

# Realtà **MAPEI**

AMERICAS



**MAPEI**<sup>®</sup>

**40** YEARS

**PROUDLY  
CANADIAN**

**SINCE 1978**

The logo features the MAPEI brand name in a bold, white, sans-serif font on the left. To its right is a large white number '40' where the zero contains a red maple leaf. Below the '40' is the word 'YEARS' in a smaller white font. Further down, the words 'PROUDLY CANADIAN' are written in a large, bold, white, sans-serif font. At the bottom of the logo is the text 'SINCE 1978' in a smaller white font. A small MAPEI logo icon is positioned to the left of the 'PROUDLY CANADIAN' text. The entire logo is set against a blue background with rounded corners.

ISSUE 27

## A toast to the past and the future



**Luigi Di Geso**  
President and CEO,  
MAPEI North America

First, a toast to the past! In this issue of *Realtà MAPEI Americas*, we are celebrating the 40<sup>th</sup> anniversary of our Canadian subsidiary, MAPEI Inc. I am proud to say I have been a part of MAPEI's past in Canada, having started my career with MAPEI in 2000 and having accepted the post of the General Manager of MAPEI Inc. in 2004. In 2009, when I became the President and CEO of MAPEI North America, I continued to guide the Canadian operations until October 2016, when we welcomed Marco Roma as our new General Manager for Canada.

I have been very privileged to see the growth of MAPEI in Canada over the years. I remember how we celebrated our 25<sup>th</sup> anniversary in 2003 and how gratified we were at the relationships we had built with our customers, the problems we had solved for them, and the innovative new products we had brought to market for their benefit. Recognition of and reliance on the MAPEI brand has continued to grow over the past 15 years; and today we stand on the threshold of the future, ready to grasp new challenges and deliver on the expectations of all those we serve in the Canadian construction industry.

And now, a toast to the future! You will see in these pages how we have added to the strength and depth of our people in Canada, so that we are able to grow and expand in existing and new market sectors. An interview with Marco Roma highlights our direction for the future. In another article, you get the opportunity to meet a cross section of our MAPEI employees and hear what they think of life with the company in Canada. And you will see a pictorial on a number of Canadian projects across the past 40 years where MAPEI products played an important role.

This issue takes a brief side trip from Canada to visit the Hawaiian island of Oahu to see how a total of 40 MAPEI products were used on a single project – the Anaha residences at Ward Village in Honolulu. This is a fine example of what we mean when we talk about being a single-source supplier who can meet construction needs throughout a project.

There is also a special feature on the North American trade shows where MAPEI exhibited during the first quarter of 2018. Then we look at a dialog that is opening between architects and contractors about designing residences for the families of the future as we peek into the National Building Museum.

And, in this issue you will also find another one of our "Tall Tales" – those humorous and touching stories about MAPEI told from some unique perspectives. This story takes us back to the very beginning of MAPEI in Canada, where a flooring installer shares in two Olympic wins.

So, with a toast to the past and to the future, we hope you will join us as we salute MAPEI in Canada, across North America and around the world!

Sincerely,

A stylized, handwritten signature in black ink, appearing to read 'Luigi Di Geso'.

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MAPEI Americas



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# MAPEI THRIVES IN CANADA AT AGE 40



MAPEI project references can be found in Montreal (pictured) and throughout Canada





The official opening of the manufacturing plant in Laval



Laval (Quebec)

As MAPEI Inc. turns 40 in 2018, it is satisfying to recognize all the things that this subsidiary has accomplished. After all, Canada was the first country outside of Italy where MAPEI established production facilities and where the company began its internationalization plans.

MAPEI entered the Canadian market in 1976 by supplying products for the installation of the Olympic tracks for the Montreal Olympics. MAPEI then incorporated MAPEI Inc. in Canada and opened its first plant in 1978 in an industrial area of Laval (Montreal), where the company began producing adhesives for tile and resilient flooring.

From these small beginnings with one chemist and two quality-control specialists, MAPEI Inc. began to research, develop and produce ever more innovative products for the Canadian market and the rest of North America. Today that original plant has reached 147,000 square feet (13,657 m<sup>2</sup>) in size and houses two polymer reactors as well as production facilities, corporate offices, research and development labs, and a Technical Services Department beyond compare in the industry.



MAPEI Inc. began to spread westward across Canada at the end of the 1980s. In 1989, they also opened a manufacturing plant in New Westminster, British Columbia to serve the Western Canada market, which was later relocated to Delta, British Columbia. In 2001, MAPEI acquired a smaller manufacturer in Brampton, Ontario, and began producing powdered products for that growing market. In recent years, MAPEI Inc. has added a Regional Distribution Center in Calgary, Alberta, to better accommodate the Prairie Provinces. In the mid-1990s MAPEI Inc. purchased a redispersible powder manufacturing plant in Maskinongé, Quebec, in a novel move to provide vital raw materials for its plants across the Americas (the first U.S. plant had been added in 1983).

Today, MAPEI Inc. is as well known in Canada for the high quality and variety of its products as for the professionalism of its sales and technical teams. In addition, it has enjoyed participation in such high-profile projects as The Royal Ontario Museum, The Core in Calgary, the Champlain Bridge and Jacques Cartier Bridge in Montreal, the Shangri-La Hotel and Towers in Toronto, The Exchange Building in Vancouver, the Sparkling Hill Resort in British Columbia, the Pierre Elliott Trudeau International Airport in Montreal, and the Pearson International Airport in Toronto.



Delta (British Columbia)

» MAPEI Inc. is as well known in Canada for the high quality and variety of its products as for the professionalism of its sales and technical teams



Brampton (Ontario)



Maskinongé (Quebec)



Calgary (Alberta)

# THE FOCUS IS FULL SPEED AHEAD

An interview with Marco Roma

While agreeing that Canada's success is a watermark worthy of celebration, Marco Roma, General Manager of MAPEI Inc., reminds us, "The 'Golden Age' for us has never been in the past; it lies always before us, as we continuously work to bring more productive, efficient and sustainable solutions to the construction industry."

MAPEI Inc. is focused on making progress in areas where it already has a strong presence in the Canadian market, while opening new markets that it can serve based on innovative solutions developed by MAPEI's R&D teams in Canada and worldwide. In a recent interview shown below, Mr. Roma responded to a series of questions about MAPEI in Canada today and how the present will shape the future.

**What is the role of Canada (MAPEI Inc.) in MAPEI's strategic growth plan?**

Canada, being the first country where MAPEI established a production unit outside of Italy back in 1978, is by itself a historical pillar of the internationalization strategy of MAPEI Group, a strategy that initiated the positioning of MAPEI as one of the world leaders in its industry. And Canada is a perfect example of MAPEI's business model in which the market penetration begins with the development of a leading position in our core systems, meaning the products for the installation of ceramic tiles, natural stones and soft coverings, and then in a second phase expands to other lines, starting with concrete building and restoration systems. MAPEI Inc. is now moving further and at full speed into this second phase.

**How do new product innovations reach the Canadian market?**

While working closely with MAPEI Group, MAPEI Inc. is able to introduce and share new products generated from the MAPEI Centers of Excellence Research

& Development laboratories from around the world. The common goal is to maximize the use of new technologies in order to increase efficiency and productivity in the building industry sectors we serve, taking into account the voice of the customer and adapting products to local needs.

**What sector of the construction industry offers the greatest opportunity for the introduction of new MAPEI product lines into Canada?**

Attractive new opportunities have been identified in waterproofing, industrial flooring and admixtures. One example of how we are pursuing development into these new markets is with the recent launch of the Waterproofing, Cementitious and Resin Flooring Systems, Admixtures for Concrete and Products for Underground Construction [tunneling] business lines and the support of such launches with the recruitment of dedicated resources. Each of these new ventures in Canada is being undertaken keeping in mind that significant room exists for further growth in the Concrete Restoration Systems market, which remains a clear priority. The ultimate goal is to establish MAPEI in Canada as the supplier of reference for all major infrastructure projects.

**MAPEI Inc. will celebrate 40 years of operations in Canada in 2018. How have operations changed over that time span?**

The establishment of the Laval plant in 1978 started off as an opportunity to capitalize on the momentum created through MAPEI's involvement in the 1976 Olympics in Montreal. The prompt geographical expansion of the Canadian operations was our own gold medal race as we soon after opened other facilities, expanding the operations westward to Delta, British Columbia, and later to Brampton, Ontario.



Marco Roma, General Manager of MAPEI Inc.

We quickly understood that Canada was an attractive market full of potential for our new Tile & Stone Installation Systems and Floor Covering Installation Systems technologies. With the acquisition of the redispersable powder plant in Maskinongé, the business evolved once again to support vertical integration of key raw materials.

Today, all three of our product manufacturing facilities have undergone expansion, and we now count a regional distribution center in Calgary, Alberta, among our locations. In addition, we have expanded our product offering exponentially, supplying the Canadian construction industry with over 1,000 products from 10 product lines.

As our new lines continue to expand, we expect that we shall see maximization of the production capacity in our current facilities. Before we reach that point, we should have plans on the drawing board for additional operations.

**Employee retention is high in the MAPEI sales force serving the Canadian market as well as in other departments such as Technical Services, R&D and Operations. To what do you attribute this longevity, and how will you sustain this loyalty as MAPEI Inc. moves into the future?**

The culture of MAPEI Group has placed human resources, together with quality and product innovation, as the cornerstone to build sustainable growth. At MAPEI Inc., we recruit or develop experts in each field and then we give

them the chance to do what they are good at and ensure they receive the support they need from the rest of the organization. This process gained our organization the best men and women in the industry as we began our journey in Canada, and we believe this same attitude is helping us secure the best and most innovative people today as we move toward the next level of growth.

Success is a team effort, never the result of a one-man show, and I think that our people see that we walk the talk when it comes to creating a positive working environment and nurturing a true team spirit. We have overall leaders who take responsibility for each sector of sales and operations, supported by experienced people who bring technical and developmental support to the equation. All members of our teams work with each other and with our leaders to produce a sound organization with strength and depth. Each new person we add to MAPEI Inc. will enhance our efforts.

***What practices does MAPEI Inc. incorporate to promote sustainability in Canada?***

MAPEI Canada shares the global corporate sustainability mission and is thereby committed to manufacturing the best products for the building industry in a way that fully respects the environment and the end user. We focus on environmental, social and financial sustainability by concentrating on our people, processes and products.

Our facilities operate under the rigorous standards of the ISO 9001 Quality Management Systems, and each of our manufacturing facilities is ISO 14001 certified under the Environmental Management System. We will also be adopting the soon-to-be-published ISO 45001 Occupational Health and Safety Management Systems, designed to help companies establish and maintain increasingly healthier, safer working conditions for employees.

In addition to these practices, MAPEI has impressive reference projects that illustrate how our products have been used to help our customers meet their health and well-being objectives. A recent example is York, Ontario's Bill Fisch Forest Stewardship and Education Centre, which is one of North

America's first Living Building Challenge [LBC] projects and is also striving for a LEED Platinum rating. Our R&D teams continuously evaluate MAPEI products to eliminate, wherever possible, products with content on the LBC's Red List of ingredients that could be hazardous to human health and the environment.

MAPEI Canada also demonstrates its environmental and social responsibility through the improvement of our own buildings. MAPEI's expansion project in Delta, British Columbia, received a LEED Certified designation in 2012; and when our Brampton, Ontario, facility was completely redesigned in 2013, we invested in new production processes that helped enable us to transition from using non-recyclable plastic-lined paper bags to 100%-recyclable, vacuum-sealed plastic bags for product packaging.

***To what extent does MAPEI Inc. access local and regional Canadian resources?***

One of the three MAPEI Group tenets, which were originally established by our founder, Rodolfo Squinzi, is the employment of local people and the use of local resources. Wherever possible, MAPEI Inc. uses local/regional raw materials and resources for the production of our building solutions.

Local resources range from sand supplied from sand pits relatively near each of our operating facilities to the redispersible powders provided by our own plant in Maskinongé, Quebec. Our production workers are hired locally, and we have training programs in place and in development to help them progress in their careers.

***MAPEI Group believes that community involvement in sports and the arts is an important responsibility for a corporation. In what way(s) does MAPEI Inc. participate in cultural activities in Canada?***

MAPEI Canada participates in several activities in support of both art and culture stemming from our joint Italian-Canadian heritage. For a number of years, we have been sponsors of the Italian Contemporary Film Festival, which is presented in several Canadian cities and is the largest Italian film festival

outside of Italy. We were also a part of Montreal's Festa della Repubblica, a celebration of the Italian National Day hosted by the Italian Consulate General.

MAPEI Canada also supports various sporting events on a community level in the regions in which we operate. These include local cycling teams, as well as youth hockey and youth soccer teams. In addition, we sponsor golf tournaments to support our professional associations and special fundraising initiatives.

We feel that being involved lets people know that we are a permanent member of their community and that we support their continued success and well-being.

***Why is MAPEI Inc. a company to watch and support in Canada for the near and the long term?***

I would start by saying that at MAPEI we feel that our long-lasting relationship with Canada and Canadians goes well beyond pure numbers. We like to believe that our history in Canada has been a wonderful win-win story, in which the success of MAPEI Inc. has contributed to the success of all our customers and vice versa, and also created mutual trust and respect that we are committed to honor and further enhance in the years to come. At MAPEI we still look at Canada, even after 40 years of doing business here, as a land of opportunities; and we are determined to do what it takes in terms of investments in people and assets to ensure we meet new challenges and solve them together with our customers.





# CELEBRATING ANNIVERSARIES FOR ITALY, CANADA AND MAPEI

Celebrations help people to recognize their heritage, wherever they live in the world, and celebrations of Italians are especially joyous for MAPEI.



## Festa della Repubblica celebration in Montreal

In the greater metropolitan area of Montreal, 7% of the population is of Italian ancestry, and this past year an Italian holiday was celebrated in grand style in the city. The Italian Consulate General in Montreal invited a number of Italian citizens and Canadian friends to Saputo Stadium for a special day of celebrations on June 4. The celebrations focused around the Italian Republic Day – commemorated in Italy every year on June 2 – as well as on the city of Montreal, which was celebrating the 375th anniversary of its founding. The celebration held in Montreal is the largest Festa della Repubblica event held around the world.

