

INTERNATIONAL

# [Realtà MAPEI]

ISSUE 87

Year XXI - No. 87 - August 2021

87

# DISCOVER OUR BEST SOLUTIONS FOR THE BUILDING INDUSTRY



## BEFIB

Valencia - Spain

20<sup>th</sup> - 22<sup>nd</sup> September

STAND S2

## CERSAIE

Bologna - Italy

27<sup>th</sup> September - 1<sup>st</sup> October

GALLERY HALL 25 - 26  
HALL 32 STAND A8

## SEATRADE CRUISE GLOBAL

Miami (Florida - USA)

27<sup>th</sup> - 30<sup>th</sup> September

STAND 2356

## MARMO+MAC

Verona - Italy

29<sup>th</sup> September - 2<sup>nd</sup> October

HALL 7 STAND E2

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**GUIDO PALMIERI**  
Realtà Mapei  
International's  
Editor-in-Chief

## The building industry: the driver behind global recovery

Over the last few weeks there have been more positive signs about the prospects for the world's economies. Everybody knows that the road ahead will not be all downhill. The Italian Prime Minister, Mario Draghi, has already warned that: "The economy is recovering but the pandemic is not over". Nevertheless, we can look to the future with an awareness that new scenarios are opening up and we can take further consolation from the fact that growth forecasts have been readjusted upwards. There is one real driving force behind this growth: the building industry. The industry has been injected with fresh life by the expansive policies adopted by governments to relaunch the global economy. A recent report published by Cresme (the Italian Study Centre that analyses trends in the global

### A SPECIAL ON CERAMIC TILES IN VIEW OF THE NEW PRODUCTS MAPEI WILL BE SHOWCASING AT CERSAIE

building market) has reasserted the crucial role building will play once again. And so, while the global GDP is expected to rise by between 5-6%, the building industry will expand more rapidly reaching peaks of 7.6% in Australia, 7.4% in Asia and 6.3% in North America.

Experts and operators in the industry are convinced of one thing: to prevent all this from fizzling out instead of growing steadily, greater focus must be given to efficiency, digitalisation and sustainability.

The building industry is like a locomotive pulling lots of other compartments. Ceramics is in one of head compartments at the front of the train, a sector in which Italy is a world leader thanks to its innovative materials, style and design. We have devoted a special section to ceramic tiles (the Cersaie Exhibition in Bologna will be back in the spotlight in September) reviewing Mapei products for installing these materials and some of the most important and interesting recent projects the Group contributed to all over the world.

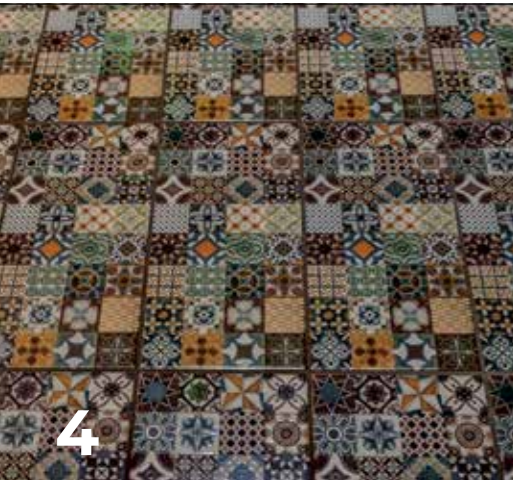
The section on solutions for your home offers an overview of Mapei and Polyglass (a subsidiary of the Group) systems for waterproofing several areas of private houses, from foundations to roofs.

2021 is a year of celebrations for lots of the Group's subsidiaries. Mapei has been operating in Portugal for 20 years and Lusomapei, the Portuguese subsidiary of the Group, has another reason to look to the future with optimism: the construction of a new manufacturing plant in north-central Portugal. Sassuolo Football Club is also looking to the near future. A change of team manager, the beginning of the 2021/2022 season, and new and old players in the squad, are the main topics of the sporting summer in *Realtà Mapei International*.

Something new being presented is the "Training Department" at the Mapei Sport Research Centre aimed at athletes who, after suffering an injury, need to get ready to return to competition.

Enjoy your reading

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Alessio Dionisi is the new Sassuolo's team manager.



**Cover story**  
This issue encloses a special section on Mapei solutions for installing ceramic tiles and some of the most important and interesting recent projects the Group contributed to all over the world.

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**Printed by**  
Rotolito SpA - Pioltello (Italy)

**Published by**  
Mapei SpA  
Via Cafiero, 22 - 20158 Milan (Italy)  
Tel. +39/02/376731 - Fax +39/02/37673214  
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E-mail = realtamapei@mapei.it

**Realtà Mapei**  
Registered by the Tribunal of Milan n. 363/20.5.1991

Realtà Mapei International is published 6 times per year

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**MAPEI'S OFFER  
FOR INSTALLING  
CERAMIC TILES****Soundproofing  
materials to reduce  
footsteps noises****Screeds and  
smoothing  
compounds****Primers****Waterproofing  
systems**

# The run-up to Cersaie

**Uncoupling,  
antifracture systems****Hydraulic  
binder-based  
adhesives, reactive  
adhesives, adhesives  
in water dispersion****Grouts for joints****Elastic sealants****Products for cleaning  
and maintaining floors****Complementary  
products for  
installation works**

The Italian ceramic tiles industry is characterised by products with a high content of "Made in Italy", high levels of investment in technology and research and development of new materials, a strong propensity towards overseas markets and large-scale internationalisation of production processes.

And it is precisely in this context that Mapei operates, with Research & Development and internationalisation also being its main cornerstones. Products for ceramic tiles have always been at the heart of the company and this year, as in previous years, lots of new products will be presented at Cersaie 2021, the international trade fairs focusing on ceramic tiles and stone materials which will be held in Bologna from 27<sup>th</sup> September to 1<sup>st</sup> October.

Particular focus will be placed on the work of installers, not only through the

high-performance adhesives and grouts being proposed, but also with a series of innovative complementary products and accessory items specifically created to make installation work simpler. Useful tools to help carry out their work as well as possible, right down to the smallest detail.

One such example? The MAPELEVEL EASYWDC levelling system, which makes the installation of ceramic tiles that much easier and help create perfectly flat ceramic coverings, simply and quickly.

Many more new products will also be showcased on the two stands set up by Mapei at the trade fair (in Gallery Hall 25-26 and Hall 32, Stand A8) and the website [mapei.it](http://mapei.it) starting from 27<sup>th</sup> September. And in the run-up to Cersaie, over the next pages we are presenting a review of works carried out using products from the Mapei line for installing ceramic tiles and stone materials.



# The ceramic tiles market on the road to recovery



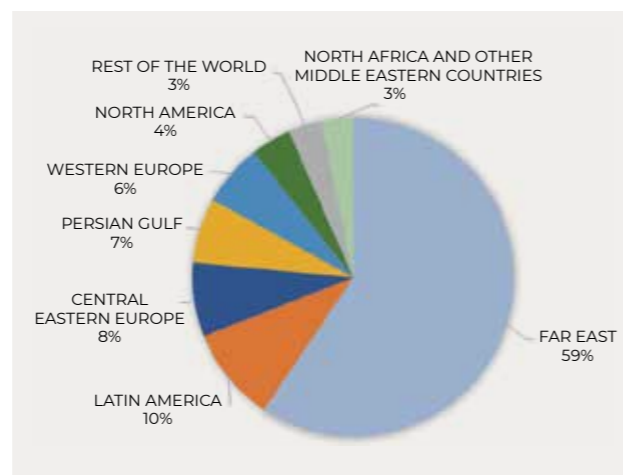
FOLLOWING THE FALL IN 2020 DUE TO THE COVID-19 PANDEMIC, GLOBAL CONSUMPTION OF CERAMIC TILES IS EXPECTED TO RISE BY 5% THIS YEAR AND BY 4% IN 2022

Ceramic floor and wall coverings are amongst the most highly appreciated materials in the construction sector and, thanks to properties such as high aesthetic characteristics, durability and ease of maintenance, they have become widely used in all geographical areas. The global ceramic industry can see signs of a recovery after the fall last year following the recession in the construction sector caused by the Covid-19 pandemic. The outlook for the consumption of ceramic tiles in 2021 and 2022 is decidedly positive all around the world. Estimated global consumption is more than 12 billion m<sup>2</sup> and, over the next few years, indicators point to excellent potential growth. Here is an overview of trends in the ceramic tiles market for the various areas of the world.

## THE FAR EAST DOMINATES THE MARKET

(share of the global ceramic tiles market for each geographical area)

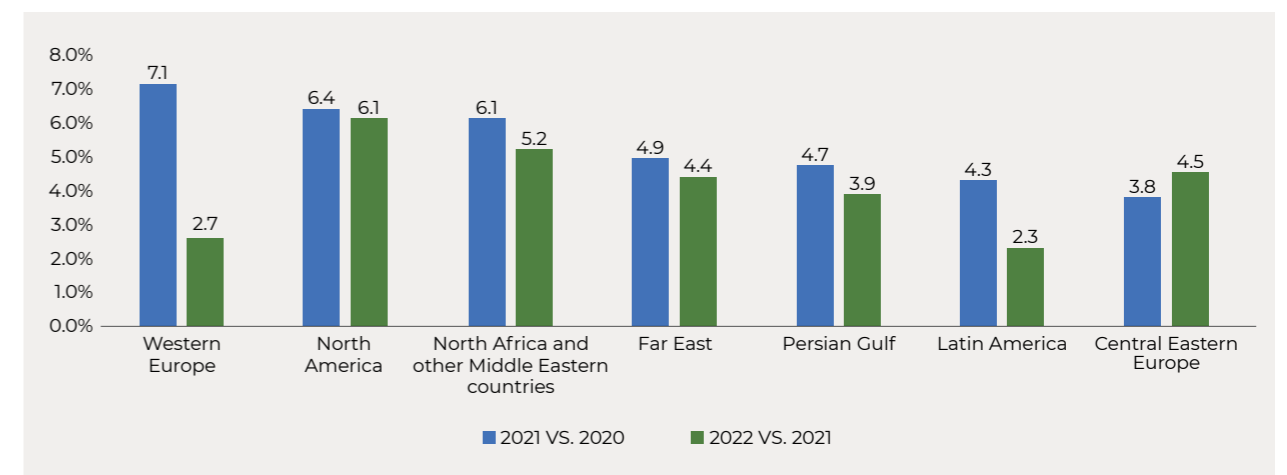
GEOGRAPHICAL AREA	SIZE OF THE MARKET IN 2020 (MILLIONS OF M <sup>2</sup> )
FAR EAST	7,184
LATIN AMERICA	1,162
CENTRAL EASTERN EUROPE	908
PERSIAN GULF	795
WESTERN EUROPE	765
NORTH AMERICA	490
REST OF THE WORLD	412
NORTH AFRICA AND OTHER MIDDLE EASTERN COUNTRIES	380
<b>WORLD</b>	<b>12,097</b>



Source: Confindustria Ceramica, June 2021

## GROWTH TREND FOR 2021-2022

(Estimated trend for the consumption of ceramic tiles – % variation compared with the previous year)



Source: Confindustria Ceramica, June 2021

**THE LEADING 15 MARKETS IN THE WORLD**

(Countries with the largest consumption of ceramic tiles – Figures in millions of m<sup>2</sup>)

COUNTRIES	MILIONS OF M <sup>2</sup>
CHINA	4,899
BRAZIL	831
INDIA	698
INDONESIA	328
UNITED STATES	263
SAUDI ARABIA	242
IRAN	221
MEXICO	193
RUSSIA	190
TURKEY	178
THAILAND	177
EGYPT	174
SPAIN	146
GERMANY	142
POLAND	142

**Global consumption**

In 2020 the global ceramic market shrunk by an estimated 3.4% with respect to 2019. The main cause of the negative trend in the consumption of ceramic tiles was the recession in the residential construction sector due to the pandemic. The health crisis led to a fall in global GDP of 3.3% which was also reflected in a 3.8% drop in global investments in the residential sector, the main area of use of ceramic tiles. All geographical areas, albeit with varying intensity, suffered a drop in ceramic tiles sales. Estimates for trends in the global economy indicate a net recovery in GDP, which is expected to grow by 6% in the current year and by 4.4% in 2022. Thanks to this improvement in the overall macroeconomic picture, investments in the residential construction sector should increase by around 7% in 2021 and by more than 3% next year. The recovery in investments into the housing market is expected to lead to an increase in the consumption of ceramic tiles by 5% in 2021 and 4% for the following year. Estimates point to the global ceramic tiles market in 2022 as being 675 million m<sup>2</sup> larger with respect to 2019, that is, before the pandemic.

**“The highest rates of growth will be registered in the countries of Western Europe and in North America. Positive outlook also for China”**

**Western Europe**

In 2020 consumption of ceramic tiles in this area reached 765 million m<sup>2</sup>, a slight fall compared with the previous year, with a share of 6% of the global market. In 2021, with very positive figures forecast for the residential sector, there should be a 7.1% rate of growth in the consumption of ceramic tiles, the highest in the world. This growth in the ceramic tiles market will be a common feature of all the main countries in this area and estimates indicate it will continue into 2022 when consumption is expected to grow by almost 3%.

**Italy**

Italy is a leader in the international tile trade and the ceramic district of Sassuolo is acknowledged as being a global point of reference for the excellence and innovation of their production processes. The size of the Italian ceramic tiles market is estimated to be 95 million m<sup>2</sup> and, in 2020, it registered a drop of around 13% compared with the previous year. The pandemic had a negative influence on the country's economy, causing a fall in GDP of 9% and a more than 6% drop in investments in construction work. For the current year, GDP should grow by 4.7% and then remain at +4.3% in 2022; these are significant growth figures, higher than the average for the Euro area. The construction sector should be one of the main drivers behind the recovery of the Italian economy. Forecasts indicate investments could grow by as much as 14% over the course of the current year and by 7% in 2022. The ceramic tiles market could grow by more than 15% in 2021, fully recovering the drop suffered last year. Moderate growth in consumption is also forecast for 2022.

**Eastern Europe**

The consumption of ceramic tiles in this area is calculated to be more than 900 million m<sup>2</sup> and accounts for 8% of global volumes; in 2020 the market suffered a fall of around 1%. For the period 2021-2022 average growth in the consumption of ceramic tiles is expected to be more than

4%. Market growth is expected to be moderate in Russia and Poland and very intense in Turkey, the country that next year could hit a consumption level of almost 200 million m<sup>2</sup>, confirming its position as the 10<sup>th</sup> largest ceramic tiles market in the world.

**North America**

The size of the ceramic tiles market in this area is around 490 million m<sup>2</sup> and, in 2020, it registered a net drop. The estimated trend in the residential building sector is positive for the three countries in this region: United States, Mexico and Canada. The consumption of ceramic tiles should benefit from the positive figures for the housing sector, growing by more than 6% both in the current year and in 2022.

**Latin America**

This region covers the second largest ceramic tiles market in the world, which accounts for 1.6 billion m<sup>2</sup> and almost 10% of the entire global market. In 2020, the consumption of ceramic tiles suffered a moderate contraction and forecasts indicate it should grow by a yearly average of 3.3% in 2021-2022. Estimated growth in the market is lower than the global average due to modest economic conditions in Brazil, which accounts for 70% of total consumption in this area.

**“For Latin America, the world's second-largest ceramic market, growth is expected to be weaker due to the modest economic conditions in Brazil”**

**Persian Gulf**

The consumption of ceramic tiles in this area is estimated to be almost 800 million m<sup>2</sup> and is highly concentrated in Saudi Arabia and Iran which are, respectively, the 6<sup>th</sup> and 7<sup>th</sup> largest ceramic tiles markets in the world. Last year consumptions remained more or less stable and, for the period under examination, it is thought their growth will be in line with the global average: +5% in 2021 and +4% in 2022.

**North Africa and other Middle Eastern countries**

In this area, with an estimated consumption rate

of 380 million m<sup>2</sup>, Egypt is the leading market. Over the last few years, the country registered a highly expansive trend in the consumption of ceramic tiles, reaching a level of 174 million m<sup>2</sup> and ranking 12<sup>th</sup> on the global market. Estimates for this region are very positive and, over the course of the current year, the ceramic tiles market should grow by more than 6%.

**Far East**

This region accounts for almost 60% of global ceramic tiles consumption and includes 3 of the 4 leading markets in the world: China, India and Indonesia. After withstanding a drop in 2020, the market should register positive conditions in 2021; in fact, estimates indicate a growth of around 5% in the consumption of ceramic tiles. The consumption in China (world leader for the level of investments in the construction sector) is 4.9 billion m<sup>2</sup>, accounting for 40% of global sales. Estimates for the two-year period 2021-2022 indicate consumption will grow by around 450 million m<sup>2</sup>, benefiting from the positive figures for the housing sector. India was badly hit by the health crisis which had a negative influence on building work and the ceramic tiles market. On a medium-term basis the country has enormous potential. Population growth and modernisation of

the country's building stock will lead to growth in the construction materials market, ceramic tiles in particular.

Indonesia has one of the leading housing markets in the world and, over the course of the last decade, went through a period of frenetic growth in the residential sector and in ceramic tiles sales. The outlook for the next few years is positive and this country will contribute to strengthening the role of the Far East as a driver behind growth in the global ceramic tiles market.

**Francesco Doria.** Market Research Manager, Mapei SpA



## Cairns, Queensland (Australia) Bailey Hotel & Resort

A NEW FIVE-STAR HOTEL WAS COMPLETED IN NORTH-EASTERN AUSTRALIA WITH MAPEI PRODUCTS FOR WATERPROOFING AND INSTALLING CERAMIC TILES, WOOD AND LVT

Tourism and hospitality group, Crystalbrook Collection, is set to transform the skyline of Cairns City (Queensland, Australia) with an almost 320 million Euro investment in three new international hotels. The company is the Australian business of the Dubai-based Ghassan Aboud Group (GAG), headed by billionaire businessman and philanthropist Muhammed Ghassan Aboud. Mr Aboud holidayed in tropical North Queensland in 2016 and became so enchanted with the beauty of the area that he invested a slice of his fortune in the region's tourism industry. With a cost of over 82 million Euros, the new Bailey Crystalbrook Collection hotel is the second of three five-star hotels. It includes 217 rooms, 110 apartments, 5 restaurants and bars including a signature Crystalbrook Station steakhouse and Parilla grill, a 24-hour fitness centre and meeting spaces for up to 150 people. The hotel opened in November 2019 and is Cairns' second new five-star hotel in over 20 years.

