Arts Academy

"When you look at an antique wooden floor you study it in terms of installation techniques, its distinctive structural traits and properties, tiny imperfections, missing parts and moth-eaten elements. After studying it visually, you then touch and feel it".

The engineer Rita D'Alessandro from the Edilegno/ FederlegnoArredo Standards Office took stock of the standards regulating wooden flooring in Italy and abroad, such as UNI standards already published (UNI 11368), under development (UNI 1609878) or waiting to be revised (UNI 11265, UNI 11538-1, and UNI 11556). On a European level, Ms. D'Alessandro mentioned the EN 13647, EN 17456 and EN 17009 standards, also focusing on the testing method referred to in EN 17456 to work out the top layer delamination of multilayer wooden elements. In relation to standards under review, she pointed out that the limit of the delamination of top layers after ageing treatment referred to in EN 13489 is currently being debated by representatives of various European countries. On a global level, ISO standards related to wooden floors, including bamboo floors, were also mentioned.

**+7.4%
INCREASE IN
THE ITALIAN
MARKET SHARE
OF WOODEN
FLOORING FROM
2019 TO 2021**

Professor Fabio Braga, a wood technologist and associate professor at the Fine Arts Academy in Florence, then took those present on a fascinating journey to discover the origins of parquet flooring, highlighting the great variety of wood species used and the great skill of the craftsmen who make them.

With the help of images of great beauty, Braga showed how the art of wood craft was able to create masterpieces, such as the inlaid floor of Casa Bossi in Novara, the first painted wooden floors in 17th century England, decorative wooden panels, and the elegant Soubise and Aremberg parquet patterns, which were fashionable in the 19th century in France. Proceedings were closed by Mikaela Decio, Corporate Environmental Sustainability Group Leader, with a speech on sustainability, an increasingly important aspect for the parquet industry too. Ms. Decio recalled how Mapei constantly invests in Research & Development and innovation to reduce the environmental impact of its processes and products, increasing the quantity of recycled materials used in product formulations, reducing the amount of waste and offering solutions (including some for the installation of parquet) with low emissions of volatile organic substances (EMICODE ECT^{PLUS} certified) to guarantee good indoor air quality. In addition, Mapei provides certified documents such as EPDs (Environmental Product Declarations) for its products, as well as P.A.S.S (Profile and Aspects of Sustainability in Synthesis) specifically regarding its materials' contribution to more sustainable installation.

ECO ADHESIVES FOR QUALITY LIVING.



Mapei presents its one-component, silylated polymer-based adhesives, for perfect installation that guarantees a strong grip, quality and respect for the environment with every type of wooden flooring. **Ultrabond Eco S958 1K**, hard-elastic category - **Ultrabond Eco S Plus**, with no methanol emissions - **Ultrabond Eco S Lite**, lightweight adhesive with an extremely high yield.

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by Lorenzo Onofri

It's time to change

NEW SOLUTIONS NEED TO BE FOUND FOR A PRODUCTION SYSTEM MONOPOLISED BY JUST ONE TYPE OF WOOD (OAK)

What challenges is the European wooden floor sector currently facing?

In this particular period, a question of this kind makes me shudder because the challenges for our sector are not only difficult; I would hazard to say they are almost historic! This critical situation has highlighted a wooden flooring production system almost completely monopolised by one type of wood (oak) and very few alternatives within the structure. This situation continues to be normal until a state of necessity is created; and we have now reached that point. We have to try and find new types of wood, new materials for backing, new ways of communicating with consumers, new colours and finishes. Basically, we need to re-think wooden flooring as a product with a wider range of solutions. I believe there will be more products with just a thin layer of noble material, because of the cost and limited availability of raw materials, and that the choice will be extended to types of wood with knots, for a more rustic-effect look. This will compel us to make more effort in terms of marketing and communication to get these changes accepted through targeted information, such as the one FEP has been doing for some time with its Real Wood initiative, highlighting how important and sustainable it is to promote consumption of wood compared with many other products. And it will certainly be important that all manufacturers share in making these important choices in order to speed up and perfect the entire change process. The most difficult part is to start thinking differently. If we were all convinced that alternatives are possible, this transformation could be accelerated, at least partially. Instead, it seems to me that everyone is still trying to take things back to that idyllic state of just a few months ago, without realising that the reality is changing radically.

Are there problems finding raw materials in Europe for wooden floors?

The situation regarding the scarcity of raw materials and the subsequent increase in their prices started back in 2020. Then, in the first half of 2021 in particular, we witnessed a complete imbalance between supply and demand of all raw materials in general, and of wood in particular. It started with an increase in the price of pine and of "poor" materials for packaging and general

construction work, and then passed on to oak and panels.

Then this situation exploded in that, after almost two years in which the global economy was stagnant because of the pandemic, the ramp-up was characterised by very high demand in North America thanks to an explosion in the new residential construction sector (which notoriously needs a high amount of wood) and the scarcity of raw materials available (considering the minimum stock levels at the various points along the supply chain).

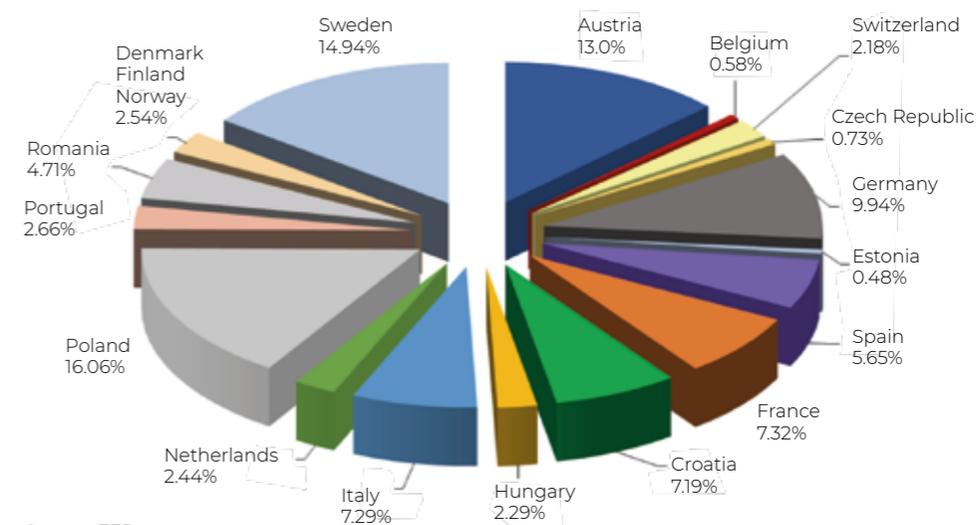
This triggered a speculation mechanism which then hit the entire global market. The war between Ukraine and Russia definitively changed geopolitical scenarios on a global level, forcing all economic and military powers (firstly USA, China, India and Europe) to take a hard look at their alliances and, above all, the "global economy" model that had been in place until just a very few months ago.