The guest of honor was a city – the city of Bologna (the capital and largest city of the Emilia-Romagna Region in Northern Italy), represented by Virginio Merola, the mayor of Bologna. The event was hosted by then Mayor of Montreal, Denis Coderre, and the Italian Consul General, Marco Riccardo Rusconi. Mr. Rusconi noted, “Bologna presents many affinities with Montreal. Both cities are famous for their universities (Bologna’s ‘Alma Mater’ being the oldest in the world). Both cities share an important industrial vocation and



provide a fertile environment for start-up businesses and creative initiatives. Bologna and Montreal share a passion for engines, racing, cars and motorcycles; both [cities] are characterized by the appreciation of good living and are recognized as gastronomic capitals. Moreover, Bologna and Montreal are welcoming cities that believe in 'living together' and 'living well together.'"

It was a memorable occasion, celebrating the grounding values of Italy's culture and national identity. The approximately 6,000 people who took part enjoyed Italian food and drink and watched a concert by Antonello Venditti, the famous Italian singer-songwriter, as well as a classical Italian female vocalist and a local amateur of heavy metal who performed Italian folk music in a unique way. MAPEI was among the day's sponsors and invited various local customers to its VIP area for the concert. The company was also clearly on display in the Saputo Stadium with a highly visible promotional booth that featured MAPEI's commitment to sport through soccer. Project references and corporate information about MAPEI were also displayed.



From left: MAPEI Inc. employees Yoanna Pergantis, Marketing Manager; and Suzanna Bonofiglio, Sr. Graphic Artist





## Montreal VIP Experience

Celebrations in Canada in 2017 continued on June 29 with a special event organized by MAPEI to commemorate the 80<sup>th</sup> anniversary of MAPEI Group and Canada's 150<sup>th</sup> anniversary a few days before Canada Day. The celebration offered MAPEI Inc. the opportunity to strengthen its ties with Canadian customers and friends as guests were invited to a day and evening of entertaining experiences.

While those who preferred pampering luxuriated in a spa day, another adventurous group of customers enjoyed the thrill of a high-speed ride in a sports car at the International Center of Advanced Racing (ICAR) race track in Mirabel, Quebec. Upon arrival, the MAPEI directors and their guests first received training in driving theory. At the next step, everyone was able to ride as a passenger in one of the race cars with an experienced driver from the track. Subsequently, individuals were able to do some laps by themselves, driving exotic cars, including a Ferrari and a Mustang GT, to get the full excitement of the experience. After a barbecue lunch, guests participated in some adrenaline-pumping, virtual-reality car racing.



From left: MAPEI Sales Directors François Faubert, Eastern Canada; J.D. Eckmire, Prairies and Western Canada; and Gaspare Clemenzi, Central Canada





The day's car racing was followed by a gala evening back in Montreal. Guests were welcomed onboard the Amerigo Vespucci training ship, considered by many to be "the most beautiful tall ship in the world." The fully rigged (24 sails), 328-foot (100-meter) ship is named after the explorer who was immortalized on two continents (North and South America), and it is home to the Italian navy's sailing school. MAPEI leaders and their guests enjoyed a welcome from the captain on the main deck, and were served drinks and hors d'oeuvres by the school's cadets. (MAPEI leadership had also been hosted onboard the Vespucci the evening before, when the President of the Italian Republic, Sergio Mattarella, was the special guest, sharing pleasantries with Giorgio, Veronica and Marco Squinzi.)

Following a naval salute from the ship's guns, the party returned to the Hotel Nelligan for dinner in the company of the Group's executive management team, including Giorgio Squinzi, President of the MAPEI Group; Marco Squinzi, Research & Development Director; Veronica Squinzi, Global Development Director; Nick di Tempora, Honorary Chairman of the Board of MAPEI Corporation; Luigi di Geso, President and CEO of MAPEI Corporation; and Marco Roma, General Manager of MAPEI Inc.

A special area of the event room at the Nelligan was dedicated to MAPEI founder Rodolfo Squinzi, highlighting MAPEI's advent in Canada nearly 40 years before. MAPEI's employees will be celebrating this 40<sup>th</sup> anniversary across Canada in 2018.



MAPEI Inc. General Manager Marco Roma (center) with MAPEI Group's Marco Squinzi and Veronica Squinzi





# THE PEOPLE BEHIND THE SUCCESS OF MAPEI INC.

It is well known that the most valuable asset of a successful company is its people. At MAPEI Inc., that axiom is well demonstrated. MAPEI has a wide array of people who work for the company in Canada. The depth of expertise and experience of our Canadian employees runs the gamut of sales, technical services, operations, logistics, customer service, marketing, R&D, quality management and human resources.

## Eastern Canada

### Laval, Quebec

MAPEI initiated its presence in Canada with a plant in Laval, Quebec, just northwest of Montreal, in 1978. When the demand outgrew capacity, the plant was moved to the current location at 2900 Francis-Hughes Avenue in Laval. Today, 132 people work in this location, which not only houses the production of liquid products and polymers for MAPEI, but is also the corporate headquarters of MAPEI in Canada. In addition to Operations, employees work in Quality Control, Technical Services, Marketing, R&D, Human Resources, Accounting, Customer Service and the executive office.

Marco Roma, the General Manager of MAPEI Inc., said, "All MAPEI growth is based on acquiring the most effective, productive people in all fields of endeavor. The challenge of our Human Resources Department today and in the future is finding the best and brightest people to work at MAPEI." Human Resources Manager Anick Pare added, "We have been able to build a strong and positive relationship in all locations. The collaboration, productivity and atmosphere show a team that is eager and motivated to take on the next challenges and support the growth of the company."

An example of team collaboration is cited by the Sales Director for Eastern Canada, Francois Faubert, who also has his office in the Laval headquarters. He said members of his sales teams can be spotted visiting all the departments for help in answering questions and providing solutions for their customers. That teamwork mentality is echoed by Pat Desanctis, the Eastern Region Business Development Leader for the flooring sector, who has been with MAPEI Inc. for 21 years: "I have always felt like I was part of a big family at MAPEI, and I work to make my customers feel that way too. There is great loyalty to MAPEI, both from our employees and our customers. I believe MAPEI will move forward in Canada through its program of continuous innovation to meet the needs of the construction sectors we serve."

Pat's feelings about the MAPEI "family" are reflected in other departments at Laval, too. Monique Brasseur, who took a temporary job with MAPEI Inc. 35 years ago, is now the Customer Service Coordinator. The four-person department in Laval has increased in size, and customers have evolved into friends. "MAPEI customers are very loyal, and most of ours have been around for more than 20 years," Monique said. "As MAPEI opens new product categories in Canada, we have begun to work with new customers; and we hope they will come to be friends in the future as we adapt to their needs and requirements. We have a great customer service team in Laval!"

Technical Services Manager Pierre Hebert, a 29-year veteran at MAPEI Inc., is based in Laval, but he works with MAPEI's customers all across Canada. Pierre also has praise for the sense of family expressed by many people at MAPEI Inc. "MAPEI treats

its employees very well, and we all have a great deal of trust in one another," he said. "Our MAPEI Technical Services Field Representatives across Canada often visit jobsites to support customers with recommendations to solve problems and to train them in the use of our products. It's very important for us to be active in our fields so that we stay on top of the technical developments and new trends. I am constantly on the lookout for experienced people who know our business and have a passion for helping others."

Laval happens to be the site of one of MAPEI's Centers of Excellence in Research and Development. Martin Vachon recently joined MAPEI Inc. to assume the role of R&D Director in place of André Drapeau, who retired after 34 years of service. "We have an excellent R&D team in the field of flooring adhesives, mortars and grouts, and surface preparation," Martin said. "This team has the breadth and depth to support our existing product lines and develop new products to ensure our continued growth."

"My area of expertise is in the new product lines for concrete admixtures and concrete restoration, and my mission is to steer the R&D effort to maximize the introduction of new products that will meet the future requirements of MAPEI's customers and attract new customers in these areas," Martin added.

Martin recognizes MAPEI's current position in Canada as a leader in the flooring installation sector and feels that it will help the success of new ventures. "We want to leverage our flooring brand recognition to help build the concrete brand. Even though they may not know our new product categories yet, concrete contractors know the MAPEI brand and recognize the MAPEI reputation," he said.





Maskinonge employees

### Maskinonge, Quebec

The Maskinonge facility may be small in size when compared with other Canadian plants – just 8,000 square feet (743 m<sup>2</sup>) – but it serves as an indispensable resource for all of North America. This plant specializes in the production of redispersible powders used in many of MAPEI North America's operations. Its 12 dedicated employees work on a 24-hour-per-day, 7-day-per-week schedule to guarantee the availability of these specialty chemicals.

## Central Canada

### Brampton, Ontario

MAPEI's presence in Central Canada came through the acquisition of Chembond Ltd. of Ontario in 2001. The original plant was built in Brampton in 1991 and enlarged to 80,000 square feet (7 432 m<sup>2</sup>) in 1996. Operations at this location reached capacity, and a move was made in 2013 to a 133,000-square-foot (12 356 m<sup>2</sup>) facility at 95 Walker Drive. The plant's manufacturing is focused on powdered products for tile and stone installation as well as on concrete repair mortars and self-leveling products.

Based in Brampton is Jim MacNeil, who came to MAPEI with its acquisition of Chembond. He has a total of 28 years of service with both companies. At Chembond, Jim was the production manager and initially remained in that position at MAPEI Inc. In 2013, Jim was promoted to Unit Manager when the new plant was built in Brampton.

Jim feels that working with MAPEI Inc. has many benefits. "MAPEI gives its unit managers a great deal of autonomy, allowing them to run their units in the most effective way," he said. "There are also very good benefits for our employees, who are recognized for their efforts and reliability. The new plant in Brampton is a world-class facility, probably one of the cleanest plants in the industry. It is a very nice atmosphere for the employees to work in, concentrating on safety and a good work environment."

Purchasing for MAPEI Inc. is also based at the Brampton facility. Heather Coates, who also moved to MAPEI Inc. when Chembond was acquired, has worked for MAPEI for 30 years and now serves

as Purchasing Manager for MAPEI Inc. Her job is to source raw materials for MAPEI Inc.'s plants in the most efficient ways. Looking from the past to the future, Heather said, "The best thing about MAPEI from my first day with the company was the way the company treats employees, with respect. Even as MAPEI has grown in Canada and globally, there is still a feeling of family. As MAPEI Canada grows, the Purchasing Department will grow too. We are always looking for experienced people who have a passion for working with a company that is looking forward."

Brampton has nearly doubled production output since 2011. Growth has come from new markets such as concrete restoration. Powdered products originally manufactured in the United States are being brought into the Brampton plant, which will save costs on importation. The plant workforce has grown by about 25% to 111 and will continue to grow as new product categories are developed.

Gaspare Clemenzi, Director of Sales for Central Canada and a 15-year employee of MAPEI Inc., shares the most prevalent feeling about MAPEI: "MAPEI has always given me a warm feeling of security, a feeling that MAPEI cares about me. Our customers in Central Canada feel the same way. Trust and loyalty are the hallmarks of our relationships, because our customers know that MAPEI will always move forward successfully with innovative, reliable products."



Brampton employees



## Western Canada

### Delta, British Columbia

When MAPEI Inc. spread westward to British Columbia and the Prairie Provinces in 1989, its first plant was opened in New Westminster, BC. By 2002, demand had increased beyond the small plant's capabilities, and operations were moved to a 35,000-square-foot (3 252 m<sup>2</sup>) plant in Delta, BC. In 2010, MAPEI completed construction on additional warehouse, shipping and office space, plus a new Quality Control laboratory, bringing the plant's total footprint to 78,779 square feet (7 319 m<sup>2</sup>). The LEED-certified building now houses 48 employees, who work in manufacturing, warehousing, shipping, quality control, customer service and administration. The Delta facility also features a branch of Canada's MAPEI Technical Institute to provide classroom and workshop space for training MAPEI customers.

The drive to grow and to continuously innovate, bringing new products and new product lines to the construction industry in Canada, keeps JD Eckmire passionate about his career with MAPEI Inc. The Director of Sales for Western Canada said, "MAPEI is able to continuously produce innovative products that receive approval from the installation community because they always meet new and changing requirements.

"MAPEI sales reps have become a lot more specialized over the past five years," JD said. "We have been hiring industry professionals and product specialists to address new market sectors we are entering. Today we continue to look for people with expertise and experience in the new business categories MAPEI is addressing."

### Calgary, Alberta

Business in the Western provinces increased to such a volume that MAPEI Inc. opened a Regional Distribution Center in Calgary, Alberta, in 2007. The 19 employees who work in Calgary receive manufactured products from the Delta plant and stock them for timely shipment to customers in Alberta and the Prairie Provinces.