### Project overview

The development of Bailey Hotel & Resort saw the construction of two towers: Lake Street Tower Hotel providing 217 rooms and Abbott Street Apartment. The Apartment tower includes 110 apartments encompassing one, two and three-bedroom options, as well as a lap pool, a gym, a spa and a games room.

The Bailey towers share a basement and common area podium. The hotel provides a range of separate facilities to compliment both towers. Bailey Hotel Tower offers exclusive facilities, including Bar/Grill & Colada Restaurants along with a "Milk Bar", a swimming pool, a 24 Hour Fitness Centre, four event/function areas, concierge and gift shop.

The completion of this five-star hotel was a large boost for the Cairns community. This project is environmentally responsive and reflects the unique qualities that the owners wanted to portray in

**1.** The Bailey Hotel & Resort is a modern and innovative luxurious accommodation facility, completed in 2020.  
**2.** The substrates of the pools of the complex were waterproofed with MAPELASTIC SMART, before installing ceramic tiles with KERAFLEX MAXI S1 and grouting the joints with KERAPOXY.  
**3 and 4.** Ceramic tiles were installed in several areas of the complex using KERAFLEX MAXI S1.





5



6

**5.** In the bathrooms the screeds were made of TOPCEM, before waterproofing the substrates with MAPEGUM WPS.  
**6.** Wooden floors were installed in the restaurant and foyer areas using ULTRABOND ECO S955 1K, one-component, solvent-free, sililated polymer adhesive.

this beautiful part of Australia. The nature of this project was to deliver a modern, innovative and aesthetically pleasing, luxurious hotel and resort. Prime Constructions was engaged to deliver this project and took on a multi-faceted role that incorporated project management, principal contractor and full fit-out contractual works. The lead architects, Thompson Adsett, delivered the design development, construction documentation and interior design for the main hotel. The restaurants and bar were designed by Jess White and her team at CTRL Space.

Together the all Queensland design team has delivered a space that puts it on par with the new wave of five-star hotels that have infiltrated other areas of Australia.

**The pools**

The multiple pool installations were awarded to Baldwin Aquatics, a pool builder located in South Queensland. Contractors waterproofed the pool substrates by embedding MAPENET 150 alkali-resistant fibreglass mesh into the first layer of MAPELASTIC SMART cementitious waterproofing membrane. MAPELASTIC SMART is a highly flexible waterproofing mortar that is ideal for use in swimming pools to protect the concrete structure that may be subject to vibration and cracks. To fully embed the MAPENET 150 reinforcement mesh, a second layer of MAPELASTIC SMART was applied.

Over 1000 m<sup>2</sup> of ceramic tiles were installed over the waterproofing membrane using KERAFLEX MAXI S1 high-performance cementitious adhesive, while joints were grouted with KERAPOXY two-component, acid-resistant epoxy grout.

KERAPOXY is an ideal grout for joints in swimming pools due to the product's excellent mechanical and chemical resistance, smooth final surface, low water absorption, uniform colour and resistance to ultra-violet rays and atmospheric agents. It is easily workable with no shrinkage; therefore no cracking or fissures are present in the grouted joints.

**Installing ceramic tiles in public areas**

The contract for ceramic installation in all public areas was awarded to Jerry and The Tilemakers, professional tiling contractors also located in North Queensland.

Contractors installed all ceramic tiles through the hotel resort using KERAFLEX MAXI S1. This adhesive is not only a high performance and versatile mortar but can also be used to install large format tiles, porcelain tiles, ceramic and mosaic tiles as well as natural stone. It is thixotropic, has a long open time and can be installed in a up to 15 mm thick layer.

Ceramic tiles were installed in the restaurant areas, podium decks, balconies and walkways after installing acoustic underlay with ULTRABOND ECO S955 1K polyurethane adhesive.

**Preparing substrates and waterproofing**

In the bathrooms, screeds were created using TOPCEM, a special normal-setting, quick-drying, controlled-shrinkage hydraulic binder, and special aggregates. The substrates were then treated with PLANICRETE SP (a multi-purpose latex to create high performance mortars and screeds distributed in Australia by Mapei Australia) and waterproofed with two coats of MAPEGUM WPS,

fast-drying flexible liquid membrane. TOPCEM was also used for screeds around the pools to create falls and on all balconies to create falls to drains prior to the application of MAPELASTIC SMART highly flexible waterproofing membrane.

**LVT and wooden floorings**

Acoustic underlay was installed with ULTRABOND ECO S955 1K one-component, solvent-free, sililated polymer-based adhesive prior to the installation of LVT (Luxury Vinyl Tiles) on the floors in the hotel rooms.

Contractors used ULTRABOND ECO MS 4 LVT WALL high performance, one-component sililated polymer-based adhesive, which is also suitable for all kinds of textile and resilient floorings, to install the LVT planks.

Wooden floors were installed in the restaurant and foyer areas using ULTRABOND ECO S955 1K,

one-component, solvent-free, sililated polymer adhesive with very low emission level of volatile organic compounds (VOC), which is suitable for bonding all types of wooden floors.

MAPEPROOF TURBO 1K one-component, solvent-free moisture vapour barrier was applied to the concrete surfaces prior to the installation, followed by a coat of ECO PRIM T PLUS solvent-free, low odour acrylic primer in water dispersion. Contractors also used ULTRAPLAN ECO, ultra-fast hardening self-levelling smoothing compound, to correct any irregularities in the concrete surface.



Find out more  
**KERAFLEX MAXI S1**

**TECHNICAL DATA**  
**Bailey Hotel & Resort,** Cairns (Queensland, Australia)  
**Owner:** Bailey Crystalbrook Resort, Ghassan About Group  
**Period of construction:** 2019-2020  
**Period of Mapei's intervention:** 2019-2020  
**Design:** Thomson

Adsett  
**Main contractor:** Prime Constructions  
**Ceramic installation company:** Jerry & The Tilemakers  
**Pool contractor:** Baldwin Aquatics  
**Mapei Co-ordinator:** Rod Howard, Mapei Australia Pty Ltd.  
**Photos:** Crystalbrook Collections

**MAPEI PRODUCTS**  
Waterproofing: Mapelastic Smart, Mapenet 150, Mapegum WPS, Mapeproof Turbo 1K  
Preparing screeds and substrates: Topcem, Planicrete SP\*, Eco Prim T Plus, Ultraplan Eco  
Installing ceramic tiles: Keraflex Maxi S1, Kerapoxy, Mapesil AC

Installing acoustic layers and wooden floors: Ultrabond Eco S955 1K  
Installing LVT floors: Ultrabond Eco MS 4 LVT Wall  
  
\*This product is manufactured and distributed in Australia by Mapei Australia Pty. Ltd.  
[mapei.com](http://mapei.com), [mapei.au](http://mapei.au)



## Rabac (Croatia) Valamar Girandella Adults Only Hotel

NUMEROUS MAPEI SOLUTIONS HELPED COMPLETE THIS CHALLENGING HOTEL RECONSTRUCTION

For more than six decades the Valamar Group has been providing top quality tourist experiences, excellent service and innovative offers in attractive destinations along the Adriatic coast: Istria, the islands of Krk, Rab and Hvar, Makarska, Dubrovnik. Valamar offers different types of holidays to meet all the expectations of its guests. Besides family holidays, cycling or tennis holidays and holidays in the nature, Valamar also offers vacations "for adults only", especially intended for guests looking for a romantic getaway or a fun-filled holiday with friends.

### The pavilion turns into a hotel

Work on the renovation of the former Oleander pavilion, which became the Valamar Girandella Adults Only hotel, began in autumn 2016. During the renovation of the pavilion rooms the old floor coverings were removed down to the load bearing reinforced concrete structure. After the new screed was completed, PRIMER G, a synthetic resin-based primer in water dispersion with a very low content of volatile organic compounds (VOC), was applied to improve the adhesion of the adhesive, as a first step before the installation of

porcelain tiles. After PRIMER G dried, wood-effect porcelain tiles were installed with KERABOND PLUS improved adhesion cementitious adhesive with extended open time. Tile joints were grouted with ULTRACOLOR PLUS, while expansion joints were sealed with MAPESIL AC.

### Terraces and bathrooms

The renovation of terraces and bathrooms included removing all layers up to the reinforced concrete structure and installing new ceramic coverings. Plasterboard panels were placed on the walls

**IN THESE PAGES.** In the terraces and bathrooms, the substrates were waterproofed with MONOLASTIC and MAPENET 150. Ceramic tiles were bonded with ADESILEX P9 on the walls and KERABOND PLUS on the floors.





of the bathrooms and treated with the ECO PRIM GRIP primer before waterproofing the surfaces with MONOLASTIC one-component, elastic, cementitious mortar. MAPEGUARD ST waterproofing tape was applied on all joints. MAPEBAND SA self-adhesive butyl tape was used on the joints of the screeds of the balconies due to its ease of use. MONOLASTIC was also applied on these surfaces in two layers, with MAPENET 150 alkali-resistant mesh embedded between them. In the bathrooms, ADESILEX P9 cementitious adhesive with no vertical slip and extended open time was used for installing porcelain tiles on the walls. KERABOND PLUS was used for bonding ceramic tiles on the floors of both bathrooms and terraces. All the tile joints in bathrooms and terraces were grouted with ULTRACOLOR PLUS, while all the expansion joints were sealed with MAPESIL AC.

**Works in the swimming pools**

The reinforced concrete substrates of the pool were cleaned and smoothed over with PLANITOP FAST 330 quick-setting, fibre-reinforced cementitious mortar. MAPELASTIC two-component, flexible cementitious mortar was selected for waterproofing the surfaces of the swimming pool. ADESILEX P10 white cementitious adhesive, with no vertical slip and extended open time, was mixed with ISOLASTIC (diluted 1:1 with water) and used for bonding the glass mosaics in swimming pools, while ULTRACOLOR PLUS was used for grouting joints. All expansion joints were sealed with MAPESIL AC.



Find out more  
**KERABOND PLUS**

**ABOVE.** Wood-effect porcelain tiles were bonded with KERABOND PLUS in the old pavilion rooms, while mosaic tiles were installed in the outdoor pool with ADESILEX P10.

**TECHNICAL DATA**  
**Valamar Girandella Adults Only Hotel,** Rabac (Croatia)  
**Period of the renovation:** 2016-2017  
**Period of the Mapei intervention:** 2016-2017  
**Design:** Ester Miletić, Studio 92 d.o.o.  
**Owner:** Valamar Riviera d.d.

**Main contractor:** Radnik d.d.  
**Ceramic installation company:** Keramika Friščić d.o.o.  
**Supervision:** IG d.o.o.  
**Mapei distributor:** Kimi Commerce d.o.o.  
**Mapei coordinator:** Severin Čamdžić, Mapei Croatia d.o.o.

**MAPEI PRODUCTS**  
Waterproofing: Mapeband SA, Mapelastic, Mapenet 150, Mapeguard ST, Mapenet 150, Monolastic  
Treating and smoothing substrates: Planitop Fast 330, Eco Prim Grip, Primer G

Installing ceramic tiles: Adesilex P10, Adesilex P9, Kerabond Plus  
Sealing expansion joints: Mapesil AC  
Grouting joints: Ultracolor Plus  
  
For further information on products [mapei.com](http://mapei.com), [mapei.hr](http://mapei.hr)

**STUDIO 92: INTEGRATED DESIGN, ATTENTION TO INDIVIDUAL NEEDS, DURABLE QUALITY**

WE SPOKE WITH WITH IGOR MILETIĆ AND ROBERT DRAGOGNA, STUDIO 92

**Studio 92 is known as an architectural studio specialized in the hospitality segment. What are your starting ideas when approaching hotel design?**

The main function of the hotel industry is to provide services to its customers, namely its guests. Therefore, the starting point is almost always a project assessment that defines the basic requirements and objectives that a product must meet. This often is the result of joint work between the investor and the designer, which ensures meeting long-term goals.

**We have witnessed numerous hotel renovations along the Croatian coast. They mostly involve five-star hotels, but to which extent is Croatia able to meet the requirements of tourists of such profile in terms of staff and content?**

Nowadays, there is a kind of gap between the equipment of a facility and the level of services provided in such facility, but Croatia is a country with a long tradition of tourism and there is no doubt that the gap will become smaller in the coming years.

**Studio 92 offers investors a complete service: from design to supervision, interior design and project management. How often do you manage to fit all business segments into one project?**

Almost always because this is the only way to achieve a high-quality product and, as for the investor, to get exactly what he wants. The big hotel companies have recognized this and set it almost as a necessary minimum in their business.

**How long does it take to complete a project of a hotel like the Valamar Dubrovnik President Hotel? Is it easier to work from scratch or is it a bigger challenge to renovate it?**

It is always easier to work "from scratch". Until recently, greenfield investments were a rarity in Croatia, but they are slowly becoming our reality, mainly due to the growing requests of investors, which are becoming almost impossible to achieve in existing facilities. On the other hand, work on existing facilities is pleasing because we often encounter extremely high-quality achievements. Our task in these situations is to try to achieve the synergy of the old and the new.

**In the previous article we describe the renovation of the Valamar Girandella Adults Only Hotel. You also designed the renovation of the Valamar Dubrovnik**



Studio 92 is a renowned studio based in Labin (Istria, Croatia) who has been designing hotels along the Adriatic coast for years.

**President Hotel. What were the differences in the design approach to these hotels?**

The approach was similar because both projects were done on existing buildings. Valamar Dubrovnik President is a hotel designed in the 1970s by American architect Edward Durell Stone, the author of the MoMa building in New York. Valamar Girandella is a tourist complex opened 50 years ago and designed by one of the greatest architects in Croatian tourism, Zdravko Bregovac. The challenge was to preserve what we found, and yet adapt the facilities to modern market requirements. It was inevitable to supplement the buildings with new construction in both interventions, which was a great responsibility, especially when you have to measure up to such big names.

**How much attention do you pay to sustainable and responsible tourism when designing? What does it mean to you?**

Today, the word sustainability has become a label that is glued to any product without criteria in order to make it more acceptable, without asking what it essentially means. While building new facilities, we are changing the space to make it desirable for human life. With our intervention we can reduce the impact on space and the environment to a greater or lesser extent, but we must know that any intervention inevitably changes our surrounding. What we must strive for is for our interventions to be as thoughtful and high-quality as possible, and to enable them a long service life, to reuse them, as is the case with buildings from the 1960s or 1970s, which makes them somewhat sustainable.



Mosaic tiles supplied by Mosaico+, a subsidiary of the Mapei Group, were bonded in the swimming pool with ULTRALITE S1 cementitious adhesive with no vertical slip.



**LEFT.** In the corridor that connects the two structures, large Fiandre tiles (measuring 150 x 320 cm) were installed on the walls with ULTRALITE S1 adhesive. **RIGHT.** In the wellness area, large-size ceramic tiles were bonded on the floors with KERAFLEX EASY S1 adhesive.



## Milano Marittima (Province of Ravenna, Italy) The new Hotel Brasil

CERAMIC TILES AND MOSAICS FOR THE NEW WELLNESS CENTRE AND OUTDOOR SWIMMING POOL

Hotel Brasil, which had already been revamped in 2008, was extended in 2020 following the owners' decision to purchase the nearby Hotel Venezia and merge it with Hotel Brasil to create a single hotel complex with a corridor that connects the two structures. Both structures have now been renovated: various works were carried out at the Hotel Brasil to bring it in line with current fire regulations and standards and four rooms were renovated to make them more welcoming for disabled guests.

The work carried out on the former Hotel Venezia, on the other hand, was much more substantial. Built in the 1960's, it was suffering from both structural and functional deficiencies which required important work to be carried out on site on the hotel's reinforced concrete skeleton. Besides, the ground-floor and basement areas needed to be waterproofed.

This section of the complex currently has 14 rooms that have been completely renovated and modernised. On the ground floor, the structure has also been equipped with a wellness centre. The wellness zone overlooks a large outdoor heated swimming pool covered with mosaic, with a solarium featuring wood decking and a garden alongside.

### The transformation of a structure

Mapei experts took part in the initial training for the site teams and then followed the actual works. The first step was to dehumidify the masonry at ground-floor level by applying MAPESTOP CREAM emulsion, which forms a chemical barrier to stop capillary rising damp, followed by POROMAP RINZAFFO PLUS, POROMAP DEUMIDIFICANTE and POROMAP FINITURA CIVILE dehumidifying

renders and mortars.

The internal walls in various areas of the hotel were rendered and smoothed with INTOMAP R2 FIBRO fibre-reinforced mortar and smoothed with PLANITOP 525 smoothing compound.

The façades of the former Hotel Venezia (for a total area of around 1000 m<sup>2</sup>) were covered with the MAPETHERM external thermal insulation system: MAPETHERM AR 1 GG one-component cementitious mortar was chosen to bond and smooth the insulating panels while MAPETHERM NET was embedded to create a reinforced skim coat. The façades were finished off with QUARZOLITE BASE COAT, followed by a trowel-applied layer of SILAN-COLOR AC TONACHINO PLUS mould and algae-resistant hygienising coating.

### Waterproofing foundations, terraces and pools

The hotel also needed storage tanks with a capacity of 30,000 litres, as specified by local fire department regulations and as a reserve of potable water. These storage tanks were constructed underneath the swimming pool at a depth of 3.5 m and needed a particularly resistant waterproofing system due to the presence of groundwater 0.8 m below ground level. The drainage system was also completely rebuilt to comply with the regulations and standards of the local Health Authority.

Underneath the storage tanks, the foundations were waterproofed from under the slab with MAPEPROOF FBT, a synthetic membrane made up of a synthetic FPO sheet tightly coupled to a layer of non-woven fabric, before casting concrete

After casting concrete, MAPEPROOF SA self-adhesive



Underneath the storage tanks, the foundations were waterproofed from under the slab with MAPEPROOF FBT, a waterproofing membrane made up of a synthetic FPO sheet tightly coupled to a layer of non-woven fabric.

HDPE membrane and MAPETHENE HT self-adhesive bituminous membrane bonded to a double layer of HDPE (high density polyethylene) film were used to waterproof the vertical walls. MAPETHENE HT was also used to waterproof the elevator shaft.

The swimming pool was then built above the storage tanks. MAPELASTIC TURBO elastic cementitious mortar, together with the accessories of MAPEBAND EASY system, were used to waterproof substrates in the swimming pool, terraces and part of the wellness center, as well as the showers in the guestrooms.