“Aesthetic taste is changing and so is the search for finishes and colours in keeping with the times

Because of the sanctions against Russia, European producers of two-layer wooden floors, which used mainly multi-layer birch as backing, found themselves without raw materials. Not only did Russian production of multi-layer birch supply almost half the backing panels needed for the European market, but basically almost 80% of birch, in a raw material sense, comes, or should we say came, from Russia. What is more, Ukraine is a very important European producer of oak and of flooring planks in particular. This war, even though it has not completely compromised production, has undoubtedly slowed down and reduced production capacity. As a result of all these factors the price of oak is still very high and alternatives for a large proportion of the supply, that previously came from Ukraine, are trying to be sourced from other markets such as France, Croatia, Hungary and Romania, triggering other issues

THE PRODUCING COUNTRIES IN EUROPE

(Data in % referring to wooden floors in 2021)



Source: FEP

regarding availability and prices, which are rising even further. These increases obviously can't continue forever because, at a certain point, demand will no longer follow the price rises.

Are there any countries where the wooden floor industry is growing more strongly and others where it plays a more marginal role? And if so, why?

Countries which traditionally have a high production of wooden floors are, firstly, Poland, Sweden and Austria, followed by other large European countries such as Germany, Italy and France. If we look at consumption, on the other hand, the situation is different. In this case we can see that the main consumers are obviously those countries with the highest population (Germany, France, Sweden, Italy), but the tendency to use wooden floors in percentage per inhabitant terms is undoubtedly higher in North European countries where, be it the availability of materials or because of climatic conditions, wood has always obviously been the main element used in the construction of private houses.

According to your research, what is it that most attracts consumers to wooden flooring? Have things been changing in recent years?

The amount of enjoyment consumers get from wooden floors is probably the same as they get from pizza, which is very high! This is demonstrated by the fact almost all non-natural flooring materials (ceramic, laminates, LVT) try to imitate the aesthetics of wood. Obviously actual wood cannot be completely imitated and that is why the more discerning consumers are not prepared to make compromises. It is appreciated for its warmth and naturalness, as well as for the sheer pleasure and sense of wellbeing that comes from "living" on it. And this feeling has not changed over time. What is changing is taste and, therefore, the search for finishes and colours that, in some way, are able to keep in step with the

“The scarcity of raw materials and rising prices are speeding up conversion processes in the sector

times and trends of the moment. So maybe there is less attachment to the natural aspect of a particular type of wood and more demand for particular formats and variegated colours. In the last few years, we have been seeing a return to herringbone-type patterns set at various angles and design floors that create a wonderful combination of traditional formats and patterns from a bygone age and more contemporary finishes. All in all wood, in spite of it being a classic, is still an exceptional material, unrivalled, continuously renewable (the only one!) and, above all, always contemporary.

FEP

The European Parquet Federation (FEP) brings together European-wide parquet manufacturers, national federations and suppliers in the parquet industry, representing them in institutional, legislative and commercial matters. Its main aim is to boost the image and enhance the value of parquet compared to other types of flooring. FEP is interested in every aspect of parquet from supply chains of raw materials to manufacturing, marketing and sales by collecting data across the territory, the promoting and follow-up of relevant European regulations, the organisation of a national congress, and the promotion of communication and interaction among its members. Mapei has been a member of FEP since 2008 and some of its representatives took part in the association's latest congress held on 9th-10th June in Hamburg (Germany).

President of FEP (European Federation of the Parquet Industry)

Mapei systems for every type of parquet

PROJECTS COMPLETED IN PRIVATE HOMES, HOTELS AND SPORTS COMPLEXES

Private home Broken Head – New South Wales, Australia

For the wooden floors in this private home, immersed in magnificent natural surroundings, the owner chose a type of eucalyptus wood called Messmate. A Mapei system was chosen to install the 170 x 15 mm planks, consisting of ECO PRIM T PLUS primer and ULTRAPLAN levelling compound for the substrates, before bonding the flooring with ULTRABOND P990 1K solvent-free, polyurethane adhesive with very low emission of volatile organic compounds (VOC). The surfaces of the flooring were then varnished with ULTRACOAT HIGH TRAFFIC varnish, now superseded by ULTRACOAT HT 2K.



Piccinni theater Bari – Italy

The wooden floors in the stalls, bathrooms, dressing rooms, boxes and attic in the theatre, the oldest in Bari, were recently renovated. Even though different types of wooden flooring were chosen for the different areas (three-layer oak laminate, solid engineered oak and solid oak with a tile-effect pattern), they were all bonded with the same product, ULTRABOND P902 2K, a two-component epoxy-polyurethane adhesive suitable for installing any type and format of wooden flooring. For the finish, the surfaces were treated with ULTRACOAT PREMIUM BASE basecoat and ULTRACOAT HT 2K two-component, water-based, aliphatic varnish to provide protection for the surfaces exposed to high levels of footfall.



Aldo Moro sports centre Saronno – Italy

This sports centre is dedicated to roller skating and is also used by the Italian skating team. The wooden floors, therefore, need to guarantee high mechanical properties, durability and resistance to wear, as well as have an attractive finish. And this is why they were re-varnished recently with a complete Mapei system consisting of ULTRACOAT PREMIUM BASE two-component basecoat, ULTRACOLOR SPORT COLOR acrylic paint with special pigments for the lines to mark out the rink and ULTRACOAT HT SPORT two-component polyurethane finish, specifically formulated to comply with the requirements of floors in sports centres.