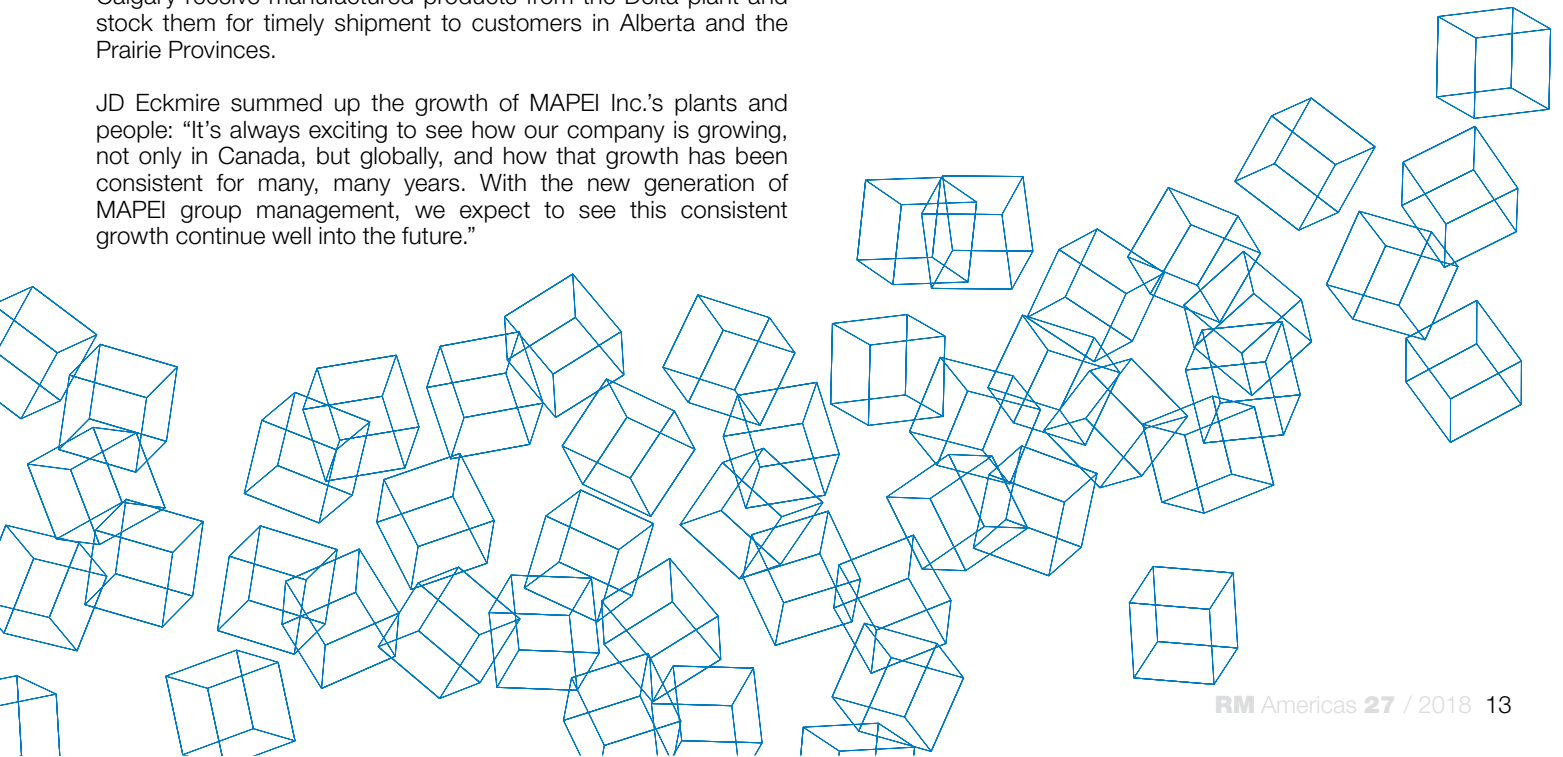
JD Eckmire summed up the growth of MAPEI Inc.'s plants and people: "It's always exciting to see how our company is growing, not only in Canada, but globally, and how that growth has been consistent for many, many years. With the new generation of MAPEI group management, we expect to see this consistent growth continue well into the future."



Delta employees



Calgary employees





# RESTORING A CHINESE GARDEN'S BEAUTY

A combination of modern technology and craftsmanship



Jardin de Chine  
– Montreal, Quebec, Canada

**Overview:** MAPEI products and technical support helped restore the roof of the main building and the decorative walls throughout the Jardin de Chine, which is the Chinese garden situated within the Montreal Botanical Garden. *Planitop® 12 SR* and *Mapecem® 202* played key roles in restoring the garden's structures, and *Elastocolor®* products provided protective coatings.

The Jardin botanique de Montréal (Montreal Botanical Garden) is considered to be one of the most important botanical gardens in the world, thanks to its collection of more than 20,000 different types of plants and cultivars, 10 greenhouses and 30 thematic gardens open to the general public. The garden extends over an area of 185.3 acres (75 hectares) and, in 2008, was officially designated a National Historic Site of Canada.

Designed in 1931 by the landscape architects Henry Teuscher and Frederick Gage Todd, the Montreal Botanical Garden receives around 2 million visitors every year. Included within the garden is an arboretum, a rose garden, a Japanese garden, an insectarium,

the Frédéric Back Tree Pavilion and a Chinese garden (Jardin de Chine). The Jardin de Chine was created in 1990 by 50 artisans who were brought over from the Shanghai Institute of Landscape Design and Architecture in Shanghai, China.

The Jardin de Chine covers about 6.17 acres (2,5 hectares). Its plantings were created along the lines of a traditional garden of the Ming dynasty. (The art of gardening in China was first established during the Ming and Qing dynasties, when the emperors and the noblest families invested enormous amounts of money and effort to create the most refined gardens.) The garden has several paths running through it, as well as an artificial mountain and a Chinese-style residential building that houses a collection of Japanese and Chinese bonsai donated by the Government of the People's Republic of China.

The project to build the garden required 120 container ships full of plants and construction materials imported from Shanghai, including 500 metric tons (500 000 kg) of stone from Lake Tai in the Province of Jiangsu.





## MAPEI products on the jobsite

More than 20 years after it was first created, the Jardin de Chine needed to be restored, starting with the roofs of the buildings in the garden. MAPEI's Technical Services representative was contacted to work alongside engineer Jean Bouvrette and project manager Richard Robillard from the City of Montreal. The same artisans who created the original garden in the 1990s returned from China to help with the restoration work.

The schedule for the restoration work had to be strictly adhered to, so a great deal of importance was given to choosing the products used. Fast-setting properties, ease of application and the ability to withstand Quebec's harsh winter weather conditions were key selection criteria.

MAPEI products were used to address a number of repair issues during the restoration of the Jardin de Chine. As each challenge arose, the restorers turned to their MAPEI representatives, who provided solutions for reconstructing areas of the roofs and garden walls, repairing and setting terracotta tiles on the roofs and providing a protective coating with **Elastocolor Coat**.

To begin the restoration, the roofs of the buildings were rebuilt by applying a 1" (2,5 cm) coat of **Planitop 12 SR** fiber-reinforced mortar – which is resistant to tensile loads and abrasion – directly on the metal sheeting of each roof. The terracotta tiles imported directly from China were installed over the surface made from **Planitop 12 SR** using **Mapecem 202** rapid-setting cementitious mortar.

**Mapecem 202** was the ideal solution due to the thickness needed to secure the curved tiles in place. The jutting gutters around the roofs, typical of Chinese architecture, were installed in some of the roof areas with **Mapecem 202**, while in other areas the **Granirapid® System** was the mortar system of choice. Every border tile was installed with the **Granirapid** System in order to accelerate the installation of the adjacent roof tiles. The artisans needed a product that would provide a firm bond with a quick-set capability, and the **Granirapid** System was the best solution.

The roof tiles needed to be repainted because quite a number of them were damaged in transit from China. MAPEI's Technical Services Department proposed using **Elastocolor Coat**, a high-yield acrylic coating product used to decorate and protect surfaces. This product is available in a vast range of standard colors and a limitless number of tailor-made colors. It forms a waterproof film that provides excellent resistance to environmental conditions over the years. The use of **Elastocolor Coat** as the finish for the roofs received the seal of approval from Montreal Botanical Garden representatives and the Chinese artisans.

The walls surrounding buildings, temples and cities are very important features of typical Chinese landscapes because they offer protection and cover from the outside. The walls surrounding the Jardin de Chine needed to be restored and protected against the elements. To restore the walls to their original white color, the pastel tint base of **Elastocolor Paint** – an acrylic-based paint that is water-resistant and impermeable to aggressive agents present in the surrounding air – was recommended.

The surface of each wall and its decorative oval features are similar to what is seen on the Great Wall of China. For this part of the restoration, the damaged areas were removed and then repaired with **Planitop XS** fiber-reinforced mortar (which is resistant to compressive and flexural loads), while the decorative features were bonded to the surface using **Mapecem 202**.

The City of Montreal and the Chinese artisans who carried out the work were highly satisfied with the end result and praised the quality and reliability of the recommended MAPEI products.





## TECHNICAL DATA

### The Jardin de Chine (at the Montreal Botanical Garden)

– Montreal, Quebec (Canada)

**Year of construction:** 1931

**Year of MAPEI involvement:** 2016

**Where MAPEI products were used:** MAPEI products were used to restore building roofs and perimeter walls, bond decorative features, provide protective coatings and finish surfaces.

**Project owner:** City of Montreal

**Architects:** Menaud Lapointe; Beaupré Michaud et Associés, Architectes

**Engineer:** Jean Bouvrette

**Project manager:** Richard Robillard

**MAPEI distributor:** Geroquip

**MAPEI coordinator:** Domenic Romano

### MAPEI Products

Repairing roofs and walls: *Granirapid System, Mapecem 202, Planitop 12 SR, Planitop XS*

Protection and finish: *Elastocolor Coat, Elastocolor Paint*



# CREATIVITY ON DISPLAY AT TRADE SHOWS



## The International Surface Event 2018



The International Surface Event (TISE) 2018 was a solid success for MAPEI. Newly designed applied samples were a big draw for attendees. The smaller scale of the samples allowed more displays within the MAPEI booth, which gave the MAPEI representatives more examples of innovative solutions to share with customers.

The MAPEI Demo Team, once again led by MAPEI national presenter Sam Biondo, attracted a large number of TISE participants to its demonstrations. This year, the presentations included surface preparation and installation system solutions for large-format tile featuring MAPEI's thixotropic mortars: new **Planitop® 330 Fast** rendering mortar for

walls and floors, and **Mapeguard® UM** underlayment membrane. Demonstrations of MAPEI's floor-covering installation system solutions for high-moisture concrete slabs highlighted new moisture-barrier products, including **Planiseal® PMB**, **Planiseal MSP** and **Planiprep™ MRS** in combination with **Ultrabond® G15** adhesive for rubber and vinyl flooring.

The demonstration titled "MAPEI Dominates the Track with Grouts Fueled by Innovation" showed the features and benefits of our best-selling grout, **Ultracolor® Plus FA**, and the attractive appeal of **MAPEI Flexcolor™ CQ**, the ready-to-use grout with colored aggregate that makes this grout color-fast. Of great interest to visitors was the backlit mosaic



and glass tile counter that lined the back of the demo stage. The tiles had been grouted with *MAPEI Flexcolor 3D*, and the backlighting of the tiles showed how the translucent grout changed colors with the change in lighting. Completing the beauty of the backlit tiles was the new *Mapesil™ 3D*, a 100%-silicone sealant that comes in the same translucent/iridescent colors as *MAPEI Flexcolor 3D* grout.

MAPEI also played an important role in the conference presentations at TISE. Technical Services Director Dan Marvin presented at a combination lecture/workshop on gauged thin porcelain tile panels with Noah Chitty, Director of Technical Services for Crossville Inc., a manufacturer of the ultra large tiles. MAPEI Technical Services Manager Jim Whitfield spoke to a roomful of contractors on “How Flat is Flat? Surface Preparation for Installations.” Whitfield commented, “It was a little surprising and very exciting to have so many contractors attending my presentation. I think the interest of the attendees highlights the importance of the role surface preparation plays in today’s installations.”

In addition to his regular involvement with Marmomac at TISE 2018, Mike Granatowski, MAPEI’s National Manager for Architectural and Commercial Projects, presented an “Introduction to Moisture Mitigation in Stone Installations.” As part of MAPEI’s further involvement with the Marble Institute of America (MIA +BSI), MAPEI representatives Nick Valenti and Diane Choate attended the National Stone Institute Pinnacle Awards, where MAPEI sponsors the Awards for the Commercial Exterior and Interior categories.

MAPEI held its traditional in-booth VIP hospitality event on January 31. The event was attended by hundreds of MAPEI clients – contractors, distributors, architects – and members of the media. Just prior to the hospitality event, MAPEI held a press conference to announce the winners of the MAPEI 80th Anniversary Giveaway. The grand prize, a side-by-side off-road vehicle, was won by Brian Schmidt of Mr. David’s Flooring International, LLC, of Itasca, Illinois.



## World of Concrete 2018

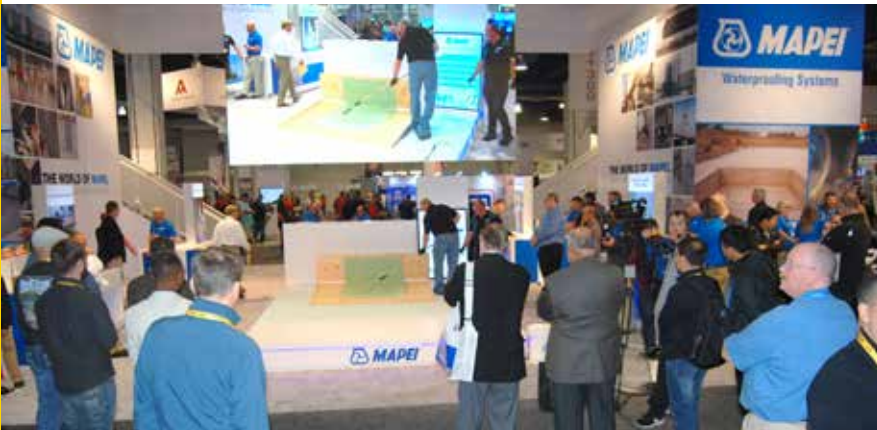


This year’s World of Concrete (WOC) tradeshow saw the largest number of attendees in 9 years. The annual event brought together concrete and masonry industries from around the country totaling 1,567 exhibiting companies and 58,222 registered industry professionals. The Las Vegas Convention Center hosted the event from January 23-26. The World of Concrete Education Program also offered 172 sessions of hands-on training, interactive workshops and seminars focused on construction fundamentals and more.

As in the previous year, MAPEI and MAPEI/GRT created separate dedicated booths. The dedicated booth for MAPEI products was in the South Hall, while MAPEI/GRT secured a booth fully devoted to concrete admixtures in the North Hall. The GRT booth offered ample seating and introduced show visitors to the family of *Dynamon™ NRG* products, specially developed admixtures to meet the needs of precast/prestressed concrete applications. The major attractions at the MAPEI booth were the live demonstrations of the latest products and applied samples of concrete coatings, admixtures, repair mortars and waterproofing membranes.

Harold Hays, MAPEI’s Technical Services Manager for Waterproofing, introduced booth attendees to *Planiseal CR1*, a new





cold-fluid-applied, low-odor, structural waterproofing membrane. Dave Randall, MAPEI's Business Development Leader for Western Canada, demonstrated **Planitop 18** and **Planitop 18 TG** repair mortars with assistance from fellow Canadians Benoit Prevost and Lee Cuthbert. Both products rapidly facilitate the repair and rehabilitation of traffic-bearing surfaces.