#### Installing mosaics and ceramic tiles

In the corridor that connects the two hotels, large-size Fiandre ceramic tiles were installed on the walls with ULTRALITE S1 adhesive. The floorings in the guestrooms and the wellness area were covered with large-size porcelain tiles by Florim bonded with KERAFLEX EASY S1 deformable cementitious adhesive which is particularly suitable for bonding large-size ceramic tiles over large areas of flooring.

Ceramic tiles were bonded on the terraces with KERAQUICK MAXI S1 deformable, non-slip cementitious adhesive, which was chosen due to its rapid-setting and hydrating properties and excellent cleanability. Joints were grouted using ULTRACOLOR PLUS in various shades to match the colours of the ceramic tiles.

Decorative glass mosaic supplied by Mosaico+ (a subsidiary of the Mapei Group) was chosen to cover the surfaces of the outdoor swimming pool and installed using ULTRALITE S1 cementitious adhesive with no vertical slip. The same product was used for bonding metallic mosaics by Mosaico+ in the bathrooms, showers of the guestrooms and in the wellness area. The product chosen to grout joints in the mosaic coverings was KERAPOXY CQ epoxy grout which was also used for grouting joints in the



Find out more  
ULTRALITE S1



Find out more  
MAPEPROOF FBT

#### TECHNICAL DATA

**Hotel Brasil**, Milano Marittima (Italy)  
**Period of the intervention:** 2020-2021  
**Design and works direction:** Annalisa Casadei, Studio Arkigeo  
**Owner:** Società Mare Adriatico  
**Main contractors:** Adriatica Costruzioni Cervese, Edil Omnia  
**Waterproofing contractor:** Trading  
**Thermal insulation and**

#### coatings contractor:

Artigiancasa  
**Mosaic and ceramic tiles installation company:** General Service  
**Mapei distributor:** Faro  
**Photos:** Giulio Semprini  
**Mapei coordinators:** Fabio Costanzi, Andrea Melotti, Stefano Mazzotti, Fabrizio Maltoni, and Thomas Gessaroli, Mapei SpA (Italy)

#### MAPEI PRODUCTS

**Waterproofing:** Mapeband Easy, Mapelastac,

Mapelastac Turbo, Mapeproof FBT, Mapeproof SA, Mapethene HT  
**Dehumidifying masonry:** Mapestop Cream, Poromap Deumidificante, Poromap Rinzaffo Plus  
**Renovating internal walls:** Intomap R2 Fibro, Planitop 525  
**Thermal insulation:** Mapetherm AR 1 GG, Mapetherm Net  
**Wall coatings:** Quarzolite Base Coat, Silancolor AC

Tonachino Plus  
**Bonding ceramic tiles and mosaics:** Keraflex Easy S1, Keraquick Maxi S1, Ultralite S1  
**Grouting joints:** Kerapoxy CQ, Ultracolor Plus

#### MOSAICO+ PRODUCTS

P-saico, Èmetallo, Divetro, Concerto, Cromie, custom-made Decoro

For further information on products: [mapei.com](http://mapei.com), [mosaicopiu.it](http://mosaicopiu.it)

## AN INCREASINGLY CLOSE RELATIONSHIP WITH THE WORLD OF DESIGN

INTERVIEW WITH STEFANO NENCIONI, GENERAL MANAGER OF MOSAICO+

**Over the last few years, clients from both the public and private sectors have been opting more and more for mosaics in bathrooms, saunas, swimming pools and kitchens. What do you think this preference is due to?**

Mosaic is a universal covering solution and, with its more small-size formats, has come back into fashion, similar to what happened with large-size ceramic tiles. Besides, it is a particularly good choice when covering curved surfaces which often characterise spa centres and swimming pools. It is recommended for environments that require particular care, such as showers and swimming pools. What is more, the extensive range of colours available means it is a valid option for covering surfaces in residential complexes which are undergoing significant refurbishment work.

**As a result of this evolution, there is now an infinite array of solutions which are particularly striking for their various colours, forms and materials. With this trend in mind, how would you say Mosaico+'s way of working has changed?**

Mosaico+ likes to emphasise its role as a partner for designers, constantly in search of solutions that enable stylistic ideas at the base of a project to become reality. And this is reflected in our collaboration with selected designers, enhancing our range of products with solutions that focus on the design needs of clients.

**How much does choosing the most appropriate adhesives and grouts for joints, according to area of use, type of mosaic and expected stresses and loads, effect the final result of a mosaic covering?**

With mosaic the joints can radically change the final result; they are an integral part of the overall aesthetic

outcome you are looking for in a project. Apart from their decorative aspect, the technical and performance properties of adhesives and grouts enable our materials to perform at 100% and in line with project requirements.

**What will you be showcasing at Cersaie 2021?**

This year we will be back with a collection designed by Studio Irvine, called Loom. The public will also be able to see Cut-up, a collection of full-body porcelain stoneware designed by Massimo Nadalini and Cardo which was launched at the end of June. It is inspired by the literary technique which consists in physically cutting written text, leaving the words or complete sentences intact. By mixing these various fragments together, new texts are created which maintain a certain logic, although at times they can be incomprehensible. And lastly there will be a revisited version of P-saico collection, P-saico mélange, where the closest and most distant shades on the spectrum are mixed to create a vibrant Seminato-type floor, in which the shade chosen for the grout modifies the final perception of the surface quite significantly.

**ADI (Italian Association for Industrial Design) has chosen two Mosaico+ collections for the ADI Design Index 2020: what kind of relationship do you have with the design world?**

Our relationship with the design world is becoming closer and closer and to receive recognition, such as by being inserted in the ADI Design Index, is confirmation that the path we have undertaken is taking us in the right direction, which includes our collaboration with designers into the research and development of new products.



A few examples of mosaics by Mosaico+: from left on, the custom-made mosaic used for Hotel Brasil, P-saico and Cut-up collections.



MOSAICO+

# Safe and durable installation all over the world

FROM THE PANORAMIC TERRACE TO A SHOWROOM: A PORTFOLIO OF WORKS USING INNOVATIVE INSTALLATION MATERIALS



## Dream Island Moscow - Russia

Dream Island, the largest theme park in the whole of Europe located just south of Moscow, opened its doors to the public in February, 2020 in the presence of the President of the Russian Federation, Vladimir Putin. The park extends over an area of 100 hectares and includes 35 attractions for children and adults, a large shopping centre, 18 restaurants, an enormous

## Panoramic terrace at Empire State Building New York - USA

The Empire State Building, the fourth-tallest building in the city, is one of the most iconic on the New York skyline and attracts 4 million visitors every year. At its summit, the panoramic terrace on the 102<sup>nd</sup> floor provides a breath-taking view of the metropolis. And it was precisely this area that recently underwent renovation work, which included installation of new stone floorings using a system distributed on the US market by Mapei Corp. MODIFIED MORTAR BED was chosen for the preparation of the substrates, ULTRAFLEX LFT adhesive was used to bond the large-size stone slabs, ULTRACOLOR PLUS FA was used to grout the joints, making the floor's intricate compass design especially pronounced, and, finally, the expansion joints were sealed with MAPESIL T.



## Agora Hub Budapest - Hungary

Situated in one of the most dynamic neighbourhoods in Budapest, AGORA is a complex that provides office space for various companies in two distinct buildings. The aim behind its design is to guarantee healthy, safe and pleasant surroundings for those who use and work in them. In the areas that have already been completed (work on the complex is scheduled to be end in 2023), refined finishes include large-size, thin ceramic tiles that required an installation system that would guarantee mechanical strength, resistance and durability. The substrates in various areas (kitchens, corridors and bathrooms) were treated with PRIMER G, levelled off with NOVOPLAN MAXI and waterproofed with MAPELASTIC, MONOLASTIC and MAPEBAND, before installing large-size ceramic tiles with ULTRALITE S2 and smaller tiles with KERAFLEX S1. The joints were then grouted with KERACOLOR FF FLEX and the expansion joints were sealed with MAPESIL AC.

park, a multiplex cinema and a concert hall. To install porcelain tiles in areas subjected to high volumes of pedestrian traffic, highly resistant installation materials were used such as KERABOND T-R cementitious adhesive, which is distributed on the local market by AO Mapei, and ULTRACOLOR PLUS grout for joints. In the areas in constant contact with water, such as the fountains and bathrooms, the substrates were waterproofed with MAPELASTIC and MAPEBAND. The façades of some of the buildings, including those at the park entrance, were insulated with MAPETHERM AR2 and MAPENET 150. For some of the park's attractions, structural anchors were formed using MAPEFILL and MAPEFILL 10 grouts to ensure the complete safety and stability of the installations.



### Sparkasse Aschaffenburg - Germany

The Aschaffenburg branch of the German bank, Sparkasse, is located in a building dating back to the 1970's, which was renovated recently to make it safer and more comfortable for its clients and employees. At ground floor level, which is dedicated to financial services for the bank's clients, an area of 1,100 m<sup>2</sup> was made more spacious and luminous by installing new flooring made from 30 mm thick stone slabs. The first step was to treat the substrates with PRIMER MF and to apply MAPELASTIC in certain areas to guarantee a good level of waterproofing. Once the ceramic tiles had been installed with ELASTORAPID, joints were grouted with ULTRACOLOR PLUS. The stone steps for the spiral staircase, meanwhile, were bonded in place with ULTRABOND ECO PU 2K polyurethane adhesive.

### Jaguar-Land Rover showroom Calgary - Canada

The management of this dealership and showroom wanted to employ a system to install large-size porcelain tiles that would guarantee a strong, resistant surface and also reflect the luxury image and reputation of the Jaguar and Land Rover brands. And they found it with a solution proposed by Mapei Inc., consisting of materials distributed on the Canadian market by the subsidiary, such as PRIMER L acrylic primer, NOVOPLAN 2 PLUS levelling mortar to guarantee a perfectly flat substrate, MAPELASTIC CI membrane to waterproof the surfaces and ULTRAFLEX LFT adhesive, particularly suitable for bonding large-size floor and wall ceramic tiles and stone slabs. ULTRACOLOR PLUS FA was then used to grout the joints while the expansion joints were sealed with MAPESIL T.



### Fourways Mega Mall Johannesburg - South Africa

Mapei South Africa contributed to the massive extension and renovation of this big mall which also included the installation of ceramic tiles over 40,000 m<sup>2</sup>. The heavy volume of foot traffic required resistant, reliable products that would ensure a successful and durable installation. Screeds were prepared by using TOPCEM PRONTO, ready-to-use, normal-setting, controlled-shrinkage mortar. The substrates were levelled using ULTRAPLAN ECO, ultra-fast hardening, self-levelling smoothing compound. The porcelain tiles were installed with KERAFLEX S1 EXPRESS, an adhesive manufactured and distributed in South Africa by Mapei South Africa, before grouting the joints with KERAPOXY CQ, a mould-resistant epoxy grout.



### BB Tower Kuala Lumpur - Malaysia

This building is a 32-storey office tower with a total area of 25,800 m<sup>2</sup>, hosting the headquarters of YTL, an extensive infrastructure developer operating in 10 countries. It is located in one of the most high-end commercial and hospitality hubs of Kuala Lumpur. Its design had it qualify for a GBI Gold Rating certification for energy saving. Mapei products were used for installing ceramic tiles on all the internal walls and floors, as well as on the lift lobby walls. KERABOND PLUS adhesive was used for bonding large-size ceramic tiles on internal floors. KERABOND T, mixed with ISOLASTIC, was chosen to install tiles on the lift walls, while KERAFLEX MAXI S1 was used to bond large-size tiles on internal walls.

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ONLY THE BEST WATERPROOFER WILL DO.



Everyone likes to add a personal touch to their balcony, but you also need to choose the correct, ecosustainable products if you want to waterproof it safely and permanently. There's no better solution than **Mapei's range of cementitious waterproofing** to protect your home from leaks and infiltrations.

**MAPEI. BUILDING EXPERTISE.**

# Waterproofing systems for your home



FROM THE FOUNDATIONS TO THE ROOF:  
ALL MAPEI WATERPROOFING SOLUTIONS  
TO PROTECT YOUR HOME

Mapei, who have always been particularly focused on the needs and requirements of both designers and the final users of buildings, proposes a comprehensive and original range of waterproofing systems that are ideal for use on private residential buildings, both new builds and homes that need to be restored or refurbished.

- 1 Complete system for waterproofing and repairing underground structures exposed to counter-pressure of water with an anti-condensation cycle.  
MAPEWALL + MAPENET EM30 / MAPENET EM40 + MAPEPROOF RANGE + MAPELASTIC FOUNDATION + POROMAP RANGE + SILANCOLOR RANGE
- 2 Rapid system with no demolition work required for the application of waterproofing and installation of ceramic tiles on old balconies/terraces  
MAPELASTIC TURBO + KERAQUICK MAXI S1 + ULTRACOLOR PLUS
- 3 Coloured, ready-to-use waterproofing system for old tiled roofs.  
PURTOP EASY RANGE
- 4 System for creating "green roofs" to be used as gardens or for growing produce.  
PURTOP LINE



# Waterproofing below ground level

Quite often, spaces below ground level need to be exploited due to a lack of available building land and the high density of structures in built-up areas. This is why renovating constructions below ground level is quite common and is a solution that allows various types of structure to be created, such as service areas, extra living space, utility rooms, production areas and many more. Structures below ground level, however, are in contact with moisture in the ground and with water percolating from the ground and need to be waterproofed to prevent leaks and infiltrations compromising their functionality and to guarantee their protection and durability. Mapei has developed two different types of system for waterproofing and protecting structures below ground level.

■ **MAPEPROOF:** bentonite barriers consisting of two geofabrics in needle-punched polypropylene, with the upper layer in non-woven fabric and the lower layer in woven fabric, which form a sandwich around a uniform layer of natural sodium bentonite. The particular grain size of the bentonite, together with the type of non-woven geofabric used, guarantees that the bentonite saturates the non-woven fabric when it comes into contact with poured concrete. These properties make the MAPEPROOF barrier self-sealing and, when the special compound comes into contact with water or moisture in the ground, it is transformed into gel with excellent waterproofing properties.

■ **MAPELASTIC FOUNDATION:** a two-component, flexible cementitious mortar for waterproofing concrete surfaces subject to positive and negative water pressure. When the two components are mixed together, they form a plastic-consistency paste that is easy to apply with a roller or by spray, on both horizontal and vertical surfaces, in layers up to 2 mm thick.



# Mapelastick range: a guarantee for more than 30 years

Thanks to its constant, ongoing research into product innovation, the Mapei Group has a range of cutting-edge, long-lasting solutions available for end users that have been certified according to the most stringent standards. The MAPELASTIC range has been available on the building products market for more than 30 years and is synonymous with reliable, guaranteed waterproofing. MAPELASTIC, MAPELASTIC SMART and MAPELASTIC TURBO are elastic, cementitious waterproofing systems which, thanks to their content of high quality synthetic resins, maintain their high elasticity in all weather conditions, thereby ensuring their characteristics remain stable over the years. The high level of adhesion of

MAPELASTIC, MAPELASTIC SMART and MAPELASTIC TURBO to various types of substrate means they may be used to waterproof new structures and to restore existing structures without having to

remove the old covering material. And lastly, they are so versatile they can be used on various types of substrate and applied using different methods to meet the needs of every user.





# Polyurethane membranes: versatility and simple application

To waterproof balconies and terraces, Mapei proposes the PURTOP EASY range: ready-mixed polyurethane-based products applied in one single coat. The high elasticity and excellent adhesion of these products to substrates make them ideal for

both new and existing structures, to guarantee a rapid, perfect waterproofing solution. Highly versatile, the products from this range allow users to choose their preferred application method (by trowel or spray). PURTOP EASY is a one-component,

elastic polyurethane membrane for waterproofing both new and existing balconies, terraces, roofs and pedestrian areas. On the PURTOP EASY layer you can apply a non-slip finish or a coloured finish.



# Green roofs to create city gardens



The increasingly widespread attention to the environment and eco-sustainable building in general, along with the trend of reclaiming green areas within urban surroundings, has led designers to look for solutions that may be adopted to create green roofs to be used as gardens or for growing produce. Apart from reducing the visual impact of a building, this type of intervention also contributes in reducing its "heat-island" effect. Mapei has developed a series of cutting-edge product systems,

which comply with current European standards covering this sector and which have been tested by important research bodies and institutes, in order to create green roofs with excellent waterproofing properties. And for these particular design requirements Mapei proposes PURTOP 400 M, a two-component, solvent-free, hybrid polyurea membrane applied by spray with a high-pressure, bi-mixer type pump, so that waterproofing membranes may be applied on bridge decks and roofs on site.



## Timisoara (Romania)

# A new carpark in the Isho district

POLYGLASS MEMBRANES WERE USED TO WATERPROOF ROOFS IN THIS LIVELY URBAN AREA

Timisoara is the largest city in western Romania and has been designated 2023 European capital of culture. Over the last few years, it has become much more appealing for business and the tourism sector and this has led to numerous backers investing in urban redevelopment projects and the conversion of dozens of buildings of architectural value in the oldest neighbourhoods of the city, as well as the construction of completely new neighbourhoods.

This is the context behind the creation of the Isho redevelopment project of a former industrial area: a new multi-functional district consisting of residential complexes, areas for leisure activities, shopping facilities and office spaces. Isho includes 1,200 apartments, as well as offices, a hotel, an extensive range of cultural and sports services and a multi-storey carpark, all within a just short walk of the old part of the centre of Timisoara.

### The carpark project

One of the tallest in the country, the new carpark – with a fully-automated intelligent system to manage the availability of parking spaces – has played a key role in improving traffic conditions in one of the most congested parts of the city.

From a construction point of view, the work proved to be a real challenge: it was designed in the form of a spiral, with 700 parking spaces over 9 levels and a continuous ramp system. The internal height at each level is quite limited which meant it was not easy to find suitable equipment to apply and compact the hot asphalt on the ramps leading to each of the levels.

The low ceilings also created problems for the delivery of the asphalt around the site: in fact, because there was not enough space available for the dumper trucks to reach the various levels, they had to offload the material on the ground floor.

The tender for supplying building materials for the work

was awarded to the Mapei Group, who beat their competitors by being the only company that could guarantee the availability of material from stock and provide suitable equipment for its application and constant support for the teams working on site.

### Waterproofing the ramps

The design of the ramps specified the application of a layer of hot asphalt applied directly over a bituminous membrane manufactured and supplied by Polyglass SpA, a subsidiary of the Mapei Group headquartered in Italy.

The product chosen in this case was 5 mm thick POLYBOND HP P elastomeric-plastomeric (PlastomerPolymer Bitumen) waterproofing membrane.