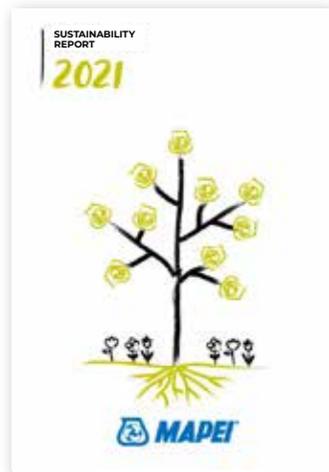
Fairmont Palliser hotel Calgary - Alberta, Canada

The oldest and most prestigious hotel in Calgary is the Fairmont Palliser which boasts illustrious guests, such as the current Canadian prime minister, Justin Trudeau, as well as refined features and luxurious interior decor. In 2019 Mapei Inc., the Canadian subsidiary of the Group, was involved in the restoration project on the hotel, which included the renovation of more than 700 m² of floor and wall coverings with new marble and wood. Going into detail, more than 400 m² of hardwood flooring was installed with ULTRABOND ECO 995, a premium adhesive distributed within the Canadian market by Mapei Inc. and chosen for its soundproofing properties and resistance to moisture.



Focus on Sustainability

THE SIXTH SUSTAINABILITY REPORT JUST PUBLISHED DEALING WITH MAPEI SPA AND THE GROUP'S EUROPEAN SUBSIDIARIES



The Mapei Group is growing in terms of income and the number of staff. Its commitment to sustainability, one of the pillars of its corporate strategy, is also increasing at the same time. The figures for the sixth Sustainability Report that have just been published (in reference to 2021) are eloquent: 1,939 million euro handed out to stakeholders, 38 million euro invested in Research & Development, and 32 million euro spent on sports, cultural and social projects. This year's document (an extract in English language of it can be downloaded from the website: mapei.it) covers Europe, i.e. it refers to Mapei SpA and all its Italian and European subsidiaries consolidated in their entirety. Sustainable innovation and attention to the environment and people guide the company's operations, as Veronica Squinzi and Marco Squinzi, the Group's CEOs, told us: "Mapei constantly studies cutting-edge solutions for reducing the environmental impact of its operations and promoting high quality, long-lasting building work, focusing on the entire life cycle of products and putting the well-being of the planet and people at the centre of its business operations. Acting effectively by generating less and less waste and limiting the exploitation of resources is one of the main challenges of this millennium: we at Mapei are taking this on by paying special attention to the

use of recycled materials in our products and their formulas, and also for packaging. This requires study, constant commitment to research and, above all, the belief that change is possible". Sustainability is part of everyday life at Mapei. It is embodied, for example, in the careful selection of raw materials and the attempt to consume a smaller amount of these materials in creating products with low environmental impact, especially in terms of greenhouse gas emissions. Particular attention also focuses on the implementation of operations that boost circularity in the building industry and make constructions more durable. The high quality and low environmental impact that characterise Mapei products do, indeed, contribute to the sustainability of the buildings in which they are used, increasing their service life and energy performance. Other important issues are relations with the local communities in which the company operates, support for sport and culture and, last but not least, the central importance of the people who belong to the "big Mapei family". Year after year this proves to be a winning approach acknowledged even outside the company: according to a survey carried out by Statista, a leading operator in market research and business data analysis, in partnership with the Italian financial newspaper Il Sole 24 Ore, Mapei is one of the 150 most sustainable Italian companies, the only one in the chemical industry.

Download the report



SUSTAINABILITY: FACTS AND FIGURES

All the figures are related to Mapei SpA's and the Mapei Group's European subsidiaries

1,939
MILLION EUROS
DISTRIBUTED
TO STAKEHOLDERS IN 2021



about 38
MILLION EUROS
INVESTED IN R&D
IN 2020



10,752
HOURS OF
TECHNICAL
TRAINING



127,426
PARTECIPANTS
IN TRAINING
EVENTS IN 2021



-20%
INJURY FREQUENCY
RATE IN 2021
(COMPARED WITH 2020)



94%
OF PURCHASED GOODS
(IN WEIGHT) FROM LOCAL
SUPPLIERS IN 2021

TOTAL COMPENSATION OF CO₂ EMITTED DURING THE LIFE CYCLE OF **KERAFLEX MAXI S1 ZERO** ADHESIVE IN ITALY AND OF **ULTRACOLOR PLUS** IN GLOBAL PRODUCTION, BY PURCHASING CERTIFIED CREDITS TO IMPLEMENT A PROJECT TO GENERATE **ENERGY FROM RENEWABLE HYDROELECTRIC SOURCES** IN INDONESIA



6,651
EMPLOYEES IN 2021



ABOUT **32** MILLION EUROS CONTRIBUTED FOR SPORT, CULTURAL AND SOCIAL INITIATIVES

Sailing to the Caribbean

AMBROGIO BECCARIA'S YACHT, WHICH WILL BE TAKING PART IN THE ROUTE DU RHUM ON 6TH NOVEMBER, HAS BEEN OFFICIALLY PRESENTED IN GENOA

The Atlantic Ocean is getting closer. Milanese yachtsman Ambrogio Beccaria and his team are finalising their preparations for the Route du Rhum, a solo transoceanic race that will set sail from Saint-Malo, France, on 6th November. The final destination is Pointe-à-Pitre, in Guadeloupe, over 3,500 miles away.

Ambrogio Beccaria will be at the helm of "Alla Grande-Pirelli", a Class40 yacht presented at the Italian Yacht Club in Genoa on 7th September. This all-Italian project has Mapei as its Global Partner (see also *Realtà Mapei International* no.91).

The boat, designed by Gianluca Guelfi in partnership with Fabio D'Angeli, was designed based on the know-how and experience of Beccaria and the yacht designers and was the outcome of a lengthy sequence of studies and simulations. "The resulting design," so Ambrogio explained, "is easy to sail in tricky conditions, easy to steer at 30 knots, and easy to push to the limit. The yacht's centre of gravity is, in fact, very much at the stern: the idea is that the bow not cut through the waves but actually bounces over them, like a large stone bouncing on the surface of the water".

