

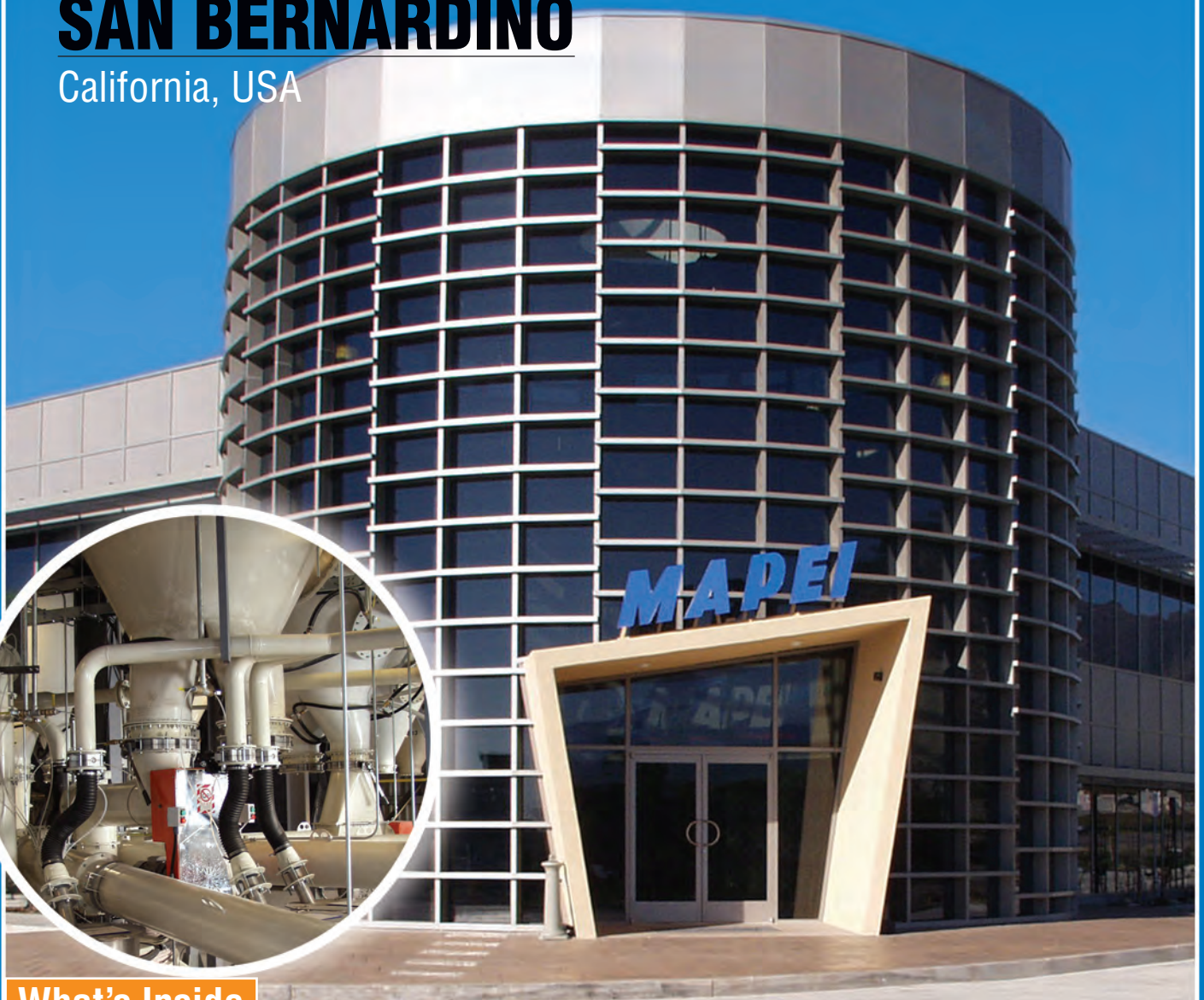
Realtá MAPEI®

Americas

UNVEILING Plant #14

SAN BERNARDINO

California, USA



What's Inside

• Trade Shows 2005 – MAPEI Shines in Las Vegas • Reference Projects – San Diego Airport & Tropicana Resort

ISSUE
01

Americas

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From the Director

Do you have a story to tell about the flooring industry? MAPEI does.

In this issue, we have several stories to tell. We begin with the exciting news of our 14th manufacturing plant in the Americas, and the grand-opening ceremonies we hosted on January 24. Our new San Bernardino plant is the manufacturing facility site we have established in the United States. We also operate from four locations in Canada and three more in the Caribbean and South America. Be sure to “take the tour” of our new plant on pages 4 to 9.