POLYBOND HP P has excellent performance properties since it is made from a special distilled bitumen com-

The continuous ramp system inside the carpark was waterproofed with POLYBOND HP P membranes.



A view of the multi-storey carpark in the Isho neighbourhood in Timisoara whose roofs were waterproofed with POLYBOND HP P.

pound modified with a high percentage of special polymers such as polypropylene (APP) and polyolefin (APAO), with the addition of special anti-ageing additives.

The membrane is manufactured according to standards set by NAT® technology, an innovative production system which controls the ageing process of the polymeric matrix of bitumen membranes.

POLYBOND HP P has a spunbond polyester nonwoven carrier stabilized with glass strands parallel to the machine direction. The carrier gives great tensile strength (in all directions) and puncture resistance, with excellent dimensional stability.

The adhesion promoter employed for the membrane was POLYPRIMER, a bituminous primer containing oxidized bitumen and a mix of technical quick drying solvents, which blocks dust and porosity in the application surface enabling the membrane to be applied quickly.

An enormous amount of PlastomerPolymer Bitumen

membrane – around 20,000 m<sup>2</sup> – was used in the construction of this spectacular structure that has helped improve the architectonic impact of the city and make Isho the best-served neighbourhood in Timisoara regarding parking spaces.

This system can also be used for waterproofing the roofs of private residential buildings, ensuring long-lasting results and high performances.



Find out more  
POLYBOND HP P

### TECHNICAL DATA

**ISHO Parking**, Timisoara (Romania)

**Period of construction:** March 2018 – August 2019

**Period of waterproofing works:** October –

November 2018

### Period of the Polyglass

**intervention:** April –September 2018

**Design:** ATELIER 21 SRL

**Intervention by Polyglass:** supplying

products for waterproofing the ramps

### Installation company:

CECUM CONSTRUCT SRL

**Distributor:** EGERIA TM

SRL

**Polyglass/Mapei coordinators:** Lucian

Zarin and Cosmin Judea,

Mapei Romania

### POLYGLASS PRODUCTS

Polyprimer, Polybond HP P

For further information on products [polyglass.com](http://polyglass.com)



## The “cathedrals” of wine

DESIGN, SUSTAINABILITY AND INNOVATIVE MATERIALS ARE THE GUIDELINES UNDERSCORING BUILDING WORK IN WINE PRODUCTION PLANTS. MAPEI'S CONTRIBUTIONS TO AN INDUSTRY GROWING ON A GLOBAL SCALE.

Wine is an integral part of lots of cultures. Over the years, the emergence of advanced distribution networks and innovative flavours, coupled with the health benefits of wine and premiumization of products, has resulted in it becoming even more popular globally. The global wine market has witnessed steady growth over the years and, according to Statista portal ([statista.com](https://www.statista.com)), worldwide revenue in the wine segment amounted to 340.8 billion US dollars in 2020. The market is expected to grow annually by 9.8% in 2020-2023 and the forecast for 2021 is 381 billion US dollars.

The United States consumed the largest volume of wine in 2020: 33 million hectoliters. At 24.7 million hectoliters, France was the second leading consumer of wine worldwide. The United States was also the world leader in 2020 in terms of revenue with 50 billion U.S. dollars. In second place was France with revenue at 25 billion dollars. China is forecast to reach a market size of 93.5 billion US dollars by 2027. Indeed, Asia-Pacific is expected to witness rapid growth in this market, during the next few years. This is due to an increase in the number of companies that produce wine in China, India, and Japan. An increase in demand for premium wines and growing westernization also drive the growth of the wine market in this region.

Italy was once again the world's leading wine producer in 2020 (49.1 million hectolitres), followed by France (46.6 million hectolitres) and Spain (40.7 million hectolitres). These three countries account for most of European (165 million hectolitres) and global production: smaller producers include the United States (22.8 million hectolitres) and Argentina. Despite a 10.8% drop during the year of the pandemic, France is still at the top of the rankings for foreign sales (worth 8.7 billion Euros) ahead of Italy and Spain.

Wine-manufacturing plants are often synonymous with beautiful architecture, sustainability and tourist interest. A number of wine-manufacturing plants in Italy bear the hallmark of leading architects - for example, Mario Botta, Renzo Piano and Tobia Scarpa - as do several others in Spain (Frank O. Gehry and Norman Foster) or the United States (Jacques Herzog and Pierre de Meuron). Design moves hand-in-hand with the use of innovative materials and technology for producing, conserving and ageing wine.

Mapei has helped build and renovate numerous wine-production plants. Here is a review of some of the most important works it contributed to.

**340.8**

BILLION US DOLLARS:  
GLOBAL  
REVENUE IN 2020

**+9.8%:**

GLOBAL ANNUAL  
GROWTH EXPECTED  
IN 2020-2023

**50**

BILLION US DOLLARS:  
US WINE MARKET  
IN 2020

**93.5**

BILLION US DOLLARS:  
EXPECTED GROWTH  
FOR WINE REVENUES  
IN CHINA BY 2027

**ITALY**

WORLD'S TOP WINE  
PRODUCER IN 2020

**FRANCE**

WORLD'S TOP  
EXPORTER  
IN 2020



## Saint-Estèphe (France) Château de Pez

CERTIFIED PRODUCTS FOR AN EXTENSION  
TO THIS WINERY RICH IN HISTORY

Dating back to the 15<sup>th</sup> century, Château de Pez is one of the oldest vineyards in the Saint-Estèphe area in the Bordeaux region (France). Situated on the left bank of the Gironde estuary, it covers an area of 48 hectares and includes vines of the Cabernet-Sauvignon and Merlot varieties. It has been owned by Maison de Champagne Louis Roederer since 1995 and produces fine wines of exceptional quality. The structure has a rich history and has been transformed over the centuries with numerous investments and extensive renovation work over the years to modernise the winery's processing equipment and buildings.

### Innovative products for an antique structure

While carrying out the extension work, the main contractor, Adrien Costa, used Mapei solutions to waterproof and install ceramic tiles in the new wine-making area and in the area where the freshly-harvested grapes are offloaded.

The system used for this particular intervention meets the requirements of French certification "Excell PLUS ambiance intérieure\*" which certifies the absence of specific contaminants, guaranteeing that emissions from the materials employed

do not affect wine while it is being stored or going through the ageing process, and that the health and safety of those who live and work in areas where they are applied is safeguarded.

On a surface area of more than 600 m<sup>2</sup>, the first step was to form a screed made from TOPCEM, a special hydraulic binder for normal-setting, rapid-drying, controlled-shrinkage screeds, which helps reduce waiting times before installing flooring (24 hours) and before putting them into service (48 hours).

After a thorough clean, the surfaces were waterproofed with MAPELASTIC AQUADEFENSE ready-to-use, rapid-drying, liquid elastic membrane.

30 x 30 cm porcelain tiles were then bonded to the floors and walls using KERAFLUID N adhesive, which is distributed in France by Mapei France.

The joints were grouted with ULTRACOLOR PLUS high performance grout. In this specific job site, the product was chosen by the designer because it has the "Excell zone verte" label, usually requested in France for works in wineries.



Find out more  
TOPCEM



**1.** An external view of the winery. In the foreground one can see the new building hosting the wine-making process.

**2.** The area used for storing wine.

**3.** The new areas used for wine-making operations where ceramic tiles were bonded with KERAFLUID N.

### TECHNICAL DATA

**Château de Pez**, Saint-Estèphe (France)

**Period of construction:** 15<sup>th</sup> century

**Year of the renovation:** 2019

**Intervention by Mapei:** supplying products for preparing the screeds, waterproofing substrates

and installing ceramic tiles  
**Design:** SCP Ducos et Rougier

**Owner:** Nicolas Glumineau  
**Owner's assistant:** MO<sup>2</sup>, Pierre Simoni

**Works direction:** Ingérop  
**Main contractor:** Adrien Costa

**Supervision:** Dekra  
**Mapei coordinator:** Martial

Giry, Mapei France  
**Photos:** Pierre Simoni

**MAPEI PRODUCTS**  
**Preparing screeds:** Topcem

**Waterproofing substrates:**

Mapelastic AquaDefense  
**Installing ceramic tiles:** Kerafluid N\*

**Grouting joints:** Ultracolor Plus

\*This product is manufactured and distributed on the French market by Mapei France.

For further info on products visit [mapei.com](http://mapei.com) and [mapei.fr](http://mapei.fr)



## Szekszárd (Hungary)

# TAKLER WINERY

MAPEI ADHESIVES TO INSTALL CERAMIC AND CONCRETE TILES IN THE WELCOMING AREAS



### IN THESE PAGES.

Takler winery has been producing wine since 1987. In 2012 they built new areas completed with Mapei products.



This winery has been both producing and storing wine since 1987 when Ferenc Takler, a descendant of a Swabian family with a long history of winemaking, started growing his own vines on the hills around Szekszárd in the south of Hungary. In 2012 this family-run business took advantage of a grant from the European Union to optimise their production methods and to expand the area dedicated to wine-tasting sessions and providing hospitality to tourists. Thanks to the grant, a new structure with a restaurant, wine shop, wine terrace and arcaded entrance was built which features a Swabian "peasant-baroque" style embodying the atmosphere of the Decsi hills: the ideal location for tasting the perfect wines.

### Ceramic and concrete tiles

The vaulted hall with its 9 domes hosts the restaurant and features beautiful wall and floor coverings designed and manufactured by Otti Manufaktúra Kft.

The ceramic and stone coverings were installed with KERAFLEX MAXI

S1 and ADESILEX P9, high-performance cementitious adhesives with extended open time and no vertical slip.

KERAFLEX MAXI S1 is particularly recommended for bonding large porcelain tiles and natural stone slabs. With very low emission of volatile organic compounds (VOC), it is especially suitable for high thickness layers up to 15 mm.

ADESILEX P9 is an ultra white powder with excellent workability. When mixed with water, a mortar is obtained which is easily workable; highly thixotropic; features extended open time and perfect adherence to all materials normally used in building; hardens with minimal shrinkage.

DYNAMON SP1, a super-plasticizer based on a modified acrylic polymer, and VISCOFLUID SCC/10, viscosity modifying admixture for self compacting concrete, were also used to manufacture rustic concrete tiles at Otti Manufaktúra Kft.

The concrete tiles were installed on floors, walls and other decorative elements in the new areas.



Find out more  
KERAFLEX MAXI S1

### TECHNICAL DATA

**Year of construction:** 2012  
**Period of Mapei intervention:** 2012  
**Owner:** Takler winery  
**Designer:** Hoffer Ottó  
**Main contractor:** Huber

**Péter**  
**Installation companies:** Huber Péter and Péter Béla  
**Mapei distributor:** Otti Manufaktúra Kft.  
**Mapei Coordinator:**

Juhász Mihály, Mapei Kft. (Hungary)

### MAPEI PRODUCTS

Keraflex Maxi S1, Adesilex P9, Dynamon SP1, Viscofluid SCC10

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



## Soave wine cooperative

### SOAVE (PROVINCE OF VERONA, ITALY)

Two years ago, the Soave wine cooperative decided to extend and refurbish the structure, which now covers an area of more than 11 hectares. This total includes 35,000 m<sup>2</sup> of covered buildings, making it the largest winemaking cooperative in the whole of Italy, with a bottling capacity of 80 million bottles. To reduce energy consumption, the façades of the existing office block and the new bottling plant were thermally insulated. Rockwool insulating panels were bonded in place on the walls with

MAPETHERM ARI GG cementitious mortar. After around 24 hours, the façades were skimmed with a 2 mm thick layer of MAPETHERM ARI GG. While the mortar was still wet, MAPETHERM NET alkali-resistant glass fibre mesh was installed thereupon and, after another 24 hours, a second layer of MAPETHERM ARI GG was applied. The façades were then treated with MALECH primer before applying QUARZOLITE BASE COAT coloured undercoat and QUARZOLITE TONACHINO acrylic resin plaster.

#### TECHNICAL DATA

**Period of construction:** 2012  
**Period of the Mapei intervention:** 2017-2019  
**Design:** Studio Andrea Tomasi & Associati  
**Owner:** Soave wine cooperative  
**Main contractor:** Rigon

Costruzioni Edili Srl  
**Mapei distributor:** Svai Srl  
**Mapei coordinators:** Andrea De Rossi and Riccardo Berta, Mapei SpA (Italy)

#### MAPEI PRODUCTS

Mapetherm ARI GG, Mapetherm Net, Malech, Quarzolite Tonachino



## Winzer Krems wine cooperative

### KREMS AN DER DONAU - AUSTRIA

The Winzer Krems wine cooperative is the largest wine producer in Austria and has an eighty-year tradition of making fine wines. The cooperative has around 900 members from Krems and der Donau region in Lower Austria. Work started in 2019 and is still ongoing at the cooperative's facility in Sandgrube 13, which included the building of a new wine cellar, a new bottling plant and new storage facilities covering an area of around

6,000 m<sup>2</sup>.

The concrete for the foundations was admixed with Mapei admixtures distributed on the Austrian market by Mapei GmbH, such as DYNAMON SF14 HIGH\* super-plasticiser for fresh concrete with low viscosity, DYNAMON LZ 553\* plasticiser to increase the workability of concrete and MAPEAIR LP 200\* aerating agent, which is added to concrete to make it resistant to freezing weather conditions.

#### TECHNICAL DATA

**Period of construction:** 2019-ongoing  
**Period of the Mapei intervention:** 2019-ongoing  
**Owner:** Winzer Krems eG  
**Main contractor:**

Lasselsberger GmbH  
**Mapei coordinator:** Thomas Gruber, Mapei GmbH (Austria)

**MAPEI PRODUCTS**  
 Dynamon SF14 High\*, Dynamon LZ 553\*, Mapeair LP 200\*

\* These products are manufactured and distributed on the Austrian market by Mapei GmbH (Austria)

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

# Resin floorings: hygienic and resistant

RESISTANT TO WEAR AND FREQUENT CLEANING, RESIN SYSTEMS ARE PARTICULARLY SUITABLE FOR THE WINE INDUSTRY. HERE IS A SELECTION OF APPLICATIONS



1



2

## Kaltern winery CALDARO (BOZEN, ITALY)

The solution adopted for this winery, which was installed in 2018 over an area of around 1,000 m<sup>2</sup>, was MAPEFLOOR SYSTEM 32, a multi-layered epoxy system characterised by its high mechanical properties, high resistance to chemicals and a highly non-slip surface finish, which means cleaners can wash surfaces every day while working in complete safety (photo 1). MAPEFLOOR SYSTEM 32 forms a seamless surface,

impermeable to oil and aggressive substances, which fits in superbly with modern stainless steel storage vessels, as well as with more "traditional" containers made from wood (photo 2). The walls were also made waterproof and resistant to chemicals by applying two coats of MAPECOAT I 62 W epoxy coating in water emulsion. The joints in the flooring were sealed with MAPEFLEX PU 45FT.

## Roccafiorino winery TODI (PERUGIA, ITALY)

Apart from having to protect flooring in production areas, wineries also need to make the spaces used for greeting and entertaining clients more welcoming, so they may immerse themselves into surroundings which are both contemporary and, at the same time, respectful of age-old traditions. The surfaces of the flooring in the production areas of this winery were damp and suffering from capillary rising damp, which made it necessary to apply MAPEFLOOR SYSTEM 51, a multi-layered, water-based, vapour-permeable epoxy coating system, characterised by its high mechanical properties, high resistance to wear and non-slip finish (photo 3). For the shop and reception area, the client opted for MAPEFLOOR SYSTEM 33, a self-levelling epoxy system characterised by high mechanical properties and a really warm, welcoming effect, emphasised by a matt finish which was created by applying a coat of transparent MAPEFLOOR FINISH 58 W, an option available for this system (photo 4). All the above work was carried out in 2018 over a total area of 1,500 m<sup>2</sup>.



3



4



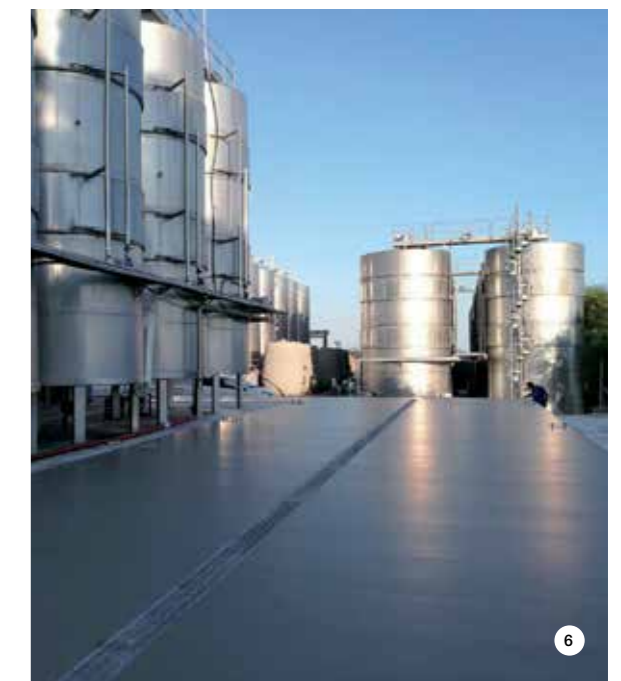
5

## San Patrignano winery SAN PATRIGNANO DI CORIANO (RIMINI, ITALY)

The speed at which this type of system can be installed and put into service, along with the simple maintenance and care procedures and the constant protection it provides for resin-based surfaces, were the winning features of MAPEFLOOR SYSTEM 32, which has now been applied in various areas of the winery (3,500 m<sup>2</sup> of surfaces) over the last ten years (photo 5).

## Settesoli winery MENFI (AGRIGENTO, ITALY)

The external surfaces of wineries may also have to withstand aggressive chemicals and the wear caused by wheeled vehicles or may need to be washed frequently. The MAPEFLOOR CPU/HD coating system guarantees really high mechanical properties and resistance to wear. In the case of substrates that could potentially be damp, the only thing that could be affected is its colour, but this has no effect on the performance characteristics of the product.



6



© Arch. Guizzo Armando

## Nervesa della Battaglia (Treviso, Italy) CANTINA GIUSTI WINERY

A WATERPROOFING SYSTEM FOR A GREEN ROOF TO CREATE A BUILDING IN HARMONY WITH LOCAL SURROUNDINGS

### Problems and solutions

A real vineyard sits on top of the Cantina Giusti Winery; this meant that it was critical to create the correct stratigraphic layout of the roof. Polyglass PLANA P and ELASTOSHIELD TS4 P membranes, and an additional MAPEPLAN T B synthetic membrane, enabled all objectives to be achieved, guaranteeing a perfect waterproofing system in full respect of the environment.