So, it is easy to handle but also sustainable: this Class40 yacht is, in fact, powered by renewable energy, producing water from a desalinator powered, in turn, by energy

generated by solar panels. The use of single-use plastics is kept to a minimum, and the few plastic objects on board are reusable. Composite materials, like flax fibre and a thermosetting, recyclable resin with very low environmental impact, have been used to construct certain parts such as the bow and stern hatches and the holder for the ship's instruments.

Mapei is the Global Partner of a project driven by technology focused on sustainability

Tension is mounting as the countdown begins to the start of the regatta, even for Mapei that is backing ocean sailing for the first time. "I have been following Ambrogio since he raced his first Mini-Transat," so Simona Giorgetta noted, a member of the Mapei Board of Directors, "he has put together a fantastic team that works well together and has built a unique boat. We are lending this project the same kind of support we have always given our ventures into other sports like cycling and football".

IN SEARCH OF MY ROOTS: ITALIAN AND MEDITERRANEAN

Ambrogio Beccaria explains the philosophy behind the "Alla Grande" sailing project

The "Alla Grande-Pirelli" yacht was officially presented on 7th September in Genoa. The Route du Rhum is fast approaching: how do you feel after so many months' work? Are you satisfied with the end result?

This boat means so many things to me. When we officially presented it in Genoa on 7th September, it was a milestone for me because I realised the importance of the whole teams' enthusiasm over this project. The last months of construction work really took it out of us, they

were very tough times when we were afraid of ruining everything we had done to make the job a success. So, I am now very pleased with all the work we have done. There are still some important steps left before we can say we are fully satisfied and I will only get to know what the boat is really like, heart and soul, during the journey from Genoa to Lisbon: being on board will be very emotional!

How important is the 'Italian nature' of this project? And the

synergy between the top Italian businesses that backed you?

The Italian nature of the project resulted from the decision to make the boat ourselves. I wanted "Alla Grande" to conform to our idea - mine and the designers' - of what a modern ocean sailing project means to us. Ocean sailing is a very French thing, and nobody can say that the French sailing world is not inclusive and stimulating, but I definitely wanted to do something of my own so we could express ourselves to the full. The most

obvious thing was to draw on my roots, which are Mediterranean and Italian. That is how the "Alla Grande" project came into being with the backing of top Italian companies, which, as so often happens when they cooperate, produced results of the highest quality.

Milanese 'by name' and by birth: how did your passion for sailing come about in a big city?

In the beginning, sailing was a form of escapism. When I started to get hooked, I was 14 and looking

for something to fall in love with, something that would make me want to get up in the morning full of energy and good intentions. At that age I was not enjoying life in Milan, a place I couldn't relate to, so sailing was a great outlet.

Tenacity, enthusiasm, grit: what are the ideal traits for a successful yachtsman?

There are many fundamental traits for being a successful sailor, probably the first is to have flair, to trust your instincts and try to



Simona Giorgetta, member of the Mapei Group's Board of Directors, with Ambrogio Beccaria.



Ambrogio Beccaria during a training session at Mapei Sport Research Centre.

Mapei Sport supporting "Alla Grande"

Physical training and support to get ready for the transatlantic race

Ambrogio Beccaria has the backing of Mapei Sport, the Sport Research Centre founded by Mapei in 1996, for both his physical training and sports medicine and nutrition.

Experts from the centre, which is now located in Olgiate Olona (Province of Varese) have gone on board the boat with him to closely study the physical demands Ambrogio will face and the type of movements he will have to perform sailing solo. A personalised training plan was then worked out for him. "With Ambrogio we are working above all on increasing his strength levels in the specific sailing skills, including exercises to improve his balance in conditions somewhat similar to those he will have to deal on his boat," so Federico Donghi explained, head of the Training Department at Mapei Sport Research Centre, "he is doing two to three training sessions a week in the gym and up to two run sessions. As the key event draws near, we will gradually reduce the workload to ensure he is in good shape to take on the challenge that awaits him".

The work I have done with experts from Mapei Sport is bearing fruit," so Ambrogio told us, "ocean sailing is an extreme, adrenalin-fuelled sport that is also psychophysically demanding: finding out how solitude affects you, managing anxiety and polyphasic sleeping are fundamental parts of ocean sailing. Competition is an end rather than a means of studying what is happening around you. Even study aimed at hitting top speed is nothing but a way of being in tune with nature and the wild world that is the ocean".

The project will also look at the scientific side of ocean sailing, a discipline still studied very little from a physiology viewpoint. Mapei Sport will continue to collect data during the ocean crossings to better understand the body's response to this kind of activity.

Cooperation between the country's leading companies ensures high quality results

analyse even things that seem impossible to analyse, such as the direction of the winds, waves and tides. Things that are never quite the same and change with every passing moment. But you can get to know about them.

For solo sailing, on the other hand, I think the key thing is to never stop believing. Which can be risky,

because when you get it wrong you get it very wrong. But being such a niche activity, very few people will help you chase your dream to begin with. It is important not to stop believing even when you are at sea, because I have often wondered what the hell I was doing alone out in the middle of the sea.

Good teamwork is vital for a company like Mapei. How do you apply this concept to building and running a sailing yacht in the best possible way?

It seems paradoxical but, even in solo sailing, teamwork is the

key. For example, right now I am sailing from Genoa to Lisbon in the company of Bernardo Zin and Alberto Riva. They both played a key role in the technical construction of the boat. And without them the "Alla Grande" project would not be what it is. I think it's crucial to trust the people you work with, so they feel free to express themselves to their very best. Sometimes, when I'm in trouble out in the middle of the sea I remember that I'm also fighting for those people who are not on board with me at that moment but who, nevertheless, are on the same team as me.

The boat is a testing ground for innovation

DESIGNERS GIANLUCA GUELFI AND FABIO D'ANGELI SHARE THEIR VIEW WITH US



Gianluca Guelfi (left) and Fabio D'Angeli (right).

What design guidelines did you follow in building the Class40 yacht?

One thing is our approach to design, treating the executive design as the outcome of a research programme. With Ambrogio, we started from the idea that when designing this type of ocean-going boat there were still certain things that had not been fully studied, there was a lack of analysis/prediction techniques that led to substantial differences in behaviour between what had been simulated during the design phase and what we felt at sea sailing on these boats.