Rankin Jays, MAPEI's Business Development Leader for Coatings, highlighted the flexibility and versatility of **Elastocolor®** coatings with a surprise performance by D. Westry, "The World's Fastest Speed Painter." D. Westry is known for his rapid upside-down painting performances in which he flips the artwork upright to reveal a completed portrait, all within minutes. Onlookers were entertained by D. Westry's artistry as he created portraits of Michael Jackson, Marilyn Monroe, Frank Sinatra, Albert Einstein and more using **Elastocolor Paint**. Four of the paintings were raffled off to booth visitors; while the other two portraits were gifted to Nick Di Tempora, Honorary Chairman of the Board of MAPEI Corporation, and Luigi Di Geso, President and CEO of MAPEI North America. D. Westry has guest-appeared on Anderson Cooper's daytime talk show, *Anderson Live*, and performed for celebrities and politicians including former

Atlanta Mayor, Kasim Reed. The **Elastocolor** coatings presentation was the most widely attended demonstration.

The in-booth VIP event was also a big crowd-pleaser; it was standing room only as product videos streamed overhead while VIP guests enjoyed catered hors d'oeuvres and an open bar. It was an ideal way to generate relationships between visitors and the sales team.

This year, MAPEI also supported a profoundly life-changing cause, with special thanks to Mike Murray, the co-founder of Concrete Cares, for providing a wonderful opportunity to give back to the community. Concrete Cares is a charitable organization devoted to using the concrete industry to benefit the needs of families dealing with pediatric cancer. MAPEI supported the event by donating two pallets of **Ultratop®** and **Ultratop PC** plus pails of **Planibond® EBA**. Jack Christiansen of Concrete Accessories, Inc. in Las Vegas won the silent auction with a \$2,500 bid. Concrete Cares uses the WOC forum to support the Candlelighters Children's Foundation of Nevada and raised a record \$50,000 in donations for pediatric cancer patients. From education and networking opportunities to live product demos, MAPEI capitalized on all aspects of the shows.



**BUILDEX Vancouver** is Western Canada's premier tradeshow event, held at the Vancouver Convention Centre West. During the event on February 14-15, BUILDEX featured 600 exhibits and more than 80 educational seminars, attracting over 14,000 attendees.

During the show, the MAPEI Inc. team showcased the latest innovations in "No-Moisture-Limit" solutions for subfloor preparation and adhesive bonding. These new products are designed to withstand exposure to elevated moisture conditions and will provide robust, high-performance solutions at any moisture emission level.

MAPEI also invited visitors to its booth throughout the two-day event to learn more about its industrial flooring and parking deck systems. Business Development Leaders Alain Pomerleau and Dave Randall introduced MAPEI's **Mapefloor™ CPU** industrial flooring systems and the **Mapefloor** coating system for parking decks and balconies. Live demos of **Mapeguard UM**, **Ultraflex™ LFT™ Rapid** and **Ultracolor Plus FA** illustrated MAPEI's full system for tile and stone installations.

**The 2017 IPI Conference & Expo** was held from May 21-24 at the Ernest N. Morial Convention Center in New Orleans. The IPI event operates as the largest educational and networking event for parking and transportation professionals. This year's event featured 50 education sessions, two pre-conference programs, hands-on workshops, an awards gala and more.

As part of the single-source solutions offered by MAPEI, the booth promoted various products for parking environments including corrosion protection and mitigation, repairs, structural strengthening, crack/joint sealing, wall coating and waterproofing. Jerry Phenney, MAPEI's National Specification and Projects Manager, spoke with potential customers, universities, owners and national engineering firms from all over North America about quality toppings and protective solutions.

IPI is one of many concrete-driven trade shows attended by MAPEI, which also attends the International Concrete Repair Institute (ICRI) Fall Convention; Sealant, Waterproofing & Restoration Institute (SWRI); and World of Concrete (WOC).



**Total Solutions Plus** (TSP) kicked off in high gear this year at the Washington Marriott Wardman Park in Washington, D.C., from November 4-7. The three-day conference is a combination of education sessions and networking opportunities for professionals in the ceramic tile industry. To demonstrate how MAPEI "dominates the track" with grouts that are "fueled by innovation," the booth featured an exciting virtual-reality racing game. During the three-hour exhibition day, the game enticed booth visitors to compete in a hands-on, go-cart racing sensory experience complete with headset and a controller.

The game experience gave the team a great opportunity to re-introduce **MAPEI Flexcolor 3D**, a translucent grout with an iridescent finish to complement glass and mixed-mosaic tile. **Ultracolor Plus FA** was also a big hit as a rapid-setting, all-in-one replacement grout, eliminating the common problem of efflorescence.

Dan Marvin, MAPEI's Technical Services Director, and Jim Whitfield, MAPEI's Technical Services Manager, both attended industry standards meetings at TSP in preparation of the show's official opening. Pierre Hebert, MAPEI's Technical Manager in Canada, joined Jim in presenting an engaging lecture titled "Selecting and Specifying Ceramic Tile with ANSI and ISO Standards." It highlighted the importance of industry standards in establishing quality in a specification.

"To be able to select the proper mortar or grout based on designations can be very beneficial to the project specification and the installer," Whitfield said. "[For example] what should the contractor accept in the substrate previous to installing? What should be corrected or at least brought to the attention of the general contractor before starting? These answers are in properly specified projects using the latest in industry standards. The design professional, the owner and tile contractor all can benefit from a better understanding of industry standards, and how they coordinate with the rest of the construction documents."





## TECHNICAL SERVICES PLAYS A CONCRETE ROLE IN CANADA

Building on MAPEI's experience in the fields of tile and stone installation and floor covering installation, in 1992 the company decided to introduce its Concrete Restoration Systems to the North American market by investing in a research center in Laval, Quebec.

At first, a little over 20 products were developed for the introduction of this product line to the Canadian market. This was the genesis of what was to become, several years later, a line offering over 180 products, ranging from concrete restoration and structural strengthening to below-grade waterproofing and admixtures for concrete.

The product line has grown because MAPEI has taken special care in evaluating the needs of professionals in the industries that it supports. These products were developed with the same philosophy and rigor with which MAPEI's reputation was forged, resulting in innovative, greener, more sustainable products with an easy, low-odor application. The products have always been supported with continuing education and technical assistance programs for the installers.

Market acceptance of the Concrete Restoration Systems division is often gained through the approval of various transportation departments. More than 20 of our products have been approved by Canadian agencies, including the Ministry of Transportation of Alberta; the Ministry of Transportation of British Columbia; the Ministry of Transportation of Ontario; and Quebec's Ministry of Transport, Sustainable Mobility and Transport Electrification. The ability to meet these agencies' high standards proves that

MAPEI is committed to the quality and performance of its many innovative products.

Members of the Technical Services staff at MAPEI Inc. are involved with organizations and associations in the concrete industry, serving on committees to improve the company's understanding of needs and requirements of these organizations' members.

MAPEI Inc. is an active member of the International Concrete Repair Institute (ICRI) both locally and internationally. ICRI committees work on technical guides to educate concrete contractors. The ICRI also offers certifications for contractors and holds conventions to provide the latest technical information.

Of note is the fact that MAPEI initiated the setup of the Quebec Province's ICRI chapter. This chapter continues to be the only one in ICRI to have hosted conventions outside the United States. The chapter was the host on two occasions.

MAPEI also proudly supports the American Concrete Institute (ACI), another organization that aims to provide knowledge and information to ensure the best use of concrete in the industry.

The Technical Services Department of MAPEI Inc. has supported concrete restoration jobs across Canada, providing solutions that have helped repair, strengthen and protect these projects. The following overviews provide examples of how MAPEI products have contributed to durable, sustainable buildings and infrastructure.

## Alberta Legislature Building

Edmonton, Alberta

**General contractor:** Lorac Construction

**Distributor:** National Concrete Accessories (NCA)

**Products used:** *Mapeflex™ P1, Primer SN™, Mapefloor™ PU 400 FC, Mapefloor Finish 415 NA, Planitop® X, Planigrout® 712*

An indoor parking garage measuring 120,000 sq. ft. (11 148 m<sup>2</sup>) was covered with a traffic deck membrane system. The challenge with this project was to propose a product that would provide good protection against water and salt as well as high resistance to wear and abrasion. MAPEI Inc. Technical Services suggested that its parking deck system be composed of *Mapefloor Finish 415 NA* combined with basecoat *Mapefloor PU 400 FC* and *Primer SN*. *Planitop X* was used for wall repairs and *Planigrout 712* for the corbels.



## Union Station

Toronto, Ontario

**General contractor:** Bondfield Construction

**Distributor:** Form and Build Supply

**Products used:** *Topcem™ Premix, Planicrete® AC, Mapedrain™ 30, Mapelastic® 315, Fiberglass Mesh, MAPEI Ultralite™ S2, Ultracolor® Plus FA, Mapesil™ T*

When a national historic site in Canada required 50,590 sq. ft. (4 700 m<sup>2</sup>) of restoration, MAPEI was selected as the main supplier for this prestigious underground construction. *Mapedrain 30* was used for drainage in the waterproofing system for the project. *Topcem Premix* mixed with *Planicrete AC* was involved to level the substrate upward 2" (5 cm) before the installation of *Mapelastic 315* with *Fiberglass Mesh* membrane as a protective coating. New flamed granite slabs weighing 650 lbs. (295 kg) were installed using a forklift. *MAPEI Ultralite S2* mortar was used to set the slabs in place, and the tile joints were grouted with efflorescence-free *Ultracolor Plus FA*.





## Champlain Bridge

Montreal, Quebec

**General contractor:** Pomerleau

**Distributor:** Géroquip

**Products used:** *MapeWrap™ Primer 1, MapeWrap 11, MapeWrap 12, MapeWrap C Uni-Ax 300, MapeWrap C Uni-Ax 1200*



This project required 328,426 cu. ft. (9 300 m<sup>3</sup>) of structural strengthening of girders with fiber-reinforced polymer (FRP). On this project, MAPEI came up with an innovative solution using *MapeWrap C Uni-Ax 1200*, saving time and labor by avoiding use of a multi-layer carbon fiber.



## Autoroute Dufferin-Montmorency

Quebec City, Quebec

**General Contractor:** Construction Stellaire

**Distributor:** Géroquip

**Product used:** *Mapelastic®*



A protective coating was needed to cover a 3.11-mile (5-km) stretch of the Dufferin-Montmorency highway. MAPEI's *Mapelastic* was selected as the coating on beams and Jersey walls. This project was the first project in Quebec to specify a Type 2 coating by MTQ (Quebec's Department of Transportation). Type 2 coatings must demonstrate high waterproofing performance, chloride resistance and freeze/thaw resistance.

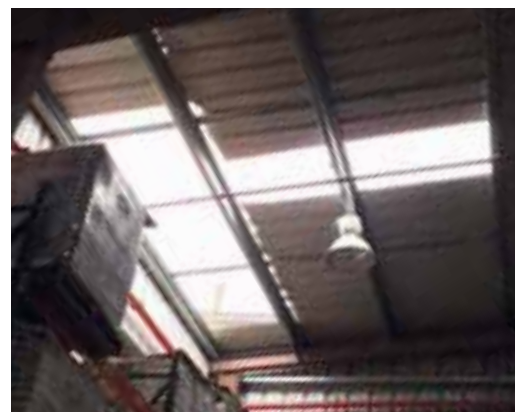
On these projects and many others, MAPEI Inc. Technical Services assists with proper product selection and with on-site training for installers and applicators.



### About the author:

Benoit Prevost

Benoit is a Senior Technical Representative specializing in Concrete Restoration Systems. A part of MAPEI for 27 years, he has held various positions all related to the technical field, including laboratory technician, R&D researcher, quality control manager and quality management manager. As a LEED Green Associate, he is also responsible for staying up-to-date on the LEED standard for Canada.



# MAPEI FUND HELPS PUERTO RICO AFTER HURRICANES

On September 20, 2017, a catastrophic Category 4 hurricane named Maria ravaged the island of Puerto Rico with 155-mph winds and heavy rain. A mere two weeks before Maria hit, Hurricane Irma had passed just north of the island with Category 5 winds, causing widespread power outages for an estimated 1.5 million customers. Between 60,000 to 80,000 customers were still without power when Maria struck.

Across the entire island, tornado-like winds leveled homes, downed trees and destroyed whole communities. For many, entire homes were decimated during the 30-hour-long storm. Some areas saw between 5 to 10 inches (12 to 25 cm) of rainfall while other areas experienced as much as 35 to 40 inches (89 to 102 cm), all of which caused extensive flooding, landslides and collapsed bridges. Maria is considered to be one of the worst natural disasters on record in Puerto Rico. Months after Hurricane Maria made landfall, the island struggled to rebuild, recover and restore power to more than 400,000 islanders.

Due to blocked roads, downed powerlines and debris, transportation to those in need was limited and in some areas impossible. Only about 7% of Puerto Rico had electricity in their homes, while 55% were without drinking water nearly two weeks after Hurricane Maria passed. The MAPEI Caribe facility was not immune to the storm either. The warehouse lost part of its roof, most of the skylight and one of the warehouse's rolling doors. Trucks were toppled over dominoes-style, plus 77,000 lbs. (34,927 kg) of raw materials and 256,000 packaging bags were damaged.

## Rebuilding homes and lives with the MAPEI Family Relief Fund

MAPEI decided to do its part by helping those in crisis, including our own family and friends at the MAPEI Caribe facility. Nick Di Tempora, Honorary Chairman of the Board of MAPEI Corporation, and the MAPEI leadership team spearheaded a disaster relief mission with the help of members of almost every department.

Within a few days after the storm, use of a private plane was donated as part of the humanitarian relief. This helped MAPEI to deliver close to 1,000 lbs. (454 kg) of critically needed supplies, including dried goods, bottled water, diapers, baby formula, extension cords, batteries, flashlights, generators and gas cans. Many of the families had young children. "With this thought in mind, we also sent toys, as it was important to keep the children happy and amused during this rough time," said Luigi Di Geso, President and CEO of MAPEI North America.

The choice to fly in a small aircraft was ideal for visual landing, especially due to the condition of the airport and the lack of radar. The team worked on a tight schedule to unload supplies and depart within a couple hours to make room for other incoming flights.

When the port of San Juan opened to shipments, MAPEI North America's Operations team coordinated the delivery of more supplies in two 40-foot (12,2-m) cargo containers that sailed from the port of Jacksonville, Florida. One container was full of

**LEFT AND ABOVE** Damage from Hurricane Maria at the MAPEI Caribe plant. **RIGHT** Supplies being delivered to MAPEI employees in Puerto Rico.





food and water, toys, baby formula, flashlights, extension cords, reusable ice blocks, batteries, oscillating industrial fans and building materials like plywood, screws and nails. The other container was stocked with additional food, water, batteries, and baby products. Each container held upwards of 45,000 lbs. (20,412 kg) of necessities, including huge quantities of mosquito and insect repellent. Following the storm, the average temperature was 84°F (29°C) with 80% relative humidity, and the heat coupled with standing water from the heavy rains created a rapid breeding ground for mosquitos. These provisions helped to restore basic needs.