The Montello Hills near Treviso (Northern Italy) are the setting for the new Cantina Giusti Winery: 5.000 m<sup>2</sup> that reflect an unbreakable bond between the local territory and tradition. Polyglass made its contribution to the project by helping create one of the most original and spectacular parts of the building: a waterproofing system for the green roof, which was achieved by applying PLANA P and ELASTOSHIELD TS4 P membranes and an additional synthetic membrane, MAPEPLAN T B.

Located in Nervesa della Battaglia (Province of Treviso), the winery is a reflection of the business spirit of the Italian-Canadian businessman Ermenegildo Giusti, who decided to return to his homeland and put all his effort into redeveloping this area at the foot of the Montello Hills. This prestigious project is the result of a childhood dream that has been transformed into reality: in fact, the farm includes around one hundred hectares of vineyards, a panoramic

winery and various rustic houses. The aim was to preserve the natural biodiversity of the surrounding area, exploit the energy available from alternative sources, re-establish the natural balance of local woodland and promote eco-sustainable cultivation practices.

The Armando Guizzo architectural studio was responsible for the design of the winery, creating a building which, thanks to its undulating form, is in total harmony with the surrounding landscape. The building is five floors high, with two thirds of its overall development below ground level (from a level of -7.7 m to +6.7 m). The belvedere, which sits on the top of the structure, provides magnificent panoramic views of the area and can be used to gain access to the green roof with its very own vineyard.

### The green roof

Polyglass's part in this ambitious project was to specify the stratigraphic layout of the waterproofing

**RIGHT.** A view from above of the building.



system for the green roof during the design stage and then to supply the actual materials during the installation stage.

Choosing to create a green roof brings a lot of advantages, such as better thermal insulation, which helps reduce energy consumption, a reduction in the heat island effect with lower CO<sub>2</sub> emissions and longer service life for the waterproofing system. Besides, it creates extra green areas which people can use and enjoy, as well as new habitats for flora and fauna, a further contribution in helping safeguard biodiversity. The result of all this also means the property has a higher commercial value, and all those using and living in the building can enjoy a better quality of life.

### Waterproofing system

The roof of the Cantina Giusti Winery is so much more than a simple but intensive green roof. In fact, there is a real vineyard growing on top of the

building, which requires all the work and attention typically needed to cultivate grapevines.

This meant that it was critical to create the correct stratigraphic layout. The first step was to apply 3 mm thick PLANA P 3 membrane to create a vapour barrier, which regulates the flow of water vapour from inside the building towards the outside and helps prevent problems caused by the formation of condensation between the various layers of the roof.

Thanks to its excellent mechanical properties in terms of extension at break, high puncture resistance and dimensional stability, 4 mm thick ELASTOSHIELD TS4 P elastomeric

membrane was used to cover the expansion joints using the pontage technique.

MAPEPLAN T B 20 synthetic membrane then formed the final layer for the roof. This type of membrane is made from flexible polyolefin, which guarantees total impermeability to rainwater and water from irrigation systems, while also helping to prevent the load-bearing structure from deteriorating. It is particularly suitable for green roofs because, as stated on the FLL test certificate, it is resistant to roots and rhizomes and complies with EN 13948 standards. What is more, thanks to its unique composition, it is more resistant to





**ABOVE.** Application of Mapeplan T B synthetic membrane over the insulating layers.

aggressive substances which percolate from below and to atmospheric agents, microorganisms and bacteria. Also, its excellent dimensional stability is guaranteed by incorporating a thin layer of glass mat and thanks to the special "multi-extrusion coating" process used to manufacture the membrane. This gives the product excellent resistance to deterioration, as demonstrated by accelerated ageing tests carried out on the membrane.

MAPEPLAN T B waterproofing membranes have their own EPD (Environmental Product Declaration), as defined by ISO 14025 standards. The EPD contains information on the product's impact on the environment, which has been measured using parameters calculated according to LCA (Life Cycle Assessment) methods, following the ISO 14040 series of standards. The philosophy surrounding the majestic architectural structure of the Cantina Giusti Winery perfectly reflects Polyglass's mission: research and innovation in full respect of the ecosystem to improve energy efficiency and reduce waste. Entrusting Polyglass Technical Services with the design of a waterproofing solution means you also benefit from a tailor-made support service in line with your expectations and personal requirements, thereby creating a long-lasting waterproofing system that remains perfectly functional over the years.



Find out more  
MAPEPLAN T B

**TECHNICAL DATA**

**Cantina Giusti Winery,**  
Nervesa della Battaglia  
(Province of Treviso, Italy)  
**Year of construction:**  
2019  
**Year of the intervention:**  
2019  
**Intervention by**  
**Polyglass:** supplying

products for waterproofing  
the green roof  
**Client:** Cantina Giusti  
**Design:** architetto Guizzo  
Armando architettura e  
paesaggio  
**Main contractor:** E.MA.  
PRICE. SpA  
**Waterproofing**  
**contractor:** Nenzi Srl

**Polyglass coordinators:**  
Christian Spinazzè and  
Mauro Redemagni,  
Polyglass SpA (Italy)

**POLYGLASS PRODUCTS**

Waterproofing membranes:  
Plana P\*, Elastoshield TS 4  
P\*, Mapeplan T B\*

\*These products are  
manufactured and  
distributed by Polyglass  
SpA, a subsidiary of the  
Mapei Group.

For further information on  
products visit [polyglass.com](http://polyglass.com)

# Mapeplan®

Synthetic membranes in **FPO/TPO** and **PVC-P**

HIGH REFLECTANCE  
FOR ENERGY SAVING



ENVIRONMENTAL FRIENDLY  
(ENVIRONMENTAL PRODUCT  
DECLARATION)



IDEAL FOR LARGE AND  
COMPLEX SURFACES

MAPEPLAN® T Smart White guarantees a high solar reflectance. This white covering reduces the roof's surface temperature by 50% and, consequently, also the internal temperature of the building, keeping it constant. MAPEPLAN® production, is the line of synthetic coverings for waterproofing, which thanks to an exclusive "multi-extrusion coating" technology is able to provide PVC-P and FPO/TPO surfaces guaranteed to last long and have great performances. One of the most important characteristics of the MAPEPLAN® surfaces is their great workability and weldability. The thermal welding consists of an actual fusion and union of the molecular chains and provides resistance to the water head and mechanical stress. With MAPEPLAN® waterproofing systems it's possible to realize totally hermetic "continuous" waterproofing for roofing and civil engineering works.



WWW.POLYGLASS.IT

“There are great opportunities for growth in the building industry associated with tourism and we can offer innovative products and excellent customer service”



Mario Jordão, General Manager of Lusomapei.

# Key player in boosting tourism in Portugal

WE SPOKE WITH MARIO JORDÃO, LUSOMAPEI'S GENERAL MANAGER

**According to the Portuguese National Office of Statistics, the production index in the building industry increased for the first time in April by 3.2% compared to the previous month following a negative trend for over a year in wake of the Covid-19 pandemic. How do you assess the prospects for the forthcoming months in the building industry from your viewpoint?**

We forecast a bright next future in the building sector for the rest of the year and maybe for the entire 2022. The big players operating in the market, such as building contractors, are fighting to find labour force to face demand. Cement production is running at a high level and concrete plants recently faced some difficulties to deliver in time. Nevertheless, the global raw materials crisis is creating additional barriers, destabilising competition. A downturn trend should arise then, if economic EU subvention program is not well managed. As a small economy, Portugal might face some additional difficulties.

**In the years leading up to 2020, investment in building and housing rose constantly. After the slowdown due to the pandemic, will this positive trend resume?**

**What measures has the Portuguese government taken to boost investment in building?**  
The situation caused by the pandemic, specifically smart working, brought new awareness to the Portuguese citizens regarding their comfort and welfare needs at home. Several subsectors of the construction industry had a boost in their output level. It was decisively the private investment in maintenance works, as well as the restart of the works in the portfolio, that promoted the growing trend. However, the Portuguese government initiated and resumed significant public investment in infrastructure, after years of investment stagnation. All in all, the production in construction industry will go on growing in 2021.

**Tourism has become an increas-**

**ingly decisive player for the Portuguese economy. Is it also an important industry for Mapei?**

Absolutely! The growth of tourism and the need to create more hospitality structures were among the factors that caused strong growth in the sector.

Quality construction is always welcome news for Mapei. We will always be able to better defend our growth, enhancing the offer with our systems. Portugal still has a huge potential for growth in quality tourism in the coming years and Lusomapei has an important role to play in terms of product systems and, not least, excellent customer service. The housing and small-size hôtellerie renovation sector has grown in parallel. And where the renovation industry goes more selective and demanding, Mapei especially finds an excellent opportunity to make a difference. And this trend will continue.

**How have Mapei's operations in the Portuguese building market**

“We are building a manufacturing plant: it is a unique opportunity to diversify our production and make the company more profitable”

**changed over the years?**

Lusomapei grew initially by trying to be well represented through building materials distributors. This phase occupied several years of our strategy. Progressively, we created conditions to grow in the specialized applicators channel. The generalist team was segmented and we focused on specialization to better serve the needs of the market. We tried to have more Mapei solutions produced locally, which is still a challenge nowadays. As regards product lines, we aim to defend our n. 1 product: MAPELASTIC. MAPELASTIC is a brand, in Portugal, as well as our biggest project. We also focus on the growth of sales for the AQUAFLEX family. Waterproofing is the most important product line in our strategy. Our products for ceramic tiles deal with a mature market and enjoy long-time reputation. We started this year, the year of our 20<sup>th</sup> anniversary, an important project: we launched the “KERAFLEX XX”

adhesive. The Portuguese market of ceramic installation products is aggressive and price-focused while we try to make the difference through quality. We have already an important market share in the thermal insulation market. We are growing at a very significant level as this project is very well managed. We still have to improve as for sales in the wall coatings segment, where we deal with fierce competition due to price reasons. We are completing a project that will lead to local production of wall coatings and this will allow us to continue to grow. Mapei product families for installing PVC and self-levelling are very important in our sales structure. This was one of the first projects we “won” in the specialization strategy, proof for the team that the investment was worth it! Now it is a mature project where we try to defend ourselves from aggressive competition. The product line for industrial

LUSOMAPEI

**2001**  
THE YEAR OF ITS FOUNDATION

**15**  
MILLION EUROS REVENUE IN 2020

**69**  
STAFF

**1**  
MANUFACTURING PLANT IN ANADIA (AND 1 UNDER CONSTRUCTION IN CANTANHEDE)



Lusomapei's manufacturing plant in Anadia, in Central Portugal.



**ABOVE.** The Prata Living Concept residential complex in Lisbon, designed by Renzo Piano and completed with Mapei solutions.

floorings and sports facilities and surfaces is a very defying project where we still have a long road to travel. Multinational market leaders, as well as small players, are struggling in the Portuguese market and are very aggressive in price policies. We also sought to grow in product families that are well-known brands in the Mapei universe or products with important sales figures in other countries. Sealants and LAMPOCEM are a good example of investing resources with good payback.

**What other projects are you implementing to consolidate in Portugal?**

We are currently in the construction

phase of a new manufacturing plant, which is a huge milestone for the whole team. This is a unique opportunity to produce a wider range of products which allows us to boost the sustainable growth of Mapei's presence in Portugal, as well as the profitability of the company. Lusomapei is concerned with overcoming difficulties with positive results for the entire team. We are used to grow well and we want to reach our goals but with a proper level of "oxygenation of muscles and mind". We want motivated and participative employees. The growing concern with the area of human resources and soft skills is another very interesting and profitable project for

both the company and employees. The entire Lusomapei team takes part in the company's management, so we seek employees with a high level of analytical and decision-making skills, responsibility, and motivation. We aim to make Mapei the Portuguese player with the most agile and best organized structure, capable of providing the best global service to our customers. We have been growing at a very interesting rhythm and we have been hiring good employees. Operationally, we are very resilient and active. Finally, we look for strict control of projects and focus on them with great attention and consistency, keeping in mind the guidelines set

by the Group's CEOs. And we smile because the results are good: we are a happy and special team.

**Training and support for professionals in the building industry are among the Mapei Group's pillars: what are you doing on these fronts?**

Training has always been a strategic objective for Lusomapei. Transmitting our knowledge and learning from industry professionals is essential for the development of buildings

that are safer, more durable and sustainable. Therefore, in 2018 we implemented the "Mapei Academy" project, a brand that brings together all the training initiatives planned in Portugal: from seminars for designers, through technical training for building companies and installers, to commercial training for distributors. In 2020, due to the pandemic, we had to review the way we make training. We created the project "Em Forma com a Mapei": technical videos on the most important

and current topics that are "hot" in the construction industry such as thermal insulation, waterproofing, concrete repair, etc. We were able to maintain contact and interaction with our partners, who could attend useful training sessions from home. All this was made possible by digital platforms, which allow for quick and comprehensive communication with the market professionals. In 2021, we have been continuing these activities, while starting to resume on-site training.



**LEFT.** The "Fabrica das Palabras" library in Vila Franca de Xira stands out for its original design. Lusomapei contributed to its construction by supplying innovative products.

**20 YEARS IN PORTUGAL ... AND MORE**

Lusomapei first began operating in Portugal at the end of 2001, marketing the Mapei Group's products and systems not just nationally (including Madeira and the Azores Islands), but also in some Portuguese-speaking African countries such as Angola, Cabo Verde, São Tomé and Príncipe. Ever since then the company has continued to grow, gaining an increasingly large share of the local market for chemical products for the building industry. As well as being sustainable, Mapei's growth in Portugal is based on certain specific strategies: on one hand the decision to adopt the Integrated Quality (ISO 9001), Environment (ISO 14001) and Safety (OHSAS 18001) Management

System and, on the other, the adopting of the Mapei's Code of Ethics in 2014 to conform to the highest standards of excellence in terms of social responsibility and the ethical values shared by the entire Mapei Group. In Portugal Mapei is perceived as a brand synonymous with trust, quality, innovation and expertise. The company has 69 members of staff distributed between a manufacturing plant in the Anadia area of central Portugal, which also acts as a distribution platform, its head offices and a storage facility in the Castanheira di Ribatejo region. There is also a network of technical/sales agents providing expertise and consultancy for designers, installers and distributors

right across the country. Lusomapei's success in Portugal is shown by the numerous prestigious projects it has been involved in, supplying quality materials: the construction of underground railway lines in Porto and Lisbon, new football stadiums built for Euro 2004, the Basilica of the Holy Trinity in Fatima, cruise ships for the port of Funchal, hospitals in Braga and Vila Franca de Xira, the "Fabrica das Palabras" Municipal Library in Vila Franca de Xira, and the Prata Living Concept residential complex in Lisbon designed by Renzo Piano Building Workshop. In future Lusomapei plans to keep on investing in constructions, safety, health, sustainability, human resources and the promotion of Mapei prod-

ucts and systems. To this end, it has purchased land in the industrial region of Cantanhede in central-northern Portugal to be used to build a new manufacturing plant that is expected to be officially opened in 2022.



The logo devised to celebrate the Portuguese subsidiary's 20<sup>th</sup> anniversary.

# From Lisbon to the Atlantic Isles

MAPEI PRODUCTS HAVE BEEN USED IN NEW BUILDINGS AND TO RENOVATE STRUCTURES FOR VARIOUS FIELDS OF USE ALL OVER THE LUSITANIAN NATION



## Health centre Calheta - Madeira

This centre covers the health needs of the local community and was recently extended and modernised thanks to an investment of 35 million Euros. The centre is made up of two buildings and has a total surface area of 3,800 m<sup>2</sup>. The aim of the work was to improve various areas and functions of the centre, such as accessibility, fire prevention measures, thermal insulation and soundproofing, and to increase its overall capacity and level of services. The MAPETHERM SYSTEM was chosen for the thermal insulation of the façades, finished with QUARZOLITE BASE COAT and QUARZOLITE TONACHINO PLUS. The roofs were waterproofed with the PURTOP SYSTEM, which included the application of PRIMER SN, PURTOP 400 M hybrid polyurea membrane and a final coat of MAPECOAT PU 20 N to finish the surfaces.

## Livensa Living Lisboa - Lisbon

This student residence, situated near the main universities in Lisbon, was built according to innovative design principles to make sure the students could enjoy safe, comfortable surroundings. The 507 rooms have a kitchen, TV and basic, functional furnishings, and there are also communal areas for the students to socialise. To ensure the quality of the interiors and a high level of living comfort, MAPETHERM SYSTEM insulation system was installed on the external walls, which also helps reduce energy consumption all year round. The EPS insulating panels were bonded and skimmed with MAPETHERM ARI cementitious mortar. The chosen finishing cycle was made up of QUARZOLITE BASE COAT coloured acrylic undercoat and QUARZOLITE TONACHINO PLUS acrylic plaster.



## Caritas temporary welcome centre - São Miguel, Azores

The Azores local authority invested 4 million Euros into this centre which provides temporary shelter to the homeless and those most in need. The centre stands out in particular for its creative design solutions and includes dormitories, recreational areas and various offices. It has a capacity of up to 90 people: 60 residential guests and 30 on training courses. Good thermal insulation of the façades is guaranteed by the MAPETHERM SYSTEM, while the waterproofing for the roofs was ensured with PURTOP SYSTEM ROOF. The cementitious floorings inside the centre were completed using ULTRATOP SYSTEM, while ULTRATOP LOFT system was used for the cementitious coatings on the walls. MAPELASTIC was used to waterproof the substrates of the kitchen walls, while the external areas were coated with MAPECOAT TNS URBAN acrylic resin-based coating.

## Marginal da Ribeira coastal road Ribeira Brava - Madeira

August 2020 saw the opening of the new coastal road running between the municipalities of Tabua and Ribeira Brava after 2 years of work. It is 1.5 km long and, apart from the road itself for vehicle traffic, there is also a cycle path and a pavement for pedestrians. The project, which cost 2.9 million Euros, also included the construction of 3 safety galleries to protect the road. Mapei contributed to this important project for the island's mobility and economy by supplying the resin system used to coat the cycle path. The substrates were treated with MAPECOAT TNS PRIMER EPW epoxy primer in water dispersion. The next step was to apply MAPECOAT TNS RACE TRACK, an acrylic water-borne, rapid film-forming, coloured coating to protect concrete and asphalt surfaces subject to a high level of footfall, including driveways.