We focused on these differences to identify what was lacking from current Class40 yachts, what had not yet been studied, what still had to be found out and investigated, and what new analysis and simulation techniques needed to be developed in order to take a further step towards understanding the extremely complex fluid-dynamic system of a sailboat gliding across ocean waves. This was the first goal of the project; for months we worked on creating and perfecting our design tools. We wrote numerous lines of code before we even started drawing the first line of the boat.

This lengthy preparatory study allowed us to test out our ideas, backing them up with numbers and figures, trying out new design approaches and gradually discarding them as we went along.

We wanted a boat that would be fast in difficult ocean conditions, when the wind is strong and the waves steep and high; a boat that can surf the waves effortlessly, without slowing down in the dips between waves. We designed and tested about 50 hull shapes and dozens of different sails plans, simulating each one in different sailing conditions, and eventually chose the one that the

numbers told us was the best. We are now waiting to test out our choices at sea.

You also paid special attention to sustainability in your design: how?

Environmental impact is undoubtedly an aspect that cannot be overlooked in any new design. Ambrogio wanted to make some of the boat's components from bio-composite, i.e. recyclable resin and flax fibre. Unfortunately, these materials do not yet have the mechanical properties required to replace conventional materials, but it is important to give companies doing research in this field the opportunity to test these materials out on real projects and give visibility to this kind of research. There is still a lot to be done to reduce the impact associated with building a new boat, the amount of waste produced is still too high.

There are still technological constraints preventing us from reducing impact during construction work, but much more can be done during every other phase in the project.

“ A long preparatory study to find the most suitable solutions for a boat that would be fast in tricky ocean conditions

Mapei supplied you with a MAPEFLEX M200 AS, a multi-purpose adhesive and sealant used in the shipbuilding sector, for tinning the screws for the deck hardware. How important was it to work with companies investing in research and cutting-edge technology?

We tried to use all the technologies available on the market for the "Alla Grande" project to reduce the weight as much as possible and optimise the rigidity of the boat to improve its speed across the water as much as possible. The boat is almost like a full-scale test laboratory for many products coming straight out of the Research & Development departments of many companies. Being able to know and exploit a new technology 100% means you can have a boat that is faster than its competitors. The design of a new boat comes from a combination of many innovations ranging from methods of fluid-dynamic simulation to the chemistry of materials.

Road World Championships: sport... And much more

FOR 15 YEARS NOW MAPEI HAS BEEN THE MAIN PARTNER OF THE UCI ROAD CYCLING EVENT WHOSE 2022 EDITION WAS HELD IN AUSTRALIA IN SEPTEMBER

Mapei is one of the longest standing sponsors of the International Cycling Union's (UCI) Road World Championships. The last edition of the championships were held in September in Wollongong, a coastal city in the state of New South Wales in south-east Australia. In 1999, Mapei sponsored the UCI Road World Championships held in Treviso (time trials) and Verona (road races). Since 2008, the year when the Mapei brand first appeared at the Cyclocross World Championships in Treviso and on the Road World Championships in Varese, the sponsorship deal has been ongoing. Mapei has been the UCI's Main Partner of the Road World Championships for many editions of the event. This partnership with UCI is based on sharing the same values associated with cycling and found in the company's DNA: hard work, teamwork and the tenacity to take on new challenges.



THE MAPEI BRAND GOES ROUND THE WORLD

The UCI World Championships were, as usual, a huge television success. They were watched all over the world and in European countries: in addition to the national broadcasting channels, they were also aired on Eurosport. Despite the time difference penalising Europe, the viewing figures for Rai and Eurosport were excellent. The Mapei logo could be seen on banners, arches, prize-giving and TV interview panels, banners all over Wollongong. Mapei also appeared on the backdrops of press conferences, brochures and press releases. You could even see fans in Wollongong wearing Mapei team jerseys from the late 1990s and early 2000s.

The sponsorship deal will continue in 2023: the world championships are scheduled to take place in Scotland

MAPEI HOSPITALITY AREA

To welcome its guests to Wollongong Mapei set up a reserved area at the Harbourside Restaurant located 250 m from the finish line. Entertainment, catering and public relations were coordinated by Mapei Australia and the mother company Mapei SpA. The Group's Australian subsidiary was represented by General Manager Marco De Santis and Marketing Director Ashleigh Gray with the help of Katie O'Neill and Sylvia Ciolko. Every day between 120-150 Mapei clients and friends visited the Mapei Hospitality area (a total

Mapei Hospitality Area



Left: to welcome its guests to Wollongong, Mapei set up a reserved area at the Harbourside Restaurant located 250 m from the finish line. Right: Cadel Evans, with a few members of the Mapei team, in the Mapei Hospitality Area in Wollongong.



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ABOVE. Left, the podium for the Men Elite Road Race, won by Remco Evenepoel.
LEFT. Ellen van Dijk, winner of the women time trial.



© SWPIX

of 396) to watch the cyclists ride up the hill towards the finish line. They were also given a Road World Champion's jersey with the Mapei logo. Other guests got the chance to access the UCI VIP Lounge to enjoy a great view of the entire race even closer to the finish line. Clients and guests were very pleased with every aspect of the experience: the behind-the-scenes visits, the chance to ride in cars behind the races, and the chance to take part in the VIP Escorted Ride, a cycle ride along the Wollongong time trial and road race routes.

CADEL EVANS IN THE MAPEI AREA
Cadel Evans was at the Mapei area every day, entertaining guests with souvenir photos and comments, even introducing them to other sporting legends (see the photo at the bottom of the previous page). Cadel was born in Katherine, Australia and raced in the pro peloton from 2001 to 2015, winning 42 races. In 2002 he competed for Mapei-Quick Step, winning a stage at the Tour Down Under, one at the Uniqua Classic and the individual time trial at the Commonwealth Games. Evans also wore the pink jersey at the Giro d'Italia in 2002. Throughout his professional career, Cadel has always taken tests and scheduled his training at Mapei Sport Research Centre. Cadel won the 2009 World Championship in Mendrisio, a victory achieved thanks partly to the coaching he received from Aldo Sassi, the former Director of Mapei Sport. In 2011 Evans won the Tour de France.