In response to the overwhelming physical damage and economic situation, MAPEI Corporation established a relief fund to help residents repair their homes and rebuild their lives. The MAPEI Family Relief Fund was open to internal employees and the public via social media links. The people from the Brampton, Ontario, plant held a bake sale and donated the money earned to the fund. Each donation was matched dollar-per-dollar by MAPEI. With selfless donations from our customers and employees from around the world, MAPEI raised \$28,000 in total. Seven employees received a varied sum based on the extent of recovery needs; funds were also disbursed to the Boys and Girls Club of Puerto Rico. All the funds were delivered in December, in time for Christmas.

## MAPEI Operations and Customer Service to the rescue

To ensure maximum safety for our employees, MAPEI management in Puerto Rico asked employees to remain at their homes after the storm to avoid flooded streets and storm debris. "As a customer service representative, getting the job done was very challenging – we had no communication, no electricity, no water and no food," said Marisol Velez, MAPEI's Customer Service representative in MAPEI Caribe. In a meeting with all employees, she humbly offered her home as a temporary office facility and her cell phone as a way to contact customers and sales reps. As conditions improved, MAPEI provided service from various sites including the Dorado plant and the Cataño warehouse due to difficulties with communications.

Managing customer orders, a predominately electronic process, came with many challenges. Sales representatives physically

brought customer orders for entry. Having no printer meant handwriting bar codes and physically storing orders. Document control is crucial in these difficult times. Later, the IT Department installed a printer and set up a satellite cell phone to allow the team to continue servicing our clients. Our colleagues and friends in Puerto Rico have been strong and steadfast in helping MAPEI to resume normal operations after a major disaster.

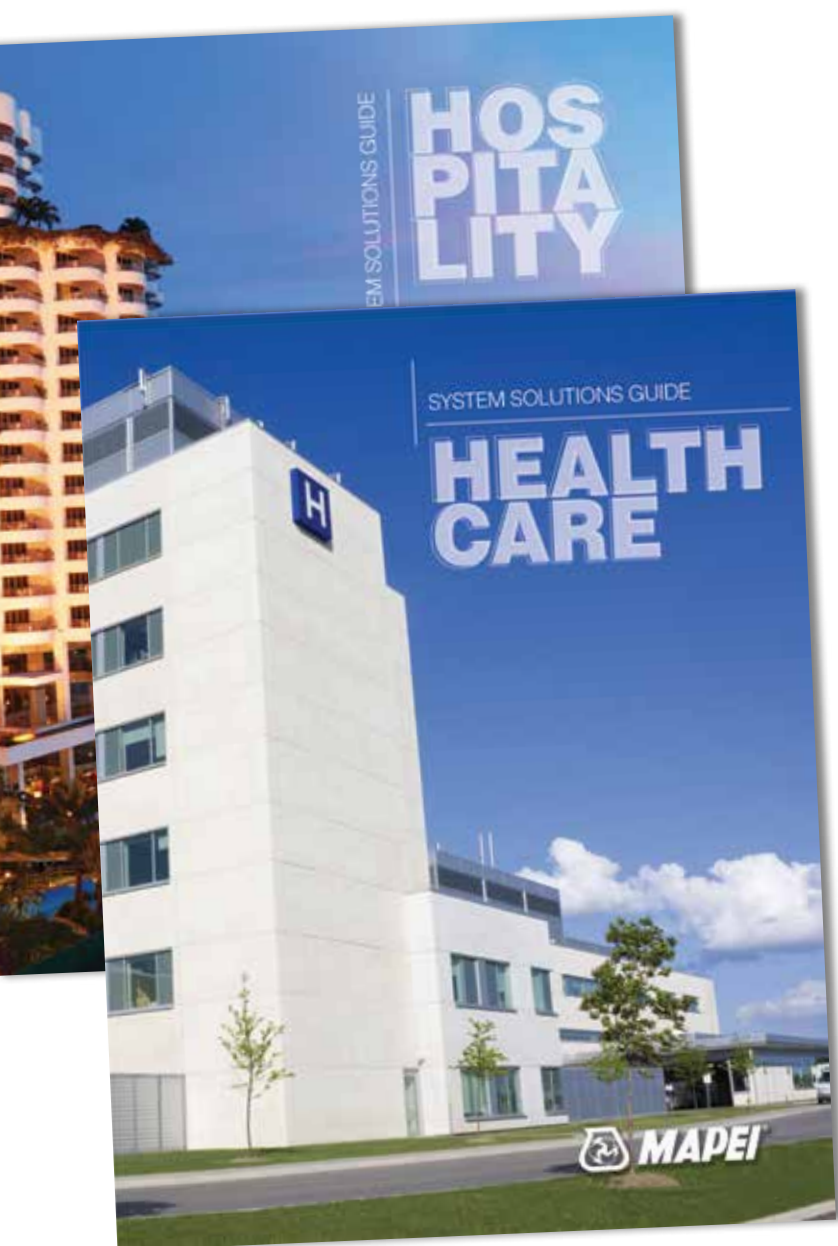
The hurricane season brought many storms: Hurricane Harvey devastated parts of Texas, and Hurricane Irma pummeled parts of Florida. The MAPEI Activity Committee (MAC) conducted a raffle fundraiser to help support the efforts of those affected by both storms. The fundraiser was a corporate headquarters and plant-wide initiative. MAC raffled off backpacks full of MAPEI-branded gear, such as phone chargers and wearables. The raffle raised \$6,000 and, with the MAPEI match, the grand total was \$12,000. The funds were then evenly distributed between the Houston Food Bank in Texas and Feeding South Florida in Florida.

The storms of 2017 were devastating, and the effects they left behind are still being felt today. When storms are strong, MAPEI as a company strives to be stronger. We sincerely thank everyone for their generosity in donating to the relief fund for Puerto Rico and for supporting the fundraiser to benefit Texas and Florida.



# SOLUTION BROCHURES FOR HOSPITALITY AND HEALTHCARE PROJECTS

When architects and contractors are determining their needs for a project design, the opportunity to specify a single-source system of products increases the probability that all the products will work seamlessly together. With the use of a single-source system, contractors are also frequently able to offer their clients better warranties. MAPEI offers project solution brochures specifically developed to assist planners in the hospitality and healthcare fields by providing visual examples of the single-source systems.



## Solutions for hospitality settings

Hospitality settings are where design professionals can really showcase their talent. Bold color choices, mixes of traditional and contemporary elements, and multiple finishes can turn a functional space into a showplace. At the same time, hospitality settings can cause challenges for architects who are tasked with making it all work together.

MAPEI's installation products can help turn your vision into a reality, and our experience with complicated installations and out-of-the-box challenges can be the difference between a job well done and a recurring headache. Our single-source systems, featuring products from waterproofing and concrete restoration to surface installations and flooring finishes, give you peace of mind in utilizing one vendor from start to finish, with proven system solutions to real-world challenges.

## Solutions for healthcare settings

Gone are the dreary green halls of the past. Today's healthcare facilities rival hotels and resorts, because a healthy and beautiful environment contributes to healing. In all areas of hospitals, surfaces must be strong, resistant and durable. MAPEI's high-performance levelers and adhesives ensure that the floors are up to the task.

At the same time, surfaces must be easy to clean and maintain, particularly in clean rooms like laboratories and surgical rooms. Installation materials must always be chosen according to the type of floor or wall covering material to be installed, and the floor or wall covering itself must be suitable for its intended use. MAPEI has always been at the forefront in developing products and system solutions that meet the installation requirements of specific healthcare facilities. We also offer concrete finishes that can be polished, colorful (and durable) coatings for building exteriors, and a beautiful array of grout choices for tile installations. The next two pages provide a sample from each brochure.



# INTERIOR

## LOBBY

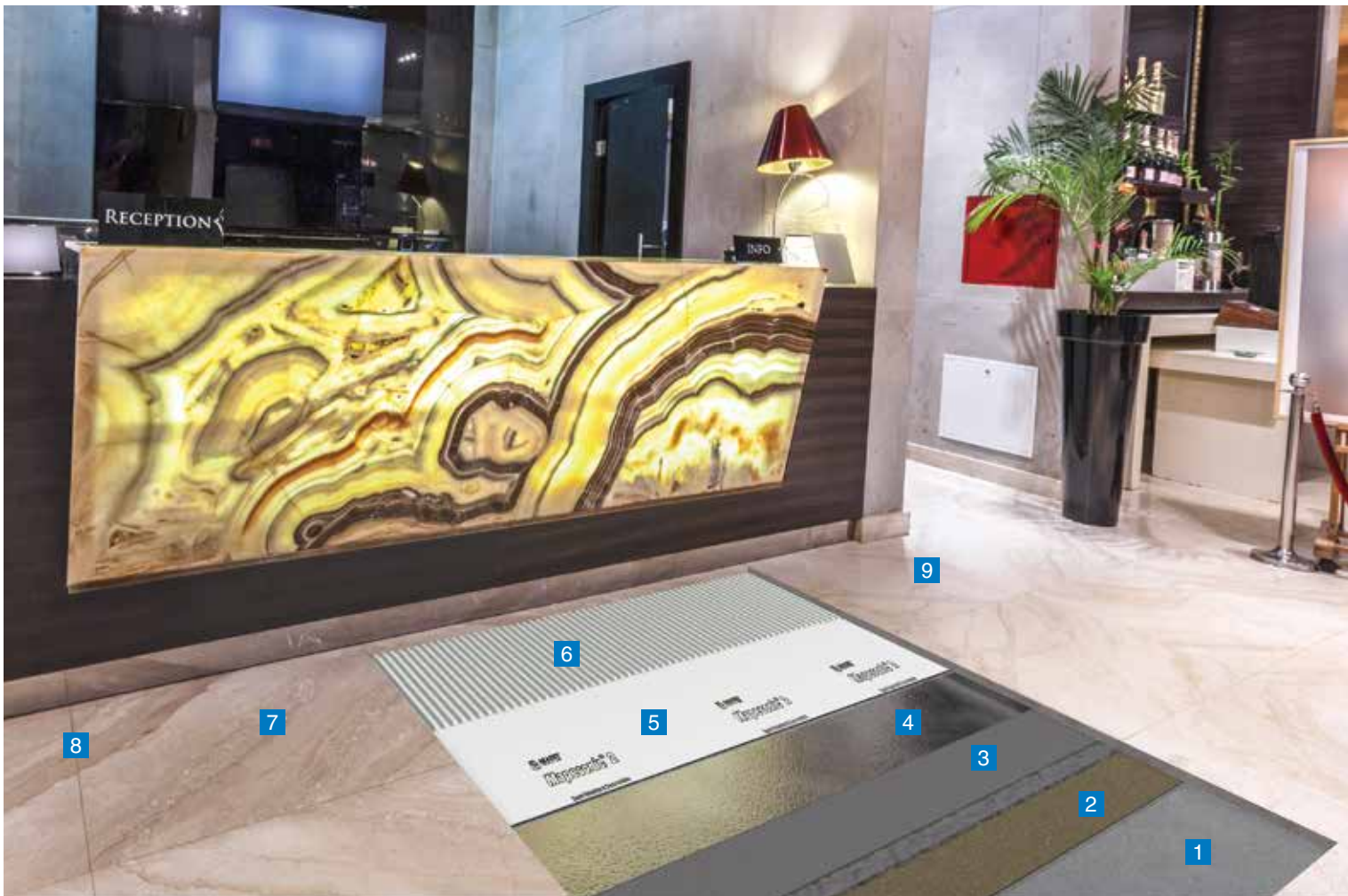
CERAMIC OR  
STONE TILE

A well-designed lobby should welcome not just the customer but also their suitcases, luggage carts and other rolling loads. Often, durable tile or stone is specified for lobbies, and the setting materials need to be just as rugged. Depending on the level of the lobby, noise control may also be a concern. Rest assured, MAPEI has products to mute the noise, handle the load and look great while doing it.

**Issues:** High traffic, pivot areas, traffic patterns

**Solutions:** Suitable tile and stone provide durable long-lasting finishes

- 1 Concrete
- 2 Cleavage membrane
- 3 **Modified Mortar Bed** – reinforced
- 4 **MAPEI SM Primer™**
- 5 **Mapesonic™ 2**
- 6 **Ultraflex™ LFT™**
- 7 Ceramic tile or stone
- 8 **MAPEI Flexcolor™ CQ** or **UltraColor® Plus FA**
- 9 **UltraCare™** Penetrating Plus SB Stone & Porcelain Tile Sealer; Penetrating SB Stone, Tile & Grout Sealer; or Penetrating Plus Stone, Tile & Grout Sealer



# INTERIOR

## SURGICAL ROOM/ LABORATORY

HOMOGENOUS  
SHEET VINYL

Cleanrooms are some of the most demanding applications for finishes and adhesives. Dust, VOCs and biological contaminants cannot be tolerated in these settings. MAPEI products are designed to work with the finishes of choice for cleanroom applications. Impact and rolling loads also must be addressed from the substrate up. Use this project solution for operating rooms, isolation patient rooms, testing rooms, laboratories (microbiology/epidemiology), computer rooms, bio technology rooms, life science rooms or other areas that are sensitive to environmental contamination.

**Issue:** Rolling loads

**Solution:** High-quality adhesive designed for rolling loads

- 1 Concrete
- 2 *Primer T™*
- 3 *Ultraplan® LSC*
- 4 *Ultrabond ECO® 360*
- 5 Sheet vinyl







# EXHIBITION OPENS A DIALOG ABOUT HOUSING DESIGN

As times change, opinions and attitudes change to accommodate new paradigms. Attitudes toward housing are changing as family dynamics have altered over the past 50 years, and there are numerous opinions about how to address new lifestyles. The National Building Museum (NBM), generously supported by the American Association of Retired Persons (AARP) Foundation, has opened a dialog between architects, designers, engineers, building contractors, developers and the general public regarding the best way to design residences for the future.

The focal point of this discussion has been centered on an exhibition at the NBM's headquarters in Washington, D.C., titled "Making Room: Housing for a Changing America." The exhibition will run through September 16, 2018. MAPEI was proud to have played a part by supplying tile installation materials for the main feature of the exhibition, the "Open House." Organized with the Citizens Housing & Planning Council of New York City

and presented in partnership with Resource Furniture and Clei srl, the NBM is using the "Open House" to "showcase design solutions for meeting the evolving 21st-century needs of America's diverse households."