1

## Funchal (Madeira) Savoy Palace

A NEW LUXURY HOTEL AND WORTHY “HEIR” TO THE HISTORIC SAVOY BUILT IN 1912 TO HOST THE INTERNATIONAL ARISTOCRACY

The Savoy Palace is one of the latest additions to the family of luxury hotels in The Leading Hotels of the World chain. It is a 5-star Superior class hotel, rich in history and tradition offering refined, comfortable and welcoming surroundings. It is located around 20 minutes by car from Madeira's Cristiano Ronaldo International Airport and just a short walk from the city centre and the sea and boasts a panoramic view of the Atlantic Ocean and the city of Funchal. This is the same privi-

leged location enjoyed by its predecessor, the Savoy Classic, built in 1912 to host the international aristocracy of the time.

The project for the new building was awarded to Saraiva + Associados and RH+ Arquitectos, who wanted to conserve the memory of its past but, at the same time, relaunch it with a view to the future. The structure, characterised by its flowing, swaying lines, has 17 floors, 309 rooms and 43 suites, 14 of which have their own swimming pool, as well as two presidential suites. The complex also has another six swimming pools, five restaurants, three bars and conference rooms with a capacity of up to 1,000 people, as well as the Laurea spa centre, one of the largest wellness centres in the country. At the highest point of the hotel are the Galáxia Skyfood restaurant and the Skybar, with access by lift directly from the road below. Through the installation company Spitex II, partner in many different projects, Mapei contributed to the construction of the new hotel by supplying various types of material to overcome specific problems in a number of different areas. Let's take a closer look at them.

### Problems and solutions

Mapei's part in the construction of this hotel was key in two particular areas: waterproofing of the substrates, where different families of products were employed (PLASTIMUL and MAPELASTIC), and installation of ceramic tiles on internal and external surfaces, using different types of adhesives and grouting mortars according to specific project requirements and areas of use.

### Ceramic coverings in interiors and exteriors

PLASTIMUL bitumen waterproofing emulsion was applied on the substrates of the masonry below ground level near the hotel's main entrance. This is an easy to apply emulsion, that forms a waterproof plastic coating which is resistant to re-emulsifying after prolonged immersion in water, even when slightly acid or alkaline, and resistant to aggressive agents present in the soil.

Ceramic tiles were bonded to internal and external walls above ground level with KERABOND T cementitious adhesive with no vertical slip mixed with ISOLASTIC elasticising latex. The joints were grouted with ULTRACOLOR PLUS mortar and the control and expansion joints and joints around the perimeter were sealed with MAPEFLEX PU 45 FT and MAPEFLEX MS45 sealants.

### Roofs, balconies and terraces

The product chosen to waterproof these areas was MAPELASTIC two-component elastic cementitious mortar, which was applied in two coats with MAPENET P mesh (distributed on the Portuguese market by Lusomapei) embedded between the first and second coat, along with MAPEBAND EASY rubber tape around the corners between the horizontal and vertical surfaces. Ceramic tiles were then bonded thereupon with KERAFLEX EXTRA S1 non-slip cementitious adhesive with extended open time, while joints were grouted with ULTRACOLOR PLUS. To create elastic seals in the expansion joints, the product chosen in this case was MAPESIL AC mould-resistant, acetic, silicone sealant.

### Swimming pools and spa centre

For the internal and external swimming pools and spa centre, the substrates were waterproofed by applying another product from the MAPELASTIC family: MAPELASTIC SMART, which has the advantage of being applicable using a roller or by brush. In this case, too, MAPELASTIC SMART was applied in two coats, with MAPENET P mesh between the two coats and MAPEBAND EASY applied in the corners between the horizontal and vertical surfaces.

For the ceramic tiles installed on the surfaces of the swimming pools and in the spa centre, however, a different solution was adopted because these areas require materials with better mechanical properties and higher resistance to chemicals. The glass mosaic was bonded with ELASTORAPID quick-setting, improved cementitious adhesive, while KERAPOXY CQ epoxy mortar with a bacteriostatic agent was chosen to grout the joints and MAPESIL AC was used to seal the expansion joints.



2



3

**1.** The Savoy Palace is a colossus in the hospitality sector and is located in the city of Funchal on the island of Madeira.

**2.** The hotel has a lot of swimming pools constructed using Mapei materials, both inside the private suites and in communal areas. One such product was KERAPOXY CQ epoxy mortar for grouting joints.

**3.** The substrates of the terraces were waterproofed with MAPELASTIC before installing ceramic tiles with KERAFLEX EXTRA S1 and grouting the joints with ULTRACOLOR PLUS.



**Internal resin floors**

The floors in the kitchen required a non-slip coating resistant to a medium volume of traffic and chemical agents. This is why MAPEFLOOR SYSTEM 32 was applied, a 3 to 3.5 mm thick, multi-layered epoxy system for floors.

For the floors in the restaurants and bars, on the other hand, another solution from the Mapei line for resin floors was chosen: MAPEFLOOR SYSTEM 31, a multi-layered epoxy system which ensured excellent functionality with an attractive finish.

**Bathrooms in the guest rooms**

A different solution had to be adopted to waterproof the walls of the bathrooms in the guest-rooms because they were made from plaster-board: the first step was to apply a coat of PRIMER G acrylic primer and MAPEBAND EASY tape in the corners between the horizontal and vertical surfaces. The next step was to apply MAPEGUM WPS ready-mixed, rapid-drying, liquid elastic membrane.

Because the internal areas also had to be covered with ceramic tiles, the product chosen in this case to bond the ceramic tiles and stone materials was KERAFLEX cementitious adhesive with no vertical slip and extended open time. In this case, too, the joints were grouted with ULTRACOLOR PLUS and the expansion joints were sealed with MAPE-SIL AC.



4. The resin floors in the kitchens were laid with MAPEFLOOR SYSTEM 32.

5. MAPEGUM WPS was used to waterproof the substrates in the bathrooms before installing the ceramic tiles with KERAFLEX.



Find out more  
**KERAFLEX EXTRA S1**

**TECHNICAL DATA**

**Savoy Palace**, Madeira (Portugal)

**Design:** Saraiva + Associados, RH+ Arquitectos

**Period of construction:** 2017-2020

**Period of the Mapei's intervention:** 2017-2020

**Intervention by Mapei:** supplying products for waterproofing substrates, installing

ceramic tiles and stone materials, laying resin floors

**Owner:** Savoy Hotels & Resorts

**Main contractor:** AFA

**Installation company:** Spitex II

**Mapei distributor:** Spitex II

**Project manager:** Silva Santos

**Mapei coordinator:** Miguel Duarte, Lusomapei (Portugal)

**MAPEI PRODUCTS**

Treating the substrates:

Primer SN, Primer G

Waterproofing:

Plastimul, Mapelast, Mapelast Smart,

Mapenet P\*, Mapeband Easy, Mapegum WPS

Installing ceramic tiles and stone materials:

Kerabond T, Isolastic, Keraflex Extra S1,

Elastorapid, Keraflex

Grouting joints: Ultracolor Plus, Kerapoxy CQ

Sealing expansion joints:

Mapesil AC, Mapeflex PU 45 FT, Mapeflex MS45

Resin floors: Mapefloor System 31, Mapefloor System 32

\*This product is manufactured and distributed on the Portuguese market by Lusomapei (Portugal)

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

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## Towards a sustainable concrete industry

PARTNERSHIP AGREEMENT SIGNED BETWEEN MAPEI AND ELETTRONDATA TO PROVIDE INNOVATIVE "TOTAL QUALITY" SOLUTIONS FOR THE PRODUCTION AND TRANSPORT OF READY-MIXED CONCRETE

Research & Development, innovation and sustainability at the service of the concrete industry. Mapei has signed a multi-year partnership agreement with Elettrondata, leader in automation systems for the management and control of concrete production, to provide tools and services to control the quality, production and transport of ready-mixed concrete at a global level. This has led to the creation of Mapei Concrete Industry Solutions, the result of an agreement to work towards a circular economy which will integrate raw materials, admixtures for concrete, fibres and digital solutions in a circular process, covering quality and sustainability, focused on reduc-

ing carbon footprint.

Targeted solutions and automated processes can, in fact, reduce the carbon footprint by analysing the life-cycle of a structure. The phase during which the concrete is delivered is also part of the quality process, thanks to the new ED SM II system by Elettrondata to check and control concrete during transport, which supplies data in real-time to the manufacturer.

So, from production to delivery, in a virtuous circle that represents a perfect example of Total Quality, which Mapei's CEO, Marco Squinzi, was keen to comment on: "This partnership with Elettrondata represents a winning combination for our clients, thanks to the successful com-

ination of consolidated, tried and tested, robust, easy to use hardware and software along with our chemical products and solutions. As the world's leading supplier of admixtures and fibres for concrete, we have developed a complete range of ancillary products to support the production and use of concrete throughout every phase. ED SM II is part of this vision of Total Quality and sustainability, focused on the production of concrete from raw materials, mix design, production process, transport, casting, curing and recycling."

Adopting Mapei Concrete Industry Solutions also leads to the optimisation of production processes, a reduction in costs, improvement in plant safety, control of the production process in real time and constant overall improvement thanks to the automation processes.

This agreement is part of a broader range of solutions available for the concrete industry: in fact, for more than 50 years Mapei has been supplying admixtures and fibres for concrete for use on sites all around the world. Innovative solutions backed by intense Research & Development work carried out in more than 30 laboratories in the five continents, and by the constant presence on site with the company's mobile laboratories: all with the aim of making Mapei a reliable partner.



Find out more  
MAPEI CONCRETE  
INDUSTRY SOLUTIONS

## A virtuous circle in the name of quality

WE SPOKE WITH MARCO SQUINZI, CEO OF THE MAPEI GROUP, AND LEONARDO NEGRO, CEO OF ELETTRONDATA

### What can Elettrondata offer to the concrete industry?

**Leonardo Nigro:** Elettrondata has been operating in the industrial automation sector for 40 years. For more than 35 years it has been working in the concrete sector and has developed fully-integrated product suites to enable the management of product quality and to have better control of the major problem areas along the production processes, all with the aim of reaching a Total Quality system and, as a result, manage quality from within the actual concrete production process.

### What type of collaboration has been implemented with Elettrondata?

**Marco Squinzi:** Over the course of this last year, the collaboration with Elettrondata has led to the emergence of several interesting ideas that the two companies have been working on together. This will lead very shortly to the release of ED SM II, a new product with additional functions that will enable the slump flow of concrete to be monitored, along with its workability and rheological characteristics, not only in the concrete plant itself, but also from the plant and throughout its journey right up to the delivery point where the concrete is to be used, and where rheology is key to achieving durability in concrete structures.

### What benefits have you achieved from this collaboration with Mapei?

**Leonardo Nigro:** Mapei's experience and knowhow have enabled us to develop the ED SM system for transported concrete even further and led to us releasing ED SM II, a system that integrates the capabilities of the previous system and takes it even further by adding new functions, new perspectives and new control modes. The aim is to improve the quality of the product and increase its value, including in the transportation phase.

### You have now created Mapei Concrete Industry Solutions: what are its objectives?

**Marco Squinzi:** With the Mapei Concrete Industry Solutions logo, the message we wish to convey is, on the one hand, the virtuous circle of concrete aimed at improving the quality of this material, and on the other hand the concept of Total Quality, which is fundamental in obtaining concrete with constantly improved performance properties.



**LEFT.** From left on, Marco Squinzi, CEO of the Mapei Group, and Leonardo Nigro, CEO of Elettrondata.



Arata Isozaki in front of the Allianz Tower in Milan.



The Atea Twin Towers in Bilbao (Spain).

“In the 1980’s he initiated an exchange with the Western society which began with the first important work he was commissioned for in the USA: the Museum of Contemporary Art in Los Angeles.”

## Arata Isozaki

KEEN TRAVELLER  
AND IMPORTANT  
POINT OF  
REFERENCE IN  
THE DIALOGUE  
BETWEEN EAST  
AND WEST

“When I was 14, my home city was razed to the ground. The atom bomb was dropped on Hiroshima, the island just opposite. This means I grew up close to the epicentre of the explosion. All that was left was ruins; no buildings and not even a city. I was surrounded by makeshift shelters and barracks. So my first experience of architecture was its complete absence. That was the moment I started to think about how people could rebuild their homes and cities”.

These are the words that perfectly describe the 46<sup>th</sup> winner of the

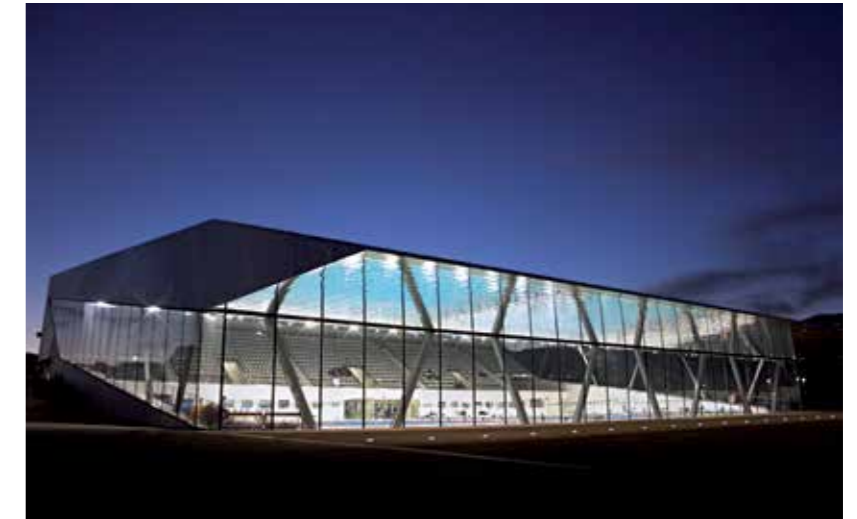
2019 Pritzker Architecture Prize. The international jury that selects the prize winners declared they had chosen Isozaki as recognition of him being not only, “One of the most influential figures on the contemporary global architecture scene”, but also as being a designer “That isn’t afraid of change and of trying out new ideas. His architecture is based on a profound understanding, not only of architecture, but also of philosophy, history, theory and culture”.

Isozaki was born in 1931 in the Japanese island of Kyūshū. After graduating from the University of Tokyo in 1954, he started his professional career as an intern in the design studio of one of the great maestros of Japanese architecture, Kenzō Tange, winner of the Pritzker Prize in 1987.

In 1963 he decided to found the Arata Isozaki Atelier design studio, which then became Arata Isozaki & Associates. He initially explored the use of different design forms, from Brutalist lines to pure geometry, putting him at the forefront of the Japanese New Wave movement. Isozaki was a participant in the rebirth of Japan following its destruction during the war: a rebirth characterised by a country

striving to reconstruct not only its material loss, but also its culture. During that period, and also in the following years, Arata Isozaki & Associates were behind the design of various projects in Japan such as the reconstruction of a large part of his home city, Ōita, and then the Expo ’70 Festival Plaza in Osaka, the Gunma Museum of Modern Art and the Kitakyūshū Municipal Museum of Art in Fukuoka Prefecture. He has always had a predilection for the exploration of diverse architectonic forms and solutions, without limiting himself to a single style.

A passionate traveller, so much so that he said he wanted to see “The world through my own eyes, so I travelled around the world at least ten times before I was thirty”, in the 1980’s he initiated an exchange with the Western society. This change of direction towards the West coincided with the first important work he was commissioned for in the United States. In fact, in Los Angeles from 1981 and 1986, he designed and worked on the Museum of Contemporary Art. This was just the start of a series of architectonic projects that consecrated him as a precursor of the trend of working outside one’s own country



The Palasport venue for ice hockey in Turin that hosted the 2006 Winter Olympics.

of origin. A condition which, over the years, led to him becoming an important point of reference in the architectonic dialogue between East and West. Outside Japan, Isozaki worked on the design and construction of dozens of buildings around the world such as the Palau Sant Jordi in Barcelona (Spain) for the 1992 Olympic Games, the Team Disney Building in Orlando (Florida, USA), the Shenzhen Cultural Center in China, the Qatar National Convention Center in Doha, the Shanghai Symphony Hall at the Art Museum of China Central Academy of Fine Arts in Beijing. Numerous projects of his can also be found in Italy, which led to him teaming up with his Italian associate in 2005, Andrea Maffei, and

opening the design studio Arata Isozaki & Andrea Maffei Associati srl in Milan. In 2006 he was one of the key players in the architectonic transformation of Turin for the 2006 Winter Olympics. One of his most famous and iconic recent works can be found in Milan: the Allianz Tower (see *Realtà Mapei Internazionale* no. 52/2015). Isozaki is also the creative mind behind designs such as the proposal for the High-Speed railway station in Florence and Bologna central station, winner of the tender in 2008 and now partially built. And still pending and awaiting completion, more than twenty years from the tender being awarded to the Japanese architect, is the Loggia for the new entrance to the Uffizi Museums in Florence.



The Qatar National Convention Center in Doha.





# Beauty and sustainability for EMERGENCY's new hospital in Uganda

DESIGNED BY RENZO PIANO AND COMPLETED IN ACCORDANCE WITH LOCAL BUILDING TRADITIONS, THE NEW CHILDREN'S SURGICAL HOSPITAL HAS OPENED IN ENTEBBE

"I like to think of Africa as a kind of testing ground for the future and not just the scene of so much suffering and forgotten wars. Gino always asked me to design a "scandalously beautiful" hospital, because some people think it is scandalous to offer everybody beauty and excellence, particularly the less fortunate. In all African languages, most notably Swahili, the idea of beauty is always associated with the idea of goodness: there can be no beauty without goodness". That is how Renzo Piano described the origins of the project he designed for a children's surgical hospital for EMERGENCY in Uganda that opened on 21<sup>st</sup> April. Built in Entebbe with the help of numerous Italian businesses, including the Mapei Group, the project was developed pro bono by the architect Renzo Piano, RPBW (Renzo Piano Building Workshop), Studio TAMassociati, and EMERGENCY's own Building Division. Uganda is a country where the mortality rate for children under the age of five is 49 for every 1000 births. 30% of these deaths could

be avoided if there was adequate surgical care. One of the first to join ANME (Africa's high-quality health care network set up in 2010 by EMERGENCY), Uganda realised years ago that it had to strengthen its paediatric surgery services. EMERGENCY decided to open a paediatric surgery hospital in this country and the Ugandan government provided the land on which the complex is built free of charge and committed to helping it get built. It also covers 20% of the hospital's annual running costs. This paediatric surgery centre actually triples the number of surgical beds available to children in Uganda.