Results

- MEN ELITE ROAD RACE** – 1. Remco Evenepoel 2. Christophe Laporte 3. Michael James Matthews.
- WOMEN ELITE ROAD RACE** – 1. Annemiek Van Vleuten, 2. Lotte Kopecky 3. Silvia Persico
- MEN JUNIOR ROAD RACE** – Emil Herzog 2. António Morgado 3. Vlad Van Mechelen
- WOMEN JUNIOR ROAD RACE** – 1. Zoe Backstedt 2. Eglantine Rayer 3. Nienke Vinke
- MEN ELITE TIME TRIAL** – 1. Tobias Foss 2. Stefan Küng 3. Remco Evenepoel.
- WOMEN ELITE TIME TRIAL** – Ellen Van Dijk 2. Grace Brown 3. Marlen Reusser.
- MEN UNDER 23 TIME TRIAL** – 1. Soren Warenskjold. 2. Alec Segaeert 3. Leo Hayter.
- WOMEN JUNIOR INDIVIDUAL TIME TRIAL** – 1. Zoe Backstedt 2. Justyna Czapla 3. Febe Jooris
- MEN JUNIOR INDIVIDUAL TIME TRIAL** – 1. Joshua Tarling 2. Hamish Mckenzie 3 Emil Herzog



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ABOVE. The podium for the mixed relay with Italy in runners-up position.

2023, EVERYBODY IS OFF TO SCOTLAND

Mapei's sponsorship deal with the International Cycling Union will continue. Next year, the Mapei logo will appear at the special edition of the UCI World Championships being held in Glasgow and other locations in Scotland, where the World Championships races for all cycling events will take place from 3rd-13th August.

MEDALLISTS COACHED BY MAPEI SPORT

Several athletes who underwent testing or benefited from other services at Mapei Sport Research Centre in 2022 made the podium in Wollongong. Dutch rouleur, Ellen van Dijk, gold medallist in the Women Elite Time Trial (see the photo on the facing page), underwent testing this year under the watchful eye of Andrea Morelli and other Mapei Sport staff at her training camps. "Ellen van Dijk," so Morelli, Head of Biomechanics Analysis Lab at Mapei Sport, told us, "carried out tests on the track". Elisa Longo Borghini (see the photo on the right), silver medallist

in the mixed team time trial, also undergoes testing at Mapei Sport. Longo Borghini and van Dijk are members of the Trek-Segafredo team. Zoe Backstedt (UK) won the two junior women's races, the time trial and road race. Morelli pointed out that "we optimised her position on the bike for the time trials". Mathias Vacek (Czech Republic), who came second in the men's under-23 race, also visited Mapei Sport in 2022 to perfect his position on the bike. From January, Vacek will be a professional rider at Trek-Segafredo, so he will be working even more closely with Mapei Sport.



Intercontinental Sassuolo, launch pad for young players

FROM NORWAY TO BRAZIL IN SEARCH OF YOUNG TALENT.
GIOVANNI ROSSI: MORE EXPERIENCED PLAYERS MUST BE LEADERS

The transfer market shows just how much Sassuolo football club has grown. "Inter Milan are keeping Andrea Pinamonti," so the Daily Mirror reported in spring 2022, suggesting that the club from Milan had rejected attractive offers from multi-European champions Liverpool for their striker. Inter Milan also rejected offers from other teams for Pinamonti, but it accepted Sassuolo's. Pinamonti is now Sassuolo's centre forward. "Sassuolo's overall club project explains how we managed to sign this key player," so Giovanni Rossi noted, Sports Director of the Mapei-owned club, "so it was not just an economic issue. Pinamonti realised that by coming here he would have a good chance of replacing Gianluca Scamacca. Pinamonti felt Sassuolo was the best launching pad for young strikers, and he has settled in here really well. Signing him was difficult, as were all our latest transfer deals".



Armand Laurienté in action against Cremonese.

ALVAREZ HAS GREAT TIMING

One of the new faces at Sassuolo, the Uruguayan player Augustin Alvarez has shown glimpses of brilliance at the start of the season. Sassuolo bought the striker from Peñarol Montevideo.

"Alvarez," according to Giovanni Rossi, "comes from an important footballing nation and we will help him become an even better player both technically and physically. He is a centre forward with great timing, he has a flair for scoring goals". Augustin is very young: he was born in San Bautista on 19th March 2001.

Also making his first appearances for Sassuolo is the striker Armand Laurienté, originally from Guadeloupe. Until last year, Alvarez was at Rennes and many Ligue 1 (France's top division) teams wanted him. Giovanni Carnevali (Sassuolo's CEO and Managing Director), Giovanni Rossi and the other managers pulled out all the stops to get him to come to Sassuolo.

Armand has already scored in the first few matches of the 2022-23 Championship.

"Laurienté" – so Sassuolo's team manager Alessio Dionisi noted, "has important qualities, good skills but he needs to improve tactically. He comes from the French league which, although very good with a lot of talented players, is different from ours. Laurienté is excellent out on the left, which is just what we needed".

HOW TO BUILD THE PERFECT FOOTBALL PITCH: A WORKSHOP AND OPEN DAY

During the summer, Mapei Stadium in Reggio Emilia underwent a number of special maintenance works that involved the re-roofing of the East and West stands, the addition of smart entrances and the renovation of the turf on the playing field (see *Realtà Mapei International* no.93). To present these interventions, on 22nd September the Mapei Stadium hosted a workshop and open day to showcase the projects. The day's pro-

ceedings, which were opened by Simona Giorgetta, CEO of Mapei Stadium (see the photo on the right), saw the involvement of leading experts in the realm of playing fields repair and a special on-pitch inspection in the company of Giovanni Castelli, an agronomist for the first division of the Italian Football League, Alessio Dionisi, team manager of Sassuolo's first team, and Aimò Diana, team manager of Reggiana. The event



FIRST FEMALE REFEREE IN ITALIAN SERIE A AT MAPEI STADIUM

A woman refereed an Italian Serie A league game for the first time at Mapei Stadium on Sunday 2nd October. Maria Sole Ferrieri Caputi (see the photo on the left) refereed Sassuolo - Salernitana.