Colorful, interactive information stations invite visitors into the exhibits. For example, the mid-20th-century nuclear family – consisting of a husband, wife, and two to three children – represented 43% of American households in 1950. Today, such a nuclear family accounts for only 20% of households, while 30% of households are composed of single adults living alone. According to the NBM:

Supply ... has been slow to meet the demands of this burgeoning market – or to respond to the needs of our increasingly varied mix of living arrangements: from roommates to single-parent, extended, and fluid families.



Innovation has been constrained, often by deeply-rooted zoning regulations.

A groundswell of action by housing entrepreneurs, however, is beginning to expand our options – making room for new models and design solutions. Looking beyond typical choices and layouts, they are offering alternatives at all levels of the market, from micro-units, tiny houses, and accessory apartments to co-housing, co-living, and beyond.



Chairman of the Board of Trustees for NBM, James G. Davis, with Diane Choate of MAPEI



As visitors progress through the exhibits, they reach the “Open House,” a 1,000-square-foot (92,9-m<sup>2</sup>) home, designed and constructed partially offsite and assembled in place on the second floor of the museum. The layout is movable, and three different living scenarios will be displayed in the house over the course of the exhibition’s nine-month run. Designed by architect Pierluigi Colombo, art director of the Italian furniture manufacturer Clei srl, the house has movable walls to allow for as much privacy or communal living as desired by the home’s residents. Multi-functional furniture plus closets and storage areas that maximize space were contributed to the “Open House” by Resource Furniture and Clei.

### Tiny houses for the homeless

One area of great interest in the housing design dialog is providing for America’s homeless in a more permanent way. One solution proposed by designers is the “tiny house” format, which is addressed in some of the interactive exhibits at the NBM. This solution has been implemented quite successfully in Austin, Texas, where a community of tiny houses and RVs has been established by volunteers. The community currently serves 200 formerly homeless people, and plans are underway to create homes for as many as 350 people.



The two bathrooms featured in the “Open House” were installed with functionality and space in mind. MAPEI supplied the mortar (**Ultraflex™ 3**) and the grout (**Keracolor® U**) used to install the wall tiles and the showers in the bathrooms. Tiles were donated by Caesar Ceramiche, Ceramiche Vogue, Ergon, Gruppo Romani and Tagina, members of Confindustria Ceramica (The Italian Association of Ceramics).

MAPEI was involved this past year at Coverings 2017, where the Installation Design Showcase featured three tiny houses. MAPEI supplied installation and waterproofing materials for the tile that was showcased throughout one of the homes, including floors, walls, showers and kitchen backsplashes. (See details and photos of the project in *Realtà MAPEI Americas*, Issue 25.)

### The National Building Museum exhibition makes an impact



A pre-opening event for the “Open House” and the entire exhibition took place at the National Building Museum in November 2017. Suppliers who contributed to the exhibit were invited to view the results of their donations. Lisa Marsh Ryerson, President of the AARP Foundation, and James G. Davis, the Chair of the Board of Trustees for the NBM, spoke to guests about the importance of designing for the future of housing and how the exhibit could help initiate discussions with architects, builders and government agencies.

The NBM has taken an impactful step to move residential design forward with the “Making Room” exhibition. MAPEI supports the dialogs that are resulting from this meaningful effort, and we will be there with wall- and floor-covering installation solutions that are durable and sustainable for the new designs of tomorrow.



# AN ISLAND BEAUTY

Created with the  
help of MAPEI



Anaha residences at Ward Village  
– Honolulu, Hawaii, USA



**Overview:** MAPEI products for carpet, wood, resilient, tile and stone installations were used throughout the Anaha residential complex in Honolulu. Installers also used MAPEI products for moisture mitigation, substrate leveling, surface preparation and waterproofing.

Anaha (which means “reflection of light” in Hawaiian) is a magnificent new condominium complex on the Hawaiian island of Oahu. Made of concrete, glass and steel, it is part of the Ward Village master-planned community near Kewalo Harbor in Honolulu. This new luxury high-rise was planned by Howard Hughes Corporation and designed by architects Solomon Cordwell Buenz of Chicago and Benjamin Woo Architects of Honolulu. The interiors were designed by global design leader Woods Bagot Interiors.

The complex is composed of the Anaha Tower, housing eight residences per floor plus penthouses on Levels 36-38, as well as the Podium townhouses and flats, which occupy the first six floors and extend from the tower. The roof of the Podium (adjacent to the seventh floor of the tower) hosts an amazing selection of indoor and outdoor activity areas, including a cantilevered pool that extends 13 feet (3,96 m) beyond the building’s edge and features a glass bottom.

The LEED Platinum building was designed with the environment in mind – harmonizing with sea, sky and mountains. The exterior of the entrance area sports a “living wall” of plants, as well as water elements framed with lava stone veneer that surround tile walkways forming the signature “W” for Ward Village. The interior of Anaha is just as awe-inspiring, with floor-to-ceiling windows that open every residence to views of the Pacific Ocean or the Honolulu skyline. Some expanses even look out toward the historic Diamond Head landmark.

Floor and wall coverings received all manner of treatments, including stone and stone veneer in public areas indoors and out; carpet, wood and tile in living spaces; stone and tile in bathrooms of the residences; and resilient floor coverings in service areas.

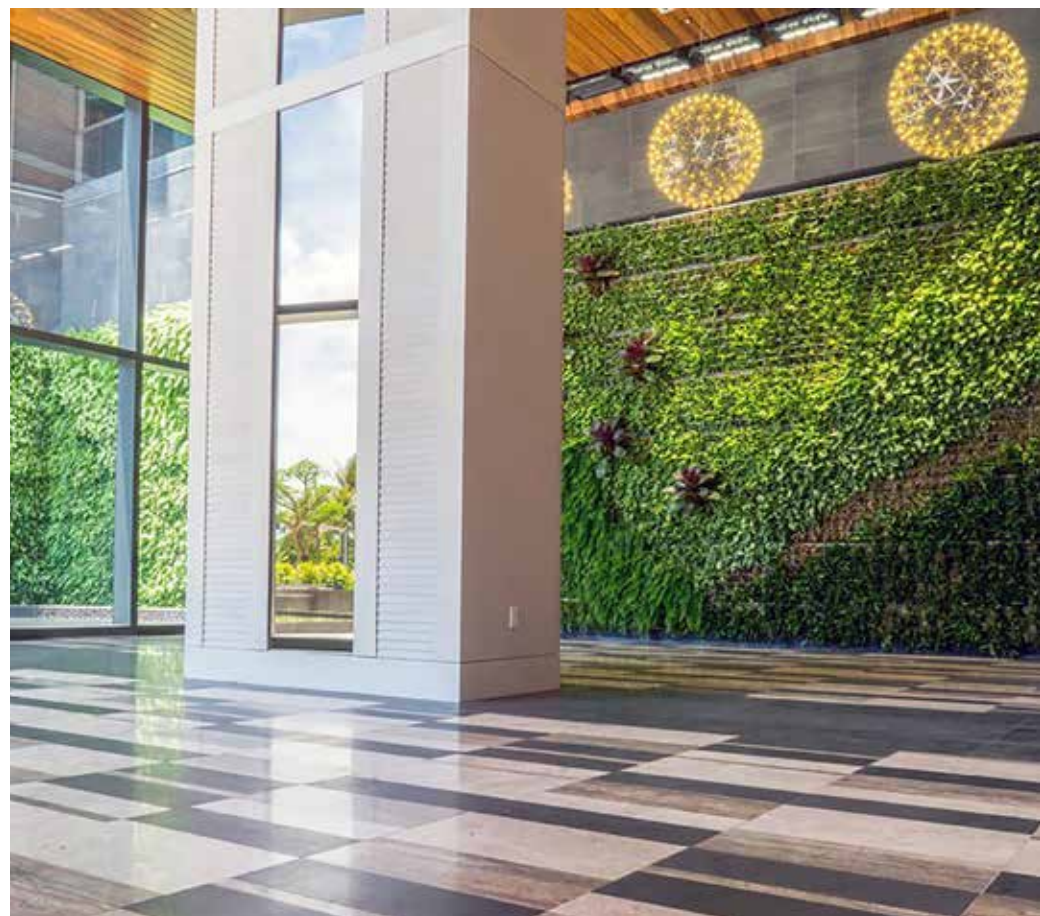
Installers from the Hawaiian branch of A-American Custom Flooring, Inc. (a member of the Tile Contractors Association of Hawaii) were in charge of all aspects of the tile installations for interior and exterior walls, floors and specialty elements – with the exception of the interior tile walls of

the pool on the amenities deck. They also handled moisture mitigation work and installation of wood, carpet and resilient floor coverings. A-American worked closely with General Contractor Albert C. Kobayashi, Inc., to complete all the aspects of the installations on schedule, including the mega-challenge of zero tolerance in transitions between flooring types.

Anaha’s 236-unit residence tower and 81 townhomes and flats were architecturally designed with a zero tolerance scheme for all finishes in the flooring landscape of the building. From interior to exterior, zero-tolerance requirements meant that all transitions could hold no change in height from tile to wood to carpet to resilients, in order to respect accessibility for disabled persons according to the Americans with Disabilities Act (ADA).

This zero tolerance created building and flooring challenges that were met by a wide variety of MAPEI’s concrete repair and flooring installation systems for construction, surface preparation and floor-covering solutions. The fast-track schedule of the 38-story tower and the six-story podium required coordination and solutions for arising jobsite problems involving moisture mitigation and slab deformation involving post-tension concrete pours.

» Anaha (which means “reflection of light” in Hawaiian) is a magnificent new condominium complex on the Hawaiian island of Oahu.







A-American used MAPEI's **Planiseal® VS** alkali-resistant, epoxy moisture-reduction barrier for moisture mitigation throughout the complex. *Planiseal VS* expedites floor-covering installations by eliminating the traditional wait time required for new concrete slabs to reach moisture levels suitable for installations. After the concrete surface was properly profiled, *Planiseal VS* was poured to cover each level in the building.

After moisture mitigation, the floors were primed with one of three MAPEI primers – **Primer L™**, **Primer T™** or **ECO Prim Grip™** – where appropriate. The installers then used **Novoplan® 1**, as well as **Novoplan 2 Plus** and **Ultraplan® 1 Plus**, in appropriate areas in order to produce a smooth, level surface for installing tiles and stone. Both *Novoplan 2 Plus* and *Ultraplan 1 Plus* are quick-setting, self-leveling underlayments and repair mixes for interior concrete and engineer-approved floors.

MAPEI's **Mapelastic®** cementitious membrane was used for waterproofing and protecting exterior horizontal and vertical concrete spaces. **Mapelastic AquaDefense**, an advanced liquid-rubber, extremely quick-drying waterproofing and

crack-isolation membrane, was used with **Reinforcing Fabric** on interior surfaces before the tile and stone installations. *Mapelastic AquaDefense* dries after about 30 to 50 minutes and is then ready to receive any MAPEI polymer or epoxy mortar.

Installation of exterior and interior tile and stone also used a variety of MAPEI's mortars and grouts. For the ultimate bond, Lava Stone Veneer pavers and curbs surrounding the building were installed with MAPEI's two-part **Kerabond/Keralastic™** system – a premium dry-set mortar that is combined with a flexible acrylic latex additive. Where there was a need for speed, the A-American crews used the **Granirapid®** fast-curing mortar system. Outdoor walls and benches that used Lava Stone Veneer and Cremino Stone Veneer in all sizes from mosaics to large-format tile were also installed with these two systems. All of these installations were grouted with MAPEI's powerful **Ultracolor® Plus FA** – an ultra premium, fine-aggregate, fast-setting, polymer-modified, color-consistent, nonshrinking, efflorescence-free grout that can fill joint widths from 1/16" to 3/4" (1,5 to 19 mm).

In the residences and townhouses, tile and stone played a dramatic role as field tile and accents on floors and walls. Types and brands included Caesarstone for countertops; Atlas Concorde floor tile in Seastone Greige and floor, wall and door accent tiles in black for residences and public areas; Marmi porcelain wall tile in "Thassos;" Natural Stone Design's porcelain floor and wall tile in Dark and Basaltina, plus mosaic tiles of the same material for residences and public spaces; Daltile's quarry tile in Arid Gray for laundry rooms in residences; "Luce Glass" glass wall tile from North Shore for public restrooms; Anne Sacks' 2" x 8" (5 x 20 cm) "INCA" brushed aluminum tiles for kitchen backsplashes; stone tiles in travertine, basalt, tundra stone and granite; "Nublado Light" and "Walnut Brown" wall-base tiles from Stone Source; and many additional tile and stone selections that were optional for residents at the time of purchase.

All interior tile and stone was installed with MAPEI's thixotropic mortar **Ultraflex™ LFT™**. This mortar has a high content of unique dry polymer, resulting in excellent adhesion to the substrate and tile, and is formulated with Easy Glide Technology™ for ease of application. Wall and floor tiles

were grouted with **Keracolor® S** (sanded) and **Keracolor U** (unsanded) grouts from MAPEI's grout color collections. The quarry tiles in laundry rooms in the residences and in the kitchen and prep rooms on the Amenities level were grouted with **Kerapoxy® CQ**. This grout uses a proprietary aggregate to achieve its durable color, making it excellent for countertops, high-traffic areas, and areas needing stain and chemical resistance. Easy to maintain, **Kerapoxy CQ** will clean to the original color and incorporates BioBlock® technology to help protect against mold and mildew.

The A-American installers performed exceptionally well with the many types of installations in many parts of the project, but they truly excelled in installing the tile on the inside and outside of the cantilevered leisure/lap pool extension on the Amenities level. Working on a crane that lifted them seven stories into the air, the crew set sheets of black glass mosaic tiles on the interior and exterior sides of the glass-bottomed portion of the pool that extends 13 feet (3.96 m) out from the building. They used MAPEI's **Adesilex™ P10** bright white, multipurpose thin-set mortar formulated with nonsag properties to set the tiles. The **Adesilex P10** was mixed with **Keraply®** latex additive for increased performance in a submerged installation. After removal of the protective cover sheets, the tiles were grouted with **Ultracolor Plus FA**.

A total of 40 different products supplied by MAPEI – from substrate preparation to installation of all types of finished flooring – gave peace of mind to the owners, architects, general contractors and installers who sourced all their needs from a single manufacturer to create a true island beauty.