## The hospital

The hospital is located along the banks of Lake Victoria and treats all children under the age of 18 free of charge. The centre covers an area of 9700 m<sup>2</sup> and provides the community with 3 operating rooms, 72, hospital beds, including 6 in intensive care and 16 in sub-intensive care, 6 clinics, a radiology unit, a laboratory with a blood



©Marcello Bonfanti

bank, a CAT scanner, a pharmacy, accommodation for foreign patients, and an outdoor playground. Most of the energy is supplied by 2500 photovoltaic solar panels on the roof. The hospital is part of an elaborate landscape plan designed by Studio Franco and Simona Giorgetta, which focuses on the natural and sustainable side of the entire project. This means plenty of attention has been given to the gardens that form a natural environmental mitigation system, as well as contributing to the so-called "healing architecture": a welcoming and well cared for setting has a positive impact on the patient healing process.

## Mapei's contribution

Right from the design phase, the hospital was intended to only have limited impact on the surrounding environment and local culture. That is why the architect, Renzo Piano, wanted to build in compliance with local building traditions, opting for the so-called pisé construction technique. This technique uses

a compound made of soil, sand, gravel and a little bit of water to prevent cracking during the drying process. The resulting paste is then compressed in wooden formworks. The clay provides notable heat inertia keeping the building's temperature and humidity levels constant, but it cannot provide adequate mechanical resistance or sufficient resistance to rainfall. The



Mapei Group came to the project's aid by sending its own technicians on-site. After sending some samples of material to Mapei's R&D laboratories, special latest-generation binding agents were developed to make this technique more versatile and durable. Mapei's help involved sending six containers of admixture to the building site from Italy, as well as formworks to shape the rammed earth. Applying a highly innovative technology to an ancient building technique made it possible to construct the hospital walls sustainably, guaranteeing versatility and durability. Using a material so widely available locally like clay also reduced the project's environmental impact. As Mapei's CEO, Veronica Squinzi, pointed out: "We are proud that our research, materials and technical support were able to contribute to this project that embodies many of the values Mapei believes in: hard work, excellence, sustainability and beauty. We hope this innovative solution can be used for building other local facilities to help the community to grow".



© Gianni Castellani

A profile of Dante Alighieri has been created using a mosaic technique outside San Michele Tower in Cervia (Central Italy).

# Dante's Gardens of Eden in Cervia

THE 49<sup>TH</sup> EDITION OF EUROPE'S BIGGEST OUTDOOR FLOWER SHOW IS DEDICATED TO THE DIVINE COMEDY

An "open air" pathway through the woods and gardens of Cervia (Central Italy) in search of the flowers, herbs and woodlands Dante Alighieri envisaged in his *Divine Comedy*. This year "Cervia Garden City" pays tribute to the work of this great poet on the 700<sup>th</sup> anniversary of his death with a flower show entitled "Dante and the Gardens of Eden". 28 areas of greenery will take visitors on a great Dante-inspired journey continuing until the end of September through luscious greenery and vegetation. A route that starts from Via della Pineta in Cervia, crosses the Gardens of Cervia and the nearby neighbourhood of Milano Matittima, stretches on through Pinarella and Tagliata pine forest and past some magnificent mulberry bushes before coming to an end at Torre San Michele Garden, where Ravenna City Council has created a mosaic of the Italian poet's profile using plants and shrubs.

The project is part of the "Viva Dante 2021" schedule of events organised by the Ravenna City Council, whose main events are sponsored by the Italian National Committee for the 7<sup>th</sup> centenary of Dante Alighieri's death.

### Mapei's gardens

Once again this year, Mapei is supporting the flower show, well aware of the need to promote a culture of beauty and sustainability starting in urban spaces. Three gardens bearing the company's name have been set up in Milano Marittima: one on Cadorna roundabout and two inside Treffz Park, one of which is ded-

icated to Adriana Spazzoli, Mapei Group's former Operational Director of Marketing and Communication, a woman closely tied to the city and a great supporter of this event.

Veronica and Marco Squinzi, Mapei's CEOs, announced: *"We are always delighted to support this unique event whose aim is to safeguard greenery and enhance the local area. Goals that Mapei identifies with and firmly believes in. Our family has always been particularly closely tied to Cervia and Milano Marittima, both places very close to our hearts."*



One of the two gardens in Treffz Park that have been named after Mapei.

# Mapei Trophy: a "classic" for golf fans

PRESTIGIOUS GOLF CLUB VILLA D'ESTE HOSTED THE EVENT

Another sport Mapei is traditionally interested in is golf, which is played by lots of its customers, staff and operators in the building industry.

Once again this year Mapei was the Title Sponsor of a sport event held at Golf Club Villa d'Este in Como, a prestigious club founded in 1926, whose current President is Walter Ragazzi.

The competition was open to amateur golfers, with most of the players taking part in the event held on 12<sup>th</sup> June coming from northern Italy.

Golf is a sport that requires a good eye, great accuracy and good basic fitness: everybody who took part in the 18-hole Mapei Trophy walked a distance of 6 km across the Villa d'Este course, just a few kilometres away from Lake Como.

As well as sponsoring the event, the President of the Board of Directors of Mapei SpA, Laura Squinzi, also represented Mapei out on the course.

Lots of Mapei customers and guests brought along their clubs and balls to take part in the various competitions organised according to the Stableford scoring system for individual competitions. A total of over 100 players took part.

"Here at Golf Villa d'Este - so Andrea Tessitore, the Club General Secretary, told us - we organise about 100 competitions-a-year. The Mapei Trophy is one of the best events, particularly from a social viewpoint".

The winners in each category were awarded a silver plate with the Mapei logo on it by Laura Squinzi and members of Golf Club Villa d'Este.

Over one hundred golfers took part in the Mapei Trophy. Laura Squinzi, Mapei's President of the Board of Directors, and Luigi Locatelli, from Mapei's Sales Management for Italy, were also involved.





## Re Stelvio Mapei is back!

AFTER SKIPPING 2020 DUE TO THE PANDEMIC,  
FUN AND ENTERTAINMENT FOR EVERYBODY

Re Stelvio Mapei was back again on 11<sup>th</sup> July after being cancelled in 2020 due to the pandemic. Lots of passionate sportsmen and women could not wait to take on the 48 hairpins connecting the town of Bormio in Northern Italy to Europe's highest mountain pass and they finally got their chance again. Re-Stelvio Mapei is organised by Unione Sportiva Bormiese, one of Italy's biggest sports club, and sponsored by Mapei. The event has always provided customers, staff and Mapei fans with the chance to meet together. At least 600 of the starters in this year's event were either Mapei staff, customers or supporters. They also included staff from two of the Group's foreign subsidiaries, Mapei Polska and Mapei d.o.o. (Slovenia), with a selected group of Polish and Slovenian customers. A total of 1660 people took part in the event.

### CYCLING, RUNNING, GOLF

All the cyclists and runners taking part in Re Stelvio-Mapei were given a race pack including the Re Stelvio jersey, which is different for each new edition. Ever since the very first event, the jersey features an image of one of the distinctive animals found in Stelvio Natural Park. Animals depicted in past editions include the eagle, bearded vulture, bear and chamois. The fox was chosen for the jersey of the 2021 event. All kinds of athletes take part in the Re Stelvio races, including people who compete on the snow and ice in the winter and then cycle or run for training in the summer. The races included a half-marathon, a competitive cycle race as well as a non-competitive e-bike ride, a running event open to all and the "Aldo Sassi" Memorial bike ride. Participants in the Re Stelvio Mapei races ride up the legendary

slopes of a truly majestic setting. The cycling-running race starts in the centre of Bormio at a height of 1,225 m and concludes at the top of Stelvio Pass at a height of 2,758 m. The constantly uphill climb covers a distance of 21.097 km. These famous stretches of road on the climb up from Bormio are legendary for cycling fans. The Tour of Italy professional cycling race took on the Stelvio from the side of Bormio for the first time in 1965. The 2014 Tour of Italy also included the climb from Bormio to Stelvio Pass. The greens of Bormio Golf Club hosted the Mapei Trophy. This year's event, including competitions for two amateur categories, was held over 18 holes using the Stableford scoring system. 73 keen golfers battled it out on a golf course at a height of 1200 m above sea level, including Laura Squinzi, the President of Mapei's Board of Directors.

**BELOW.** From left on, the start of the cycling and running races; the winners of the Mapei golf trophy, that was held at Bormio Golf Club.



# Competing again after an injury

THE MAPEI SPORT RESEARCH CENTRE HAS OPENED ITS NEW "TRAINING DEPARTMENT", A SERVICE FOR OPTIMISING PHYSICAL PREPARATION AND RE-ATHLETISATION

Ever since it was first established, the services provided by the Mapei Sport Research Centre have always operated along three main lines: medical-sports assistance at the Sports Medicine clinic, functional assessment at the Human Performance Lab, and biomechanical assessment carried out by the Motion Analysis Laboratory. Its services will now be extended thanks to the introduction of a Training Department. This new division, which is a natural continuation of the services provided by Mapei Sport, is intended to offer highly qualified expertise in the fields of training and re-athletisation.

Whereas fitness training is aimed at sports men and women of all levels from all sports, who are looking to optimise their physical performance, re-athletisation is designed for those who have completed their physiotherapy programme and are about to return to compe-

tion. More specifically, re-athletisation is that particularly tricky period for athletes who have just recovered from injury but are not yet able to perform at their best.

**“Re-athletisation is designed for those who have completed their physiotherapy programme and are about to return to competition”**

During this period, it is vital to provide athletes with specific training geared to their individual needs and the demands required by their sport. The common denominator in the services provided by the Training Department is highly individualised and personalised training carried out on a one-to-one basis to guarantee the highest possible

standards, in accordance with the underlying philosophy of the Mapei Sport Research Centre.

Nothing has been left to chance in launching this new service: “We have set up a training ward inside the centre in Olgiate Olona (Province of Varese, Northern Italy) with all the latest and most sophisticated equipment, some of which cannot be found in ordinary fitness cen-

tres and/or physiotherapy centres. The aim is to be able to monitor men and women who want to train or get back into competition in the best way possible following an injury. Our trainers can offer clients the know-how gained from working for over 25 years with professional athletes and teams, as well as national sports federations. This has enabled us to compile a databank and gain specific expertise about training high-level sportspeople”, so the Director of Mapei Sport Research Centre, Dr Claudio Pecci, told us.

“It is not some standard package, it is a program tailored to individual needs maintaining the evidence-based approach that has enabled Mapei Sport to gain international recognition in the world of sport”, so Dr Franco Combi, chief consultant of the re-athletisation area, added.

“To reach the highest levels of expertise in this sector,

you need to adopt a strategy focused around sportspeople that is designed to make the most of their individual talents, while, at the same time, helping them improve any weaknesses they might have – so Federico Donghi concluded, project leader in the Training Department - “Our speciality is the ability to personalise training and focus on details to satisfy even the most demanding clients: hence the hashtag #WEare4YOU».

So, after medical checks and assessment tests, it is time to get the most from your training with

Mapei Sport’s Training Department! Further information about the services provided by Mapei Sport can be found in English language at [mapeisport.it/en](http://mapeisport.it/en).

**Claudio Pecci, Director of Mapei Sport Research Centre: “We have set up a training ward inside the centre with all the latest and most sophisticated equipment”**

**Giulia De Maio.** Mapei Sport (Italy).



Athletes being put through their paces at the new Training Department at Mapei Sport Research Centre.

## SPORTING EXCELLENCE SINCE 1998

The brainchild back of a passionate sports fan and firm believer in research like Giorgio Squinzi (Mapei Group's former CEO) back in 1996, in perfect sync with the sporting philosophy-thinking of Professor Aldo Sassi (Mapei Sport's former Director), Mapei Sport Research Center officially opened in 1998. As well as monitoring operations in the cycling sector (Mapei Professional Cycling Team dominated the international stage for years), over the years the facility has widened its horizons to encompass other sports like football, basketball, running, golf, Alpine skiing and motor sport. Mapei Sport has always provided athletes with the help and support they need to perform to the best of their ability, based on a rigorous scientific approach and absolute respect for unbreachable ethical-sporting values.



Alessio Dionisi is the new Sassuolo's team manager.

## Dionisi: "Proud to manage Sassuolo"

SASSUOLO'S NEW MANAGER: "EVERYBODY AT THE CLUB IS EXTREMELY MOTIVATED. LOTS OF YOUNG PLAYERS HAVE ROOM FOR IMPROVEMENT"

Sassuolo is about to start its ninth season in the Italian Serie A under a new team manager: Alessio Dionisi, who is 41 years old and was born in Tuscany. Last season he led Empoli to a triumphant promotion into the top division with a huge advantage over its main rivals. Mr Dionisi had one year left on his contract with Empoli. "I was hoping Empoli and Sassuolo could come to an agreement – so Dionisi announced when he arrived at Mapei Football Center in Sassuolo - and that is what happened. Now I am proud to be at Sassuolo and I would like to thank the CEO, Giovanni Carnevali, and the Sports Director, Giovanni Rossi, for their faith in me. I hope I will be able to pay them back with the results we get on the pitch".

Mr. Dionisi played in defence throughout his playing career as a footballer: "Bearing in mind my age, my

heroes back then were first Franco Baresi, and then Lilian Thuram, who won the World Cup playing for France. When I began working as a team manager, I was inspired by all and none of my colleagues. You can

learn from everybody, every manager can be a maestro in certain things. On the other hand, you are not inspired by any particular person, at the end of the day every manager has their own way of doing things. It is hard to copy anybody".

Mr Dionisi is taking over from Roberto De Zerbi at Sassuolo. "My predecessor did a great job and worked really

hard - so the new manager claimed – and that really motivates me. Managing Sassuolo will be a great learning curve for me. I would like to thank the club for providing me with such great staff and wonderful technical facilities". Sassuolo finished the 2020-21 sea-

**"The attitude of both the staff and players has confirmed the great impression I had of Sassuolo when observing the club as an outsider"**

son in eighth place on the same number of points as the team above them.

Mr. Dionisi knows he now has much more responsibility than in the past: "This is all very new, but I feel quite confident because I am a balanced person, so I believe, and that will provide the foundations for my work here. I am really excited and very driven. I am not just speaking myself but also on behalf of my assistants, who are joining me here from Empoli".

In spring 2021 Mr Dionisi received offers from other teams. "I chose Sassuolo, mainly because it was the club's staff who chose me. I was also influenced by Sassuolo's history, an important club that has its own very definite playing style out on the pitch. I thought Sassuolo was the right choice at this stage in my professional career".

Three of the club's players also played for Italy's winning team at Euro 2020: Berardi, Raspadori and Locatelli. Other members of the team also represented other countries at the event. "Other Sassuolo players also deserved to be part of the national team. Everything happens really fast in the world of football nowadays. I need to build on the success of my predecessors here at the club" so Dionisi went on to say.

The new team manager got to know his players better at the summer training camp and the first managing sessions at Sassuolo. It will not be easy to keep up the club's great results: "Some excellent teams - so Mr. Dionisi

pointed out - rather underperformed last season. Some of them have plenty to spend on the transfer market to help them raise their game and others are determined to do better after a disappointing season. That is why it won't be easy to finish as high up the table as we did in the 2020-21 season. Sometimes in life it is harder to carry on being successful than to be successful to begin with. I will mainly be focusing on the way we play".

Mr Dionisi has had no problems fitting in at Sassuolo. "The attitude of both the staff and players has confirmed the great impression I had of Sassuolo

when observing the club as an outsider. Of course, things will not always go smoothly, but it is during those tricky moments in life that you can really

judge a person's character. I am confident because of the motivation I can feel here at the club, and we have lots of young players with plenty of room for improvement".

Mr Dionisi does not want to be labelled as a "team manager with just one playing style": "My aim is to make the most of every single player's abilities, so it will be the players' qualities that determine how we play: never in my entire career have I forced a team to play according to my own tactical beliefs. Nevertheless, I will expect all the players to play together when they are out there on the pitch". Years ago, Dionisi was labelled as "Mr 4-3-1-2". "That was really strange, because I hate that kind of playing formation" so the new manager claimed.

**"My aim is to make the most of every single player's abilities"**

### THE NEW SASSUOLO KIT WAS OFFICIALLY PRESENTED

For the second year running, Puma will be supplying Sassuolo's match, training and leisure kits. Puma and club staff showed off the new home kit for the 2021-2022 season at the official team presentation held at Palazzo Ducale in Sassuolo on 29<sup>th</sup> July, at the presence of Marco Squinzi, CEO of the Mapei Group, and Veronica Squinzi, CEO of the Mapei Group and Vice President of Sassuolo. The green-and-black home kit is designed to celebrate the club's history and culture. It is characterized by wide central vertical stripes in PUMA Black with chevron pattern that decorate the front and the lower part of the back. The V-collar is in contrast,



highlighted by an exposed PUMA Black seam, as well as the sleeves in black with elegant Green Bee profile on the edges. The kit is completed by black shorts and socks. Combined with a seamless design, the jersey features the latest innovations for optimal performance and an ultra-lightweight jacquard structure at the back to improve breathability during intense performances.

The new U.S. Sassuolo Calcio home kit is available online at [store.sassuolocalcio.it](http://store.sassuolocalcio.it) and [puma.com](http://puma.com), in Sassuolo's Official Store and in selected football retailers.



## From Sassuolo into the spotlight of Euro 2020

FOR THE FIRST TIME, PLAYERS FROM A PROVINCIAL CLUB HELPED ITALY WIN A EUROPEAN TITLE

Italy won Euro 2020 with the help of Sassuolo players: three members of the team were part of manager Roberto Mancini's squad: Domenico Berardi, Manuel Locatelli e Giacomo Raspadori.

Italy won the World Cup in 1934, 1930, 1982 and 2006, also triumphing in the European Championships in 1968 and 2021. This is the first time an Italian national team has won a title playing footballers from a club located in a city that is not a provincial capital. At Euro 2020 (the name was not changed even though the European Championships actually took place in 2021) Berardi played in six of Italy's seven matches.

The team manager brought him on in the 10<sup>th</sup> minute of the second half of the final at Wembley Stadium. Berardi also played extra time against

England and scored the first penalty in the shootout. Manuel Locatelli, who scored twice in the match against Switzerland, played five times in the European Championships, including the final.

**“Sassuolo was also represented at Euro 2020 by the Turkish players Mert Müldür and Kaan Ayhan and the Slovakian star Lukas Haraslin”**

Raspadori also played his part in the match against Wales. It is worth mentioning that Raspadori, who has played for all the various national age-group teams, made his debut for the full national team in the match against the Czech Republic on 4<sup>th</sup> June and was then selected for Euro 2020 just 16 days later.