The two major trade shows in MAPEI's business year are Surfaces and the World of Concrete. We have a lot to say about the products we unveiled, which we hope will give our customers a big helping hand. And, as always, we celebrated at Surfaces with the MAPEI customer appreciation party at the Light nightclub at the Bellagio Hotel. Be sure to look for your picture in the photo gallery!

Reference projects allow us to share the stories of our products in action and share our successes with the distributors, contractors, installers and specifiers involved in the projects. This time we take you to San Diego Airport to see the teamwork involved in a beautiful floor renovation. Then we travel further north for a ride on the Calgary light rapid transit “CTrain” and a visit to the Dalhousie transit station. Pack your bags and come along!

We close this issue with a tribute to our MAPEI Americas president. Boys' Towns of Italy, Inc., an American charity in international service to children, named Nick Di Tempora as “2005 Man of the Year.” The charity will be honoring Nick at its 60th Anniversary Diamond Jubilee Celebration in Fort Lauderdale, Florida.

It seems we do have a lot of stories to tell, but we'd like to hear your stories, too. If you have a great project you're working on, let your MAPEI representative know, and we'll work to tell your story in future pages of *Realtá MAPEI Americas!*

Sincerely,

Director of Marketing and Quality Management

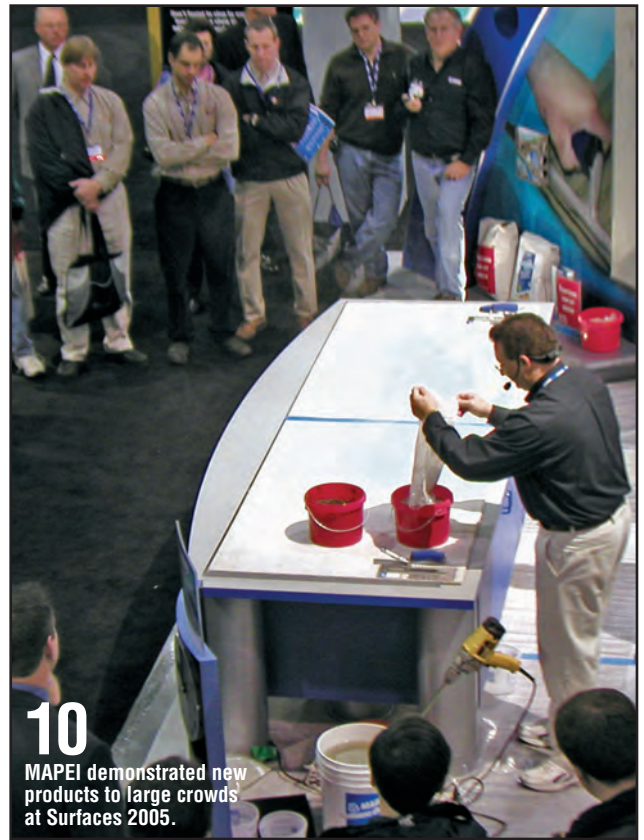
Contents

Features

- 4 14th Plant Makes MAPEI Largest Manufacturer in Industry**
Grand opening of San Bernardino plant
- 10 Vegas Shows Offer Big Payouts**
MAPEI exhibits at Surfaces 2005 and World of Concrete 2005
- 16 Photo Gallery**
Images from MAPEI's post-Surfaces hospitality event

Reference Projects

- 19 MAPEI Follows the Sun at Children's Center**
Floor-covering adhesives and tile-setting products used in day-care center in New Mexico
- 20 New MAPEI Products Bring New Strength to Busy San Diego Airport**
MAPEI develops *Mapecem® Premix "S"* formulation to reinforce mortar bed
- 28 Getting Around Calgary – The Dalhousie Transit Station**
Installers secure safety strip with MAPEI products
- 30 MAPEI Helps Make History at Tropicana Casino**
Ultratop™ serves as concrete canvas for decorative staining



Departments

- IFC From the Director**
- 2 From the President**
- 24 Special Feature: Tempests in Paradise**
How MAPEI weathered the storms
- 25 Technical Talk: Product Evolution**
How environmental issues have changed floor-covering adhesives
- 32 Technical Talk: Efflorescence**
Q & A on grout haze
- 34 Sponsorship: Boys' Towns of Italy**
Children – a cause worthy of