## TECHNICAL DATA

**Anaha at Ward Village** – Honolulu, HI (USA)

**Architects:** Solomon Cordwell Buenz (SCB); Benjamin Woo Architects

**Period of construction:** 2016-2017

**Years of MAPEI involvement:** 2016-2017

**Where MAPEI products were used:** MAPEI products were used for carpet, wood, resilient, tile and stone installations throughout the Anaha residential complex. Installers also used MAPEI products for moisture mitigation, substrate leveling, surface preparation and waterproofing. A total of 40 different MAPEI products were used on the jobsite.

**Client:** Howard Hughes Corporation

**General Contractor:** Albert C. Kobayashi Inc.

**Tile and stone installer:** A-American Custom Flooring, Inc.

**Floor-covering installer:** A-American Custom Flooring, Inc.

**Project manager:** Miles Ikeda

**MAPEI Distributor:** A-American Custom Flooring, Inc.

**MAPEI Coordinator:** Stephen Pazienza

### MAPEI Products

Concrete repairs and patching throughout the project: *Planitop X, Planitop XS, Mapecem Quickpatch*

Moisture barrier where needed for floors: *Planiseal VS, Primer WE* (used in carpeted areas)

Self-leveling on all floors: *ECO Prim Grip, Primer T, Primer L, Novoplan 1, Novoplan 2 Plus, Ultraplan 1 Plus*

Waterproofing in residence bathrooms: *Mapelastic AquaDefense with Reinforcing Fabric*

Waterproofing on exterior walls with positive hydrostatic pressure: *Mapelastic*

Setting tiles on metal stairs: *Planicrete W*

Setting and grouting exterior tiles: *Kerabond/Keralastic, Granirapid system, Ultracolor Plus FA*

Setting and grouting tiles for pool and water elements: *Adesilex P10 with Keraply, Ultracolor Plus FA*

Setting, grouting, sealing and cleanup of interior tiles: *Ultraflex LFT; Ultracolor Plus FA; Kerapoxy CQ; Keracolor S; Keracolor U; Keracaulk S; Keracaulk U; UltraCare Penetrating Plus Stone, Tile & Grout Sealer; UltraCare Cement Grout Haze Remover; UltraCare Epoxy Grout Haze Remover*

Sealing expansion joints and transitions (interior and exterior): *Mapesil T*

Installing carpet, vinyl and rubber flooring: *Ultrabond ECO 185, Ultrabond ECO 810, Ultrabond ECO 360, Ultrabond ECO 711, Ultrabond G21*

Installing and cleanup of wood flooring: *Ultrabond ECO 980, Ultrabond ECO 985, Ultrabond ECO 995, Ultracoat Universal Cleaner*





# FLAT



# FAST



# FINISHED



The **rendering, patching** and **leveling mortar** that speeds and enhances your large-tile installation

## **Planitop® 330 Fast**

### **Quick-Setting, Fiber-Reinforced, Cementitious Rendering Mortar**

- Non-sag/nonslump properties
- Nonshrink formulation
- For interior/exterior wall and floor surfaces
- Can be applied from 1/8" to 1-1/4" (3 mm to 3,2 cm) in a single coat
- Mix with water only
- Smooth, creamy consistency with easy troweling application
- For smoothing and rendering irregular interior and exterior substrates such as cement backer units (CBUs)
- Fast drying allows tile installation in 90 minutes
- Pot life of 20 to 30 minutes

**NEW!**



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ADHESIVES · SEALANTS · CHEMICAL PRODUCTS FOR BUILDING





# THE SECRETS OF SURFACE PREP FOR TILE

There is an old adage that says, “By failing to prepare, you are preparing to fail.” These brilliant words can be echoed by every tile and flooring installer today. We all know that an installation is only as good as its preparation.

I was fortunate to present at The International Surfaces Event (TISE) this year on the subject, “How Flat is Flat – Surface Preparation for Tile Installations.” What impressed me was that the exhibit hall didn’t open for another day, yet these attendees showed up in force to hear and discuss surface preparation for tile.

Our customers are commonly asking us about substrate preparation for floors and walls. Many of these questions are regarding the preparation and installation of large-format tiles and gauged porcelain tile (GPT) panels/slabs. These large-format and GPT tiles can provide ease of maintenance, incredible durability, good impact resistance and a beautiful finish that no wallpaper, FRP panels in a commercial kitchen or other floor finish can achieve. Performing at this level requires a solid foundation, a flat substrate, good mortar coverage and a proper installation to ensure a permanent installation with excellent lifecycle costs.

The flooring industry has dealt with floor patching and leveling for many years. It is a “given” that when you are installing engineered wood, carpet, VCT or sheet vinyl, you will do some floor preparation by using a self-leveler or floor patch and skimming the area. That

has not always been the case in the ceramic or stone tile industry. The practice of “making up a little” with a thin-set mortar was common.

In addition to tiles that seem to get larger and larger, sizes are commonly more rectangular and the edges are often square or rectified. This combination of characteristics can potentially highlight issues like tile lippage on poorly prepared substrates. Lippage is defined in the ANSI A108.02 standard as “... differences in elevation between edges of adjacent tile modules.” Lippage can cause tripping, broken tile edges, and unsightly floor and wall installations. To learn more about lippage and minimizing its effect, see Section 4.3.7 (“Lippage – Guidelines, Explanation and Caution”) of ANSI A108.02.

With gauged porcelain tile, tile has gotten larger and flatter with crisp, sharp square edges. You can’t reduce the effect of irregular wall or floor substrates with tiles as large as 5’3” x 10’6” (1,6 x 3,2 m) and as thin as 1/8” (3 mm) without spending time, materials and money working at it. The tile industry requirements for wall and floor substrate deviation changed a few years ago because it was recognized that traditional tolerances for substrate deviation were not enough.

Today, in the ANSI A108.02 standard, the general requirements for tile installations for both sub-floor surfaces (Section 4.1.4.3.1) and





vertical surfaces (Section 4.1.4.3.2) include the following: “For tiles with all edges shorter than 15" (0.38 m), the maximum allowable variation is no more than 1/4" in 10' (6 mm in 3 m) and no more than 1/16" in 1' (1.6 mm in 0.3 m) from the required plane, when measured from the high points in the surface. For tile with at least one edge 15" (0.38 m) or longer, the maximum allowable variation is no more than 1/8" in 10' (3 mm in 3 m) and no more than 1/16" in 2' (1.6 mm in 0.6 m) from the required plane, when measured from the high points in the surface.”

Tile installers were struggling to get substrates at 1/4" in 10' (6 mm in 3,05 m) before. How can they get 1/8" in 10' (3 mm in 3,05 m)? It requires good surface preparation with products intended for that purpose, such as MAPEI's offering of self-levelers and premium cement-based patching materials.

The volume of tile installed on walls has grown significantly. The large format may have a lot of do with that. In the past, a lot of those wall substrates were floated out with proper renders and mortar beds. There was a real advantage in that because it was mechanically attached, the float coat could be very flat and built out to accommodate the size of the tile. Today, we find that if a mortar bed on a wall is specified, it is frequently “value-engineered” out of the installation and gypsum board (primed and used in dry areas) or cement backer units are installed over metal or wood studs in its place. Large-format and GPT tiles have really highlighted our need for surface-preparation products for walls. Sure, we had some floor patches that could work on a wall, but they were not formulated to work on walls. The ideal wall-patching material would be nonsag and fast-setting with good workability, and it should have the ability to be floated fairly thin but also be built up thick enough to treat some of the big bows between studs that installers had to address in gypsum board walls with GPT tile going on them.

MAPEI's new **Planitop® 330 Fast** addresses those concerns of the installer. This product was suggested to us by customers based on their need; we listened and began development. *Planitop 330 Fast* is fast-setting and fiber-reinforced with an incredibly long stroke on the wall. Its fast-setting characteristics allow the installer to trowel it up on the wall, screed it, shape it and shave it, fine-tuning it on the wall so that tiling can begin as soon as 90 minutes from application. The fiber reinforcement allows it to be easily applied and to be nonsag, ideal for floating out irregularities in a wall. An installer who is used to applying mud on a wall will appreciate the long stroke or

how you can fill a trowel and start applying it at the bottom of the wall and float it all the way up the wall.

One of the great benefits of *Planitop 330 Fast* is that it can be built up as thin as 1/8" (3 mm) and used in those difficult repair areas where it can go as thick as 1-1/4" (3,2 cm). This new patching material can also be used to create ramps and to smooth or level areas. It can be used on the floor, and I expect it to be used a lot for that purpose; but it was conceived, formulated and designed for use on walls. Installers will understand the benefit of a product designed for their needs and formulated to reduce their issues on a jobsite before installing large tile. For example, the prevalent use of thin-set to repair or correct substrates has problems like spot bonding and a buildup so thick that it causes failures because of shrinkage or, even worse, a loss of bond.

In this short article, I have only been able to address leveling and patching irregular wall and floor substrates. There are many other parts to surface preparation, like careful inspection of the original substrate, membranes, moisture testing and concrete surface profiles, to name a few. Installers should be getting paid to prepare the substrate correctly to meet industry substrate tolerances and project specifications. Knowing the industry standards, what is happening on the jobsite before the scheduled start of the tile installation and what it will take to get surfaces properly prepared will help installers provide a successful tile installation that will last for the life cycle the owner expects from the tile finish.



**About the author:**  
James Whitfield

James, FCSI, LEED AP, is the Manager of Technical Services at MAPEI. He is actively involved in the tile industry standards as President of the Materials and Methods Standards Association (MMSA), and a member of the NTCA Technical Committee.

# MAPEI's TALL TALES

"Work and art are linked by passion and never to be separated."

– MAPEI founder Rodolfo Squinzi

So begins a book of short stories about projects of historical significance where MAPEI products played a role. These amusing "tall tales" share a whimsical look at MAPEI from some very funny points of view – from Napoleon to the tiles at the Vatican. In this issue, we take a look at MAPEI's role in the 1976 Olympics.

## Montreal Olympic Games, Canada

# How a Laplander won gold

They've always treated me well here in Montreal, even if I don't look Canadian. I really look more Native American, but I have nothing to do with their history. When I've met some and we looked at each other and then in the mirror, we decided that the scholars who delve into these things are right. It may well be that Native Americans originally came from Lapland, my home.

I'm an expert when it comes to laying building materials. It's all about precision. That's why I got a call from the company contracted to build the track for the athletics events at the 1976 Montreal Olympics. What a thrill... the Big Games!

What races! Four years of gut-wrenching sacrifices and training play out in a matter of seconds or a few minutes. My job is to do things right the first time and fast. Luck had it that MAPEI's **Adesilex G19** made its debut at those Games. It's a two-component adhesive that today is used for athletics and sports rubber flooring throughout the world.

I led the crew that laid the track for two weeks. Day and night, the work went on non-stop. We laid 400 meters of track in grueling shifts. Straightaways, bends, everything had to be perfect. **Adesilex G19** was always there and we counted on it. Opening day finally arrived and I was going off to attend the ceremonies. But that wasn't enough for me. I wanted to see how the track responded to the stress that the runners put on it. I was given the opportunity

by a fellow countryman... sort of... a Finn. We Laplanders are a bit Finnish, also a bit Norwegian, Swedish and Russian. We're a people but not a country. That's why we don't have an Olympic team.

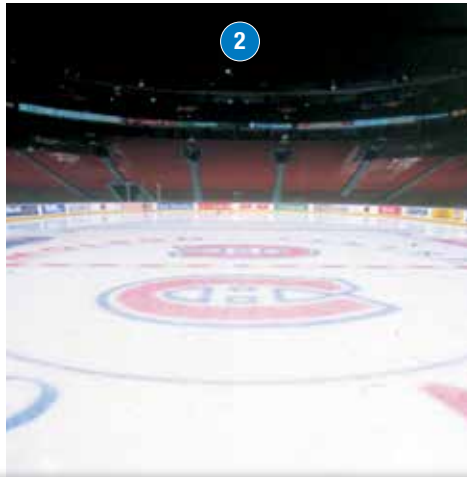
The Finn was Lasse Viren. We'd met one night in a pub. He was very blond and friendly. Viren was also very famous. He had won the gold in the 5,000 and 10,000 meters at the Munich Games in 1972. He wanted to repeat the performance for another "double gold" at Montreal. No one thought it likely.

When I told him I'd built the track, he gave me tickets for both his finals and made a promise. "Tell me where you're seated in the stadium. I'll wave to you if I win. Some of the merit will be yours for building the track." It never got a mention in the sports pages or annals of those Olympics. But, when Lasse Viren grabbed the gold again by winning both races, he glanced up to his right after he crossed the finish line each time. He was trying to catch my eye. Then he looked down, nodding at the track, and bowed towards me – me, the first and only Laplander to win two Olympic gold medals!