The central defender Francesco Acerbi also played at Euro 2020. He made his debut for Italy when he was a Sassuolo player in the 1-0 win against Albania on 18<sup>th</sup> November 2014. Acerbi now plays for Lazio.

Sassuolo was also represented at

Euro 2020 by the Turkish players Mert Müldür and Kaan Ayhan and the Slovakian star Lukas Haraslin. Other players with contracts at Sassuolo just missed out on being called up for Italy at Euro 2020: centre forward Francesco Caputo and the defender Gian Marco Ferrari. Both previously played for the full national team while they were at Sassuolo. There are other players now at different clubs who also made their debut for Italy when they were at Sassuolo: the wide midfielder Stefano Sensi now at Inter Milan, Matteo Politano, midfielder who plays for Napoli, and Lorenzo Pellegrini, a midfielder for Roma.

There are also Sassuolo players in the Italy Under 21 team and other national youth teams. “The Sassuolo players currently representing national youth teams - so Giovanni Rosi told us, Sassuolo's Sports Director - most likely to be selected for the full national team are Gianluca Scamacca and Davide Frattesi”.

## A symbol for Sassuolo like Totti was for Roma

SHE IS THE ONLY PLAYER BORN IN SASSUOLO IN MANAGER PIOVANI'S TEAM



“It's wonderful to play for your local team and I'm proud to be part of Sassuolo”. Benedetta Orsi has brown eyes and hair and a real twinkle in her eyes. She was born in Sassuolo in 2000. She is the only player from Sassuolo in a team that will be playing in the Italian Serie A again in the 2021-22 season. “Being the only player born in Sassuolo - so Benedetta told us - does not guarantee you any privileges: I have had to work hard for my place in the team. I am from Sassuolo and I hope to become a captain and symbol of Sassuolo, just like Francesco Totti, who was born in Rome, was for Roma”.

Tenacious Benedetta used to enter and win tennis tournaments. “When I was 12 years old, they removed a benign tumour from my right shoulder and so I didn't touch a tennis racket for months. Six months after surgery, I decided to take up football after playing with some young lads on a local playing field”. To begin with she played as a centre forward or striker. “I also tried my hand as an attacking midfielder because I can play in various positions. Then, after I realised I was better at stopping my opponents from scoring, I became a central defender”.

Sassuolo finished third in the 2020-21 League Championship, just one point behind AC Milan that finished second. “Coming third was a great result and if we had done better in our match against AC Milan we could even have come second. My biggest regret is the Italy Cup: we were knocked out by AC Milan in the semi-finals after drawing both matches”.

The Sassuolo team for the 2021-22 season is stronger all over the pitch. “In addition to the league and Italy Cup, we will be in the finals of the Italy Super Cup and really hope to perform well”.

**“Here at Sassuolo women's team we are lucky to have the backing of an extremely well organised club and we will do everything we can to qualify for the Champions League”**

Benedetta has already played for various Italian national age-group teams. “My dream and that of all footballers is to be picked for the full Italian team. The national team's victory at Euro 2020 means everybody is in love with the national team. Playing for my country is a goal I hope to achieve one day, but I'm in no rush: I would rather improve gradually and, above all, do my best for Sassuolo”.

“Here at Sassuolo women's team - so Benedetta went on to say - we are lucky to have the backing of an

extremely well organised club and we will do everything we can to qualify for the Champions League. Here everybody is working hard to improve, there is no battle of the sexes”.

# NEWS FROM THE MAPEI WORLD

EVENTS, SPONSORSHIPS AND INITIATIVES FROM THE GROUP'S SUBSIDIARIES

## USA - TRADE FAIRS ARE BACK

After several months without any trade fairs being held, three major North American exhibitions for the building industry reopened to welcome back industry professionals. Mapei Corp., the Group's US subsidiary, took part in the 2021 editions of World of Concrete (WOC), TISE, and Coverings. The first event, WOC, ran from 8<sup>th</sup>-10<sup>th</sup> June in Las Vegas (Nevada), allowing Mapei Corp to showcase its products for the concrete industry, such as its coatings for cementitious floors from the ULTRATOP SYSTEMS range. At TISE, which was also held in Las Vegas from 16<sup>th</sup>-18<sup>th</sup> June, and at Coverings, that took place in Orlando (Florida) from 7<sup>th</sup> to 9<sup>th</sup> of July, it displayed its products for waterproofing and installing ceramic tiles and stone, some of which were even featured in live demonstrations.



## SPAIN - MAPEI PRIZE FOR SUSTAINABLE ARCHITECTURE

The Mapei Prize for Sustainable Architecture is a project launched by Mapei Spain in 2017 in partnership with GBCe (Green Building Council of Spain). It is aimed at promoting sustainable architectural projects, whose hallmark is quality, innovation and respect for the setting/environment right from the very beginning to the end of their lifecycle, encouraging good practices in completing building projects. Over the years, the prize has gained in popularity and the 2020 edition was outstanding for the number of entrants and the quality of the works. A panel of six experts chose the 10 finalists, 3 winners and two projects given a special mention, which were all awarded prizes last November. Entries for the 2021 edition closed on the 14<sup>th</sup> of June.



PREMIO MAPEI  
A LA ARQUITECTURA SOSTENIBLE 2021

## UNITED ARAB EMIRATES - IANNAONE ON CONSTRUCTION WEEK'S POWER 100 LIST

Stefano Iannacone, the Mapei Group's Regional Director for the Middle East and East Africa, has been included on "Construction Week's Power 100 list". This is the list of the building industry's most influential players in Middle East according to *Construction Week*, the most important magazine in the local building sector. After joining the Group in 2011, Iannacone was made the General Manager



of the Dubai-based subsidiary, Mapei Construction Chemicals. His inclusion on this list is also due to his hard work over the last 12 months in contributing building the Italian Pavilion at Expo Dubai 2020, for which Mapei is a Partner of Italy and supplier of innovative and sustainable products for its construction.

## CZECH REPUBLIC - 30 YEARS OF GROWTH

On 21<sup>st</sup> June, Mapei spol sro celebrated 30 years in business in the Czech Republic. Over this period, the subsidiary has developed the Mapei brand into one of the most familiar and popular on the local market for building products and has helped in the construction and renovation of prestigious buildings, such as the National Museum and Charles Bridge in Prague. Mapei spol sro achieved revenue of 19 million Euros in 2020 and plans to keep on growing in future. The subsidiary's General Manager, Zdeněk Runštuk (shown in the photo, on the right), thanked all the 88 members of staff for their hard work that played a key role in the company's success.



# Mapecoat TNS

PREMIUM COATING SYSTEMS FOR TENNIS COURTS.



Guangzhou Tennis Stadium, China

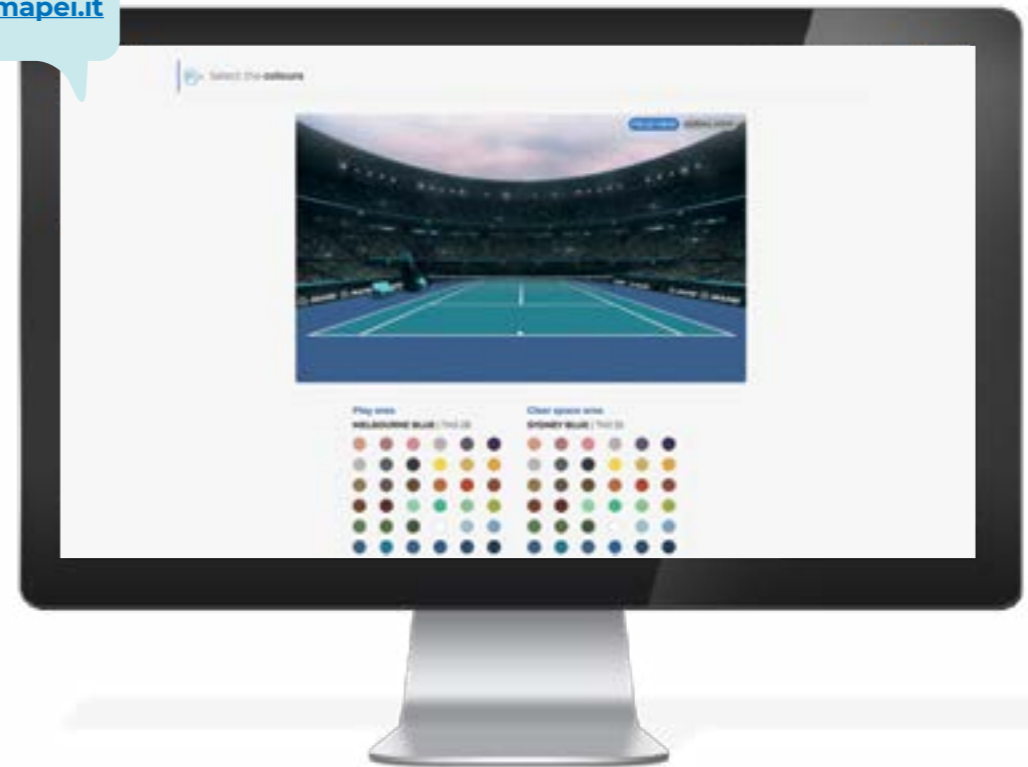
**Mapecoat TNS**, a multi-layer, acrylic waterborne system for creating and restoring tennis courts: a complete range of **tough, durable systems classified according to the ITF Court Pace** to meet the playing requirements of all sports centres. Available in 36 and any customized highly resistant colours.



EVERYTHING'S OK WITH MAPEI

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

Available in English at [mapei.it](http://mapei.it)



## Mapecoat TNS Colorizer

CUSTOMISE THE COLOUR OF YOUR PLAYING SURFACE

Would you like to play on a tennis court the same green colour as Wimbledon? Or blue like the Australian Open? Or powder pink just to be different? Thanks to MAPECOAT TNS COLORIZER, available from [mapei.it](http://mapei.it) in English language, you can create your own playing surface, copy the sports facilities hosting the most important international events or create brand-new combinations. The free new app developed by the Mapei Sports System Technology department lets you customise the colours of playing surfaces for sports. You can choose from 13 different sports, including tennis, basketball, volleyball, netball, skating and athletics, choosing from 36 different colours. Plus, if you want to create your own colour scheme, you can use the automatic ColorMap colouring system.



Find out more MAPECOAT TNS COLORIZER

<https://www.mapei.com/it/en/tools-and-downloads/tools/tns-colorizer>

### HOW TO USE THE APP

MAPECOAT TNS Colorizer can be used very intuitively. You just pick:

- The sport you want to create a playing surface for
- The colours you want for both inside and outside the playing field, any areas around it or the middle of the field and its lines.

After picking your colours, you will receive a chart showing the ideal products for creating your own playing field. If you are looking for inspiration, at [mapei.it](http://mapei.it) you can take a look at the most recent projects carried out using products from the MAPECOAT TNS range, including the tennis courts that hosted the Fed Cup 2019 in Zielona Góra (Poland), the netball courts at the Waverley District Netball Association in Ashwood (Australia), the Kiev Velodrome in Ukraine and the basketball court at Chong Hwa Independent High School in Kuala Lumpur (Malaysia).



# Fully-bonded waterproofing membranes



Philipp Truffer,  
Truffer Ingenieurbau AG

MAPEPROOF FBT:  
A HIGHLY  
EFFECTIVE  
BARRIER AGAINST  
GROUNDWATER,  
MOISTURE AND  
RADON GAS

In March 2019, at the MADE trade fair in Milan, Mapei presented for the first time their fully-bonded waterproofing membrane, MAPEPROOF FBT, which generated a great deal of interest amongst sector operators. The membrane, consisting of a layer of synthetic FPO firmly sandwiched to a layer of non-woven fabric, was developed to waterproof reinforced concrete foundations. Once concrete has been poured, the membrane adheres monolithically to the concrete and remains bonded over time, impeding lateral migration of water between the foundation structure and the membrane. In so doing, MAPEPROOF FBT forms a highly effective barrier against groundwater, moisture in the ground, radon gas and methane.

And thanks to the waterproofing tapes MAPEPROOF FBT TAPE 600 and MAPEPROOF SA TAPE, Mapei offers a proven waterproofing system that has demonstrated its effectiveness.

Besides being launched in other countries, the membrane was tested on the Swiss market where the Group's subsidiary, Mapei Suisse, introduced MAPEPROOF FBT in 2019 to widespread acclaim. Over the course of the last two years it has been installed on more than 270,000 m<sup>2</sup> of surfaces: at the Swiss Life Arena site in Zurich, in the eco-neighbourhood of Marly and in the swimming pool in Appenzell, as well as in entire neighbourhoods, such as the Glasi district in Bülach and the Dietlimoos district in Adliswil. Mapei followed all these projects very closely and provided technical support both when choosing which system to use and when actually installing the system.



A view of a building site where Mapei fully-bonded waterproofing membranes were used.

*We interviewed the engineer Philipp Truffer, owner of the engineering consulting company Truffer Ingenieurbau AG and member of the Commission on Waterproofing Standards of the Swiss Society of Engineers and Architects (SIA).*

## Why should you use fully-bonded membranes?

A waterproofing membrane fully-bonded to fresh, poured concrete is thought of as an emergency solution for "white tank" systems. With white tank systems, it is not possible to exclude the possibility of localised leakage in advance, which then need to be waterproofed by injection. In such cases, you have to be able to reach the elements to be waterproofed, something that isn't always possible, such as when plant equipment has been installed and it is difficult to remove it. In these situations, using a fully-bonded waterproofing membrane is a valid solution. It is also possible to combine it with a suitable system to waterproof the joints.

## What are the advantages of this system compared with other types of membranes?

Being bonded to the concrete impedes lateral migration of water. If the membrane does not adhere to concrete, it is not possible to localise potential leaks. The water would then pass through the waterproofing system and enter into the structure. Another advantage is the fact that, apart from guaranteeing excellent mechanical characteristics, the special polyolefin used to make the membrane has the capacity to bridge any small deformations there may be in the structure of the concrete.

## What is your experience of the Mapei systems?

We have always had positive results. We have found this type of waterproofing to be highly effective. However, because the devil is in the detail, you have to be really careful at all times, right down to the minutest part. Mapei supports us during the design phase by helping us determine the specifications for the work to be carried out. Application of the membrane is also important and has to be carried out by specialists who have received training specific for this type of work.

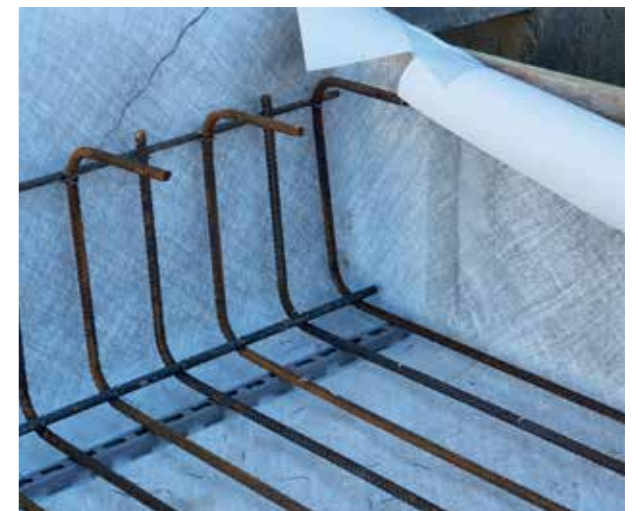
*This article was taken from Realtà Mapei Suisse, no. 16, the in-house magazine published by Mapei Suisse/Schweiz.*



Find out more  
MAPEPROOF FBT SYSTEM



Waterproofing horizontal surfaces with Mapei fully-bonded membranes.



Positioning rebar.



# Products in the spotlight

CONSOLIDATING WALLS, PROTECTING WOODEN FLOORS AND INSTALLING SCREEDS FOR ARCHITECTURAL STONE PAVING



### CONSOLIDANTE ETS/ CONSOLIDANTE ETS WR

Ready-to-use liquid products made from tetraethyl orthosilicate in alcohol solvent characterised by their **high penetration capacity and excellent resistance to alkalis and UV rays**. They are used on internal and external surfaces to consolidate porous stone materials (silicate stones and carbonate stones), brickwork, terracotta, renders and paints to improve their mechanical properties without altering their breathability. They are made up of extremely small molecules, which also make both of them suitable for consolidating substrates with very small pores. CONSOLIDANTE ETS has excellent consolidating properties while CONSOLIDANTE ETS WR combines its consolidating power with a **good water-repellent effect**.

HIGHLY CONSOLIDATING AND ALKALI-RESISTANT



### ULTRACOAT HT 2 K

Two-component, water-based lacquer formulated with 100% aliphatic (non-yellowing) polyurethane resin, characterised by an **excellent level of resistance to abrasion and scuff marks** from rubbersoled shoes. It provides a highly protective, wear and abrasion-resistant finish for solid and pre-sanded wooden floors and wooden floors requiring repair. It is suitable for use in residential and commercial environments, including those subjected to extremely high pedestrian traffic. It gives floors an **attractive "natural wood" finish**, especially in the 0 gloss version. It features very low emission of VOC (EC1<sup>PLUS</sup>-certified), ensure **fire-resistant protection (B<sub>fl</sub>-s1)** and is tested according to ISO 22196, for the determination of antibacterial activities on plastic and other non-porous surfaces.

HIGH RESISTANCE TO BACTERIA



### MAPESTONE TFB CALCIX

Pre-blended, **cement-free, lime-based mortar with a high content of recycled materials**, for making installation screeds for architectural paving of urban squares, roads and pavements, not subjected to heavy traffic. It is ideal for applying blocks, cobblestone, smaller bricks, paving bricks, thin slabs or basoli stones. It has good mechanical properties, is easy to use and resistant to de-icing salts and freezing weather. It is a product from the MAPESTONE line and, when applied in combination with MAPESTONE PFS CALCIX grout, it is used to create highly durable, decorative stone paving compliant with Italian standard UNI 11714-1:2018. It is available in **either a light colour (Neutral) and a darker colour (Tenebris)**.

FOR DURABLE AND RESISTANT PAVING

## MapeLevel EasyWDG System

THE BEST LEVELLING SYSTEM FOR EASY AND PERFECT TILE INSTALLATION.



MapeLevel EasyWDG System is a levelling system for ceramic and stone tiles for perfectly flat floors. Installation is simple and precise, without having to use pliers.

EVERYTHING'S OK WITH MAPEI

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