THORSTVEDT: FOLLOWING IN HIS FATHER'S FOOTSTEPS

Kristian Thorstvedt is the second Norwegian to wear the Sassuolo shirt. The first was the winger Emil Ceide in the 2021-22 Championship. Thorstvedt was born in Stavanger in 1999. Last season he was at Genk, a Belgian club whose club philosophy is very similar to Sassuolo's, especially as regards bringing on young players. Thorstvedt is the son of footballer, who did not want to play in the same position as his father. His dad is, in fact, the goalkeeper Erik Thorstvedt, who made 97 appearances for the Norwegian national team and played for Borussia Mönchengladbach, Göteborg and Tottenham.

Thorstvedt is a starter in the Norwegian national team where he provides plenty of assists for the centre forward Håland (Manchester City). Kristian is not a regular starter for Sassuolo for the time being: "Thorstvedt's important qualities - so the team manager assures us - will serve our team well".

Sassuolo's intercontinental transfer policy has meant Brazil has also come under the club's radar: Ruan Tressoldi, 23, is Brazilian and played for Grêmio Foot-Ball Porto Alegre last season. The Brazilian defender can already boast appearances in the Copa Libertadores, which is the South American Champions League.

New members of the 2021-22 squad also include French

forward Janis Antiste, 20, Abdou Harroui, 24, a midfielder who plays for the Morocco national team, and the Croatian defender Martin Erlić, 24. Goalkeeper Alessandro Russo, 21, and defender Riccardo Marchizza, 24, have returned after being away on loan.

TARGETING EUROPE

Sassuolo played in the 2016-17 Europa League; to qualify again, they need the help of their most experienced players.

As Giovanni Rossi points out, "We are asking men like Consigli, Frattesi, Traorè and Lopez to play at an even higher level. They must lead and inspire the entire team". Is the 2022-23 team better than last season's? Dionisi is in no doubt: "We are still building the team; we have to work hard to improve. In the meantime, we have the advantage our young players are delighted to be at Sassuolo". Many see improvements in defence. "I would say that the team is more balanced", so Dionisi notes, "not just the defence. And when the team scores a lot, the credit does not only go to the forwards. We were focused on attack, now we have to make sure we don't give too many chances away to our opponents. Now we want to be set up so that we are effective when we are in possession of the ball and can also move better when our opponents have the ball".

NEWS FROM THE WORLD OF MAPEI

EVENTS, SPONSORSHIPS AND PROJECTS BY THE GROUP'S SUBSIDIARIES



MEXICO - A HOTEL FOR THE MAPEI STAND AT OBE TRADE FAIR

After taking part in 2019, Mapei de Mexico was again among the exhibitors at OBE (Obra Blanca Expo) from 11th-13th October this year, Mexico's leading trade fair for adhesives, finishing products and ceramics. The subsidiary decided to showcase products for the hotel industry, reproducing a typical hotel in every area of its stand: lobby, swimming pool, restaurant, terrace, gym, bathroom, car park. Each setting drew the visitors' attention to a system developed by Mapei for a specific application, such as installing ceramic tiles, bonding synthetic grass or resilient floorings and laying cementitious or resin floors.



PORTUGAL, A FOUNDATION STONE FOR LUSOMAPEI'S MANUFACTURING PLANT



The ceremony for laying the foundation stone of Lusomapei manufacturing plant in Cantanhede was held on 22nd September. The new facility will be completed in 2023 and will accommodate the production operations currently carried out in Anadia. The new facility will boost Lusomapei's manufacturing output to 55,000 tonnes/year, while making the company progress towards sustainability. The products will be manufactured on site from 2023, making it even easier to supply mainland Portugal, its islands and Portuguese-speaking African countries. The event, 'presided over' by General Manager Carla Santos, was also attended by the Deputy Mayor of Cantanhede, Pedro Cardoso.

EGYPT - THE RED BULL HALF COURT 2022 PLAYED ON MAPECOAT TNS COURTS



The partnership between Mapei and Red Bull was once again the basis of a colourful high-level sports event: the final of the Red Bull Half Court 2022, the world's most famous 3vs3 street basketball tournament. The matches were played in Cairo from 30th September-1st October on a surface designed by the Egyptian artist Ahmed Nofal (aka Nofal O) and built using resin systems from the MAPECOAT TNS range to ensure the highest playing performances. Mapei, the event's official supplier, was, therefore, the "architect", together with the players of course, behind the victory of the Italian men's team and Japanese women's team.

INDIA - SUPPORTING 'TREASURE OF INNOCENCE' FOR CHILDREN IN NEED AND SCHOOLS

Mapei India is committed to social responsibility in the areas in which it operates. For years, it has supported the non-profit association 'Treasure of Innocence', which is dedicated to the education, schooling and training of children from disadvantaged families and backgrounds. It was very busy during the Covid-19 epidemic, organising training courses about infection prevention methods. Mapei India was also involved in the refurbishment of two schools in the state of Uttarakhand: the first, located in the rural setting of Pauri Garhwal, is a primary school, while the second, in Yamkeshwar, educates high-school children.



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WORK TOOLS



New resin flooring.mapei website

THE WEBSITE FOR SEAMLESS FLOORINGS IS NOW ONLINE FEATURING LOTS OF PROJECTS AND THE PRODUCTS CHOSEN TO CARRY THEM OUT

Mapei's seamless resin and cementitious systems for floors boast a well-established tradition in the building industry: thanks to their versatility, their different solutions can adapt to the specific needs of every single project. These systems lend themselves to being used in different realms: industry, food, chemicals-pharmaceuticals and also business settings, museums and even the most intimate household spaces.

Resistant, durable and practical, the best quality and high aesthetic value.

The resinflooring.mapei.com website showcases the most remarkable projects carried out all around the world using the systems of this product line. The solutions used differ according to the chosen formula and type/thickness of application in an endless range of colours and aesthetic effects.

ON THE RESINFLOORING.MAPEI.COM WEBSITE YOU CAN:

- 1 Select projects by using 8 categories
- 2 View the details of each project
- 3 Explore the 14 main systems in the line
- 4 Find out about the main features of each system on the website mapei.it
- 5 Send a message requesting information using the contact form.