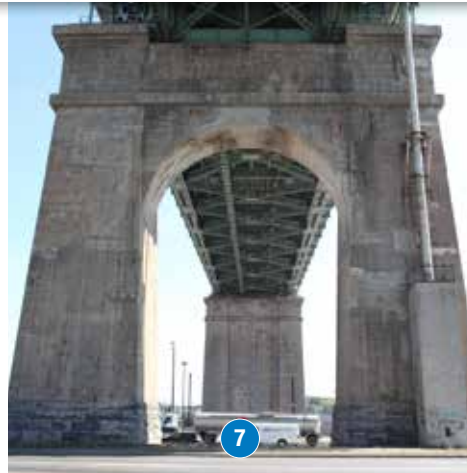
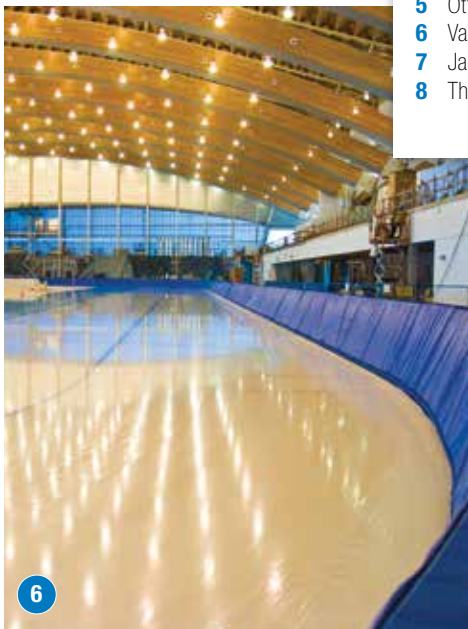
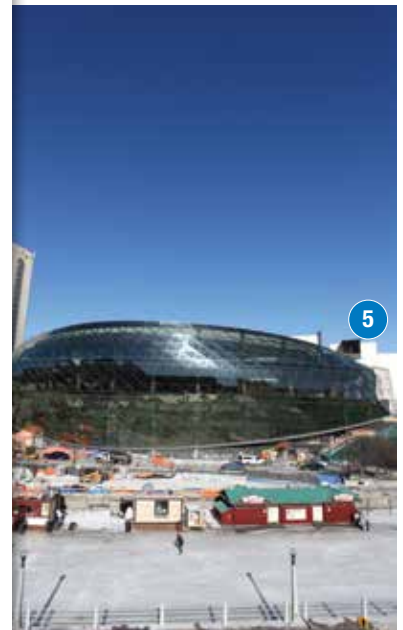
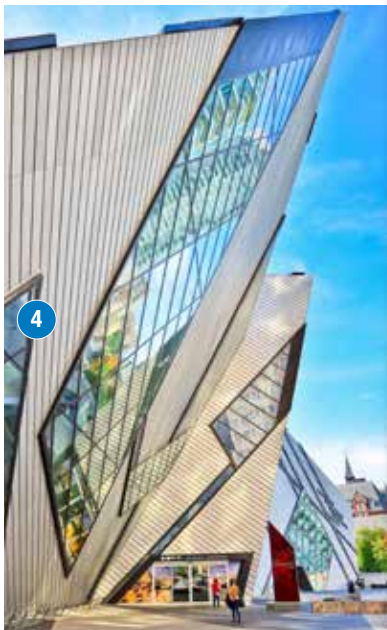




## 40 YEARS OF MAPEI CANADA PROJECTS

Since the first Canadian project that used MAPEI products – the Montreal Olympics of 1976 – MAPEI Inc. has been increasingly busy supplying solutions to contractors and installers across Canada. In this part of the “world of MAPEI,” those projects have included bridges, highways, hotels, malls, museums, nature centers, office buildings, private residences and resorts, just to name a few.

The photographs of the projects you see on this page represent MAPEI’s march of progress across Canada, from Montreal to Vancouver, with stops along the way. To see more of the projects representative of MAPEI in Canada, you can find details at [www.mapei.ca](http://www.mapei.ca) on the “References” page.



- 1 Montreal Olympics – Montreal, QC (1976)
- 2 Bell Centre (formerly known as Molson Centre) – Montreal, QC (1996)
- 3 Aberdeen Centre – Vancouver, BC (2003)
- 4 Royal Ontario Museum – Toronto, ON (2007)
- 5 Ottawa Convention Centre – Ottawa, ON (2009)
- 6 Vancouver Olympics – Vancouver, BC (2010)
- 7 Jacques Cartier Bridge – Montreal, QC (2009-2014)
- 8 The Exchange building – Vancouver, BC (2017)





The **MAPEI Technical Institute (MTI)** provides the highest-quality, basic product knowledge with demonstrations and hands-on training to architects, contractors, installers and distributors in 9 locations: Deerfield Beach (FL), San Bernardino (CA), Garland (TX), Dalton (GA), West Chicago (IL) and Swedesboro (NJ), all in the USA; and Laval (Quebec), Brampton (Ontario) and Delta (British Columbia), all in Canada.



### MTI at home and away

The MAPEI Technical Institute informs and educates in three primary ways:

- MTI hosts official product education events, hands-on workshops that provide specialized training on new products, and techniques for specific applications.
- MTI-TV videos (hosted by Dan Marvin, MAPEI's Director of Technical Services, and Sam Biondo, MAPEI's National Technical Presenter) about cutting-edge products, problem-solving solutions and step-by-step installations.
- MAPEI *Live!* is a trade-show favorite, featuring Sam Biondo and a team of MAPEI sales representatives performing live demos of our latest products inside the booth at national tradeshow events like The International Surfaces Event (TISE) and World of Concrete (WOC).



Not only does the Technical Services Department offer MTI workshops at our operational building, they also participate in lunch-and-learn sessions with internal staff and local customers. The Architectural Solutions portal at [www.mapei.com](http://www.mapei.com) also offers on-demand Web access to MAPEI's AIA-registered courses, giving architects the flexibility to earn continuing education units (CEUs) online at their convenience. Whether it is MTI online, AIA courses or in-person training, you are invited to gain this valuable industry knowledge.

To see the full schedule of upcoming MTI seminars, visit the Careers & Training section at [www.mapei.com](http://www.mapei.com).

For registration information on U.S. seminars, please contact Sophia D'Amico-Campbell at (954) 246-8555.  
For registration information on Canadian seminars, please contact Marie-Christine Mercier at (450) 662-1212.

## MAPEI celebrates its past, gives out presents



Present at the Grand Prize presentation were (from left) Al Ross and Kevin Ishkin of All Tile-Carpet Cushion (MAPEI distributor); Brian Schmidt of Mr. David's Flooring International; and Luigi Di Geso, President and CEO of MAPEI North America

Approximately 30,000 entries were recorded, and winners were drawn by an independent sweepstakes administrator. The prize winners are:

- **Grand Prize Winner** (Side-by-side off-road vehicle)
  - o Brian Schmidt of Mr. David's Flooring International, Ltd. – Itasca, Illinois
- **1<sup>st</sup> Prize** (4-wheel ATV)
  - o Michael Messina of Messina Floor Coverings, LLC – Cleveland, Ohio
- **2<sup>nd</sup> Prize** (Colnago V-1R road bike)
  - o Darya Rheinschmidt of Rheinschmidt Tile and Marble – Burlington, Iowa
- **3<sup>rd</sup> Prize** (DJI Phantom 4 Quadcopter drone)
  - o Greg Hendrickson of EER, Inc. – Pomona, California
  - o Josh Turner of Turner Ceramic Tile – Kansas City, Kansas
  - o Diane Addison of Addison Global Interiors – Portland, Oregon

Luigi Di Geso, President and CEO of MAPEI North America, presented grand prize winner Brian Schmidt with a helmet during a press conference at The International Surfaces Event in Las Vegas, Nevada. "We are very pleased to be the supplier of choice to so many knowledgeable contractors with solid histories of experience and expertise. We congratulate all the winners in the MAPEI 80th Anniversary Giveaway, and we thank all of our customers for their business," Di Geso said.

As 2018 began, MAPEI Corporation closed out its 80th anniversary (1937-2017) celebrations by announcing the winners of its 80th Anniversary Giveaway contest. Themed "Celebrate our past; enjoy our presents," the contest invited contractors in all the industry segments that the company serves to send in their purchase receipts and receive entries for some very sporting prizes. Those prizes included quadcopter drones, a Colnago road bike, a 4-wheel ATV, and the grand prize of a side-by-side off-road vehicle.

## MAPEI supports 'Rise in the City' event

On October 25, MAPEI Director of Operational Marketing, Steven Day, and MAPEI National Architectural Manager, Mike Granatowski, attended the "Rise in the City" event in New York City. "Rise in the City" combined an art competition, exhibit and auction to benefit societal improvements in underserved areas. This year's project will fund a new building for an overcrowded orphanage in Lesotho, Southern Africa.

The competition involved virtually splitting Manhattan into 100 blocks. One hundred companies were then invited to sponsor a block where artists, designers and architects created a work of art representing that block of the city. MAPEI sponsored Block 93, and Grimshaw Architects donated a piece of original artwork by architectural designer Raphael Ogoe, which was exhibited and auctioned at the event.

Ogoe commented on his mixed-media artwork: "This art piece is inspired by the many kids in Africa and most importantly the country of Lesotho. In spite all the hardship and struggles, the children find moments to make fun and create laughter. I want to impress into the viewer's mind this frozen moment of tranquility and joy devoid of all the world's struggles. Hopefully we all contribute in our own way to make every child in the world experience more of these moments."

Raphael Ogoe's mixed-media artwork "Frozen Moment"





## MAPEI joins the U.S. Army in Partnership for Youth Success



Lt. Col. Randall Newman, Battalion Commander of the Army's Miami Recruiting Battalion (left), presents the Army PaYS partnership plaque to Luigi Di Geso, President and CEO of MAPEI North America.

During the MOA signing at MAPEI Corporation's Deerfield Beach headquarters on December 8, 2017, an audience of civilians and military personnel was addressed by Captain Kenneth Bowling, Company Commander of the Deerfield Beach recruiting company; Lieutenant Colonel Randall Newman, Battalion Commander of the Miami Recruiting Battalion; and Di Geso of MAPEI. Newman commented, "The Army PaYS program is one of the most important programs we offer our soldiers. We care about our soldiers and we train them well. I have no doubt that the new partnership with MAPEI will afford qualified veterans the opportunity to work in an amazing corporation and help MAPEI to continue to see success in years to come."

Regarding the Reserve Army soldiers in the PaYS program, Newman said, "In order to be successful, you have to be able to be employed, because you can't make a living on reserve pay [alone]. What's perfect is if you actually work in a profession that coincides with your military service. ... Allowing reserves into your corporation is definitely one of those strategic enablers for the United States Army, because we rely on our Reserves. Just a quick example – I'm a logistics officer, and 70% of the United States Army's logistics capability resides in the Reserve, and that's a huge amount of our capability used to sustain operations overseas. Supporting the Reserve is critical and I appreciate that."

Di Geso praised this program that offers so much to both the soldiers who serve our country and the corporations who employ them. "We here at MAPEI are honored to join this partnership with the Army PaYS program," he said. "Not only do we feel like we're aiding a good cause, we are able to employ soldiers who have gained significant depth of experience in their military roles. When we think of their discipline, training and the way they have been taught about loyalty – these are all traits that we here at MAPEI need and seek."

Through the U.S. Army's Partnership for Youth Success (PaYS) program, MAPEI Corporation is set to access a well-qualified, experienced pool of young men and women for its current and planned job opportunities. As part of a memorandum of agreement (MOA) signed by MAPEI North America President and CEO Luigi Di Geso, MAPEI will enter job opportunities into a database that can be accessed by Regular Army soldiers and Army Reserve soldiers who are part of the PaYS program. When the soldiers select MAPEI as a potential employer, MAPEI has guaranteed them an interview for any available or planned position that matches their career path, especially their military occupational specialty (MOS). ROTC cadets can also become a part of the PaYS program as college seniors and are eligible for interviews after graduating, being commissioned and completing their training, requirements and/or first-term service obligations.

Di Geso continued, "It's not easy in today's workplace to find employees who will join your company and give you the devotion and the strength that a soldier will give. In today's age, where unemployment, thankfully, is quite low, it's also quite difficult for us to find employees like these. By joining with the Army PaYS program, not only do we ensure that we are helping our military, we are ensuring that we are getting good recruits, good people who will meet the challenges that the future will bring."

# TOOLS FOR CONNECTING WITH YOU

Our social media sites keep you on our cutting edge

We can connect to the people around us like never before with just the click of a mouse or the scroll of a thumb. Did you know that more than 2.8 billion users engage in social media in the United States? In the United Kingdom, over 400 million users are online, and in the Asia-Pacific region, users have increased by over 50%. As the digital media landscape becomes more complex and industry trends rapidly change, we invite you to stay current by visiting us online now.

Our commitment to transparency, sustainability, global responsibility and training for professionals extends to our social media pages. Across our social platforms, we post buzzworthy industry news, installation tips, new products for fast-track projects, an inside look at the MAPEI Technical Institute (MTI) trainings, and trade show coverage with special posts via #MediaMonday, #TechTipTuesday, #WhatsNewWednesday, #MAPEICanadaThursday, #FunFriday and #InternationalSaturday.

Most importantly, our social media pages are about more than just “likes” and “shares”; they are vehicles that we use to drive change in the community. By connecting online, we are able to share initiatives to support organizations around the country including Concrete Cares, Gary Sinise Foundation R.I.S.E. program, the National Multiple Sclerosis Society and disaster relief.

After Hurricanes Harvey and Maria swept through the Caribbean, the urgency of social media allowed us to spread the word about the MAPEI Family Relief Fund, which provided assistance in the aftermath of the storm. Thanks to all of the selfless donations made through our social media links, we were able to deliver a surplus of supplies including water, food, basic essentials and monetary assistance for the rebuilding of homes.

Social media is a vital communications initiative for MAPEI, helping us to build stronger relationships around the world. And for MAPEI, the world is very large – which is why almost every country has dedicated social media pages, from MAPEI UK to MAPEI Hellas (Greece) to MAPEI South Africa.

Be sure to engage with us here in the U.S. and Canada by following MAPEIAmericas on social media sites, where you can keep up to date on our latest innovations. You can also stay on top of the industry by subscribing online to the MAPEI Mail newsletter, a monthly e-newsletter with the latest news from MAPEI. To subscribe, visit the MAPEI World section on [www.mapei.com](http://www.mapei.com), where you can also sign up for e-newsletters and/or receive *Realtà MAPEI* magazine by mail. Let's stay connected.



U.S. Army Captain Nick Vogt and his family at the Gary Sinise Foundation “Walls of Honor” event



MAPEI employees in Puerto Rico receiving supplies after Hurricane Maria



Learning a variety of floor repair techniques at NWFA's training at MAPEI headquarters



MAPEI Americas





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Deerfield Beach, FL 33442

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### Technical Services

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1-800-361-9309 (Canada)

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Vietnam

### AFRICA

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South Africa



MAPEI provides solutions for busy Toronto **subway platform**

MAPEI products for substrate preparation, tile setting and grouting were used to renovate the existing subway platform at TTC Union Station in Toronto, and to provide finished surfaces for a new additional platform. This project required some of MAPEI's fast-setting options that met TTC's stringent product specifications, including *Mapecem Quickpatch* concrete patch and *Granirapid* System mortar.

MAPEI products used:

- *Mapecem® Quickpatch* • *Mapecem 202* • *Planibond® EBA* • *4 to 1™ Mud Bed Mix* • *Mapeguard® 2*
- *MAPEI SM Primer™* • *Mapelastic® 315* • *Planicrete® AC* • *Planitop® Basecoat* • *Ultraflex™ 2*
- *Kerabond/Keralastic™ System* • *Granirapid® System* • *Keracolor® S* • *Keracolor U* • *Ultracolor® Plus*
- *Kerapoxy®*



MAPEI Americas

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