DISCOVER
THE WEBSITE



M+: tradition and experimentation for contemporary surfaces

M+ IS RETHINKING TRADITIONAL FIGURATIVE MOSAICS BY OPENING UP TO NEW PRODUCTS AND MATERIALS

M+ is a Mapei Group's subsidiary based in Sassuolo (Central Italy) whose two divisions, M+ Mosaics and M+ Surfaces, manufactures designer mosaics for inside and outside surfaces/decoration and designer floors and walls. The numerous collections give a new twist to tra-

ditional mosaics by experimenting with new products and materials.

The company showcased some new porcelain tiles collections at Cersaie 2022 specially designed for floors and walls.

XXL

Designed by Marialaura Irvine, XXL is a contemporary mosaic composed of small and large segments, square and rectangular-shaped, mounted on fibreglass mesh. It makes no difference between vertical or horizontal: its geometry adapts to any type of environment thanks to the textures of its segments.

Crack!

With this new collection, designed by LO STUDIO and Massimo Nadalini, the mosaic becomes a seamless surface, when the chips and the joint generate a single pattern that overcomes the sheet's outline. CRACK shifts the point of view from the chips to the grid that contains them, reaching continuity through a dialogue between container and joint.



Primal

Primal is an investigation of recovery surfaces in which elements of different materials coexist harmoniously. Designed by LO STUDIO and Massimo Nadalini, it is characterized by a surface that is not perfectly regular and by an aesthetic in seeded. The random arrangement of the material ensures maximum surface naturalness.



QUESTIONS & ANSWERS

BEST PRACTICES FOR A PROFESSIONAL RESULT



by **Lorenzo Vedovato**

Installing mosaic

Thin, beautiful and versatile, mosaic is widely used in contemporary design in wellness centres, gyms and swimming pools, as well as in private homes, and enable refined and decorative surfaces to be created in a wide variety of styles and colours. The correct procedures for installing mosaic and the most suitable products depend on the type of surroundings (damp or not damp) and substrate. Let's take a closer look in more detail.

What are the essential requirements of a substrate before installing mosaic?

It is very important that the substrate on which mosaic is to be installed is flat, compact and free of all traces of dust. Also, if there are any expansion joints, their position must be respected. In addition, screeds must be correctly cured to avoid cracks forming later due to hygrometric shrinkage. Once these basic requirements have been met, if the area where the mosaic is to be installed is damp – such as in a Turkish bath or shower, for example – the surfaces need to be waterproofed using products such as MAPELASTIC, which is applied in two layers with a trowel, with glass fibre mesh, such as MAPENET 150, embedded between the two layers to even out the thickness and absorb potential expansion.

Is it possible to install mosaic over existing ceramic tiles?

Yes, it is possible, thanks to mosaic tiles being so thin. Before installing them, however, it is important to check that the ceramic tiles are well bonded to the substrate: if they are not well bonded, it would be better to remove them completely. Once their bond to the surface has been

checked, wash and degrease the tiles with a suitable product, such as 5% caustic soda granules diluted in water. If the tiles are shiny, they need to be abraded with a suitable grinding disc. Then skim the surface with a proper skim coat and install the mosaic.

Which are the most suitable installation and grouting products?

On cementitious substrates you need to use C2 TE S2 type adhesives, that is, improved cementitious adhesives with no vertical slip, extended open time and high deformability. One such example is the ADESILEX P10 + ISOLASTIC system mixed at a ratio of 1:1. For grouting joints, an epoxy product is usually used – such as KERAPOXY EASY DESIGN – which, apart from coming in a wide range of colours, is mechanically strong and resistant to acids. On other types of substrates, such as styrene for a Turkish bath or a pool, or metal in the case of the walls of a boat or ship, we would go for a product with a high modulus of elasticity, such as ULTRABOND ECO PU 2K polyurethane adhesive. In this case, too, they should be grouted with an epoxy product.

What type of support does M+ provide for installing mosaic?

If the client that intends installing our mosaics requests assistance, we carry out a survey to assess the condition of the substrates and then recommend the best product, after which we follow the site until the completed work is handed over.



PRODUCTS IN THE SPOTLIGHT

WATERPROOFING ROOFS, FOUNDATIONS AND METAL SURFACES; PROTECTING CEMENTITIOUS GROUTS; RESTORING DAMAGED CONCRETE

1

Plastimul High Flex Plus



IT DOES NOT RE-EMULSIFY AFTER BEING IMMERSSED IN WATER

It is a multi-purpose, ready-to-use, solvent-free, water-based bituminous waterproofing membrane used for waterproofing roofs, foundations and metal surfaces. PLASTIMUL HIGH FLEX PLUS has a thixotropic consistency and is easy to apply on sloping and vertical surfaces. Once fully dried, it forms an elastic, waterproof coating which can remain exposed to UV rays after application and does not re-emulsify after being immersed in water for long periods of time. PLASTIMUL HIGH FLEX PLUS meets the requirements of EN 15814 standard for polymer-modified bituminous thick coatings used for waterproofing below-ground structures. It is also certified for use as a passive barrier to radon gas.

2

Ultracare Grout Protector



DURABLE PROTECTION FOR CEMENTITIOUS GROUTS

Water dispersion for protecting both the polished porcelain tiles and cementitious grouts, classified as CG class according to EN 13888. ULTRACARE GROUT PROTECTOR gives a durable and periodically renewable (according to use and exposure) stain-resistant protection. It is spray-applied and ready-to-use, has excellent UV stability and good protective capacities even after multiple washings. The treatment can be carried out with this single product and surfaces are already set to light foot traffic 2 hours after application (in normal conditions of +23°C and 50% R.H.). It helps removing dirt and makes routine cleaning operations much easier. Treated surfaces are suitable for contact with foodstuffs.

3

Mapegrout Easy Repair



EASY TO APPLY AND WITH HIGH WORKABILITY

One-component, ready-mixed, fibre-reinforced, compensated-shrinkage, thixotropic mortar. It is especially suitable for restoring deteriorated concrete structures, such as beams and pillars, even if subject to attack from aggressive sulphates. MAPEGROUT EASY REPAIR can be applied with a spreader or trowel in layers up to a maximum of 50 mm thick or else by spray with a suitable worm-screw rendering machine or with a continuous-feed rendering machine. The product complies with the principles of European standard EN 1504-9 and with the requirements of EN 1504-3 for class R4 mortars. It features high workability and is very easy to apply.

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Zero impact on the climate, all the quality of Mapei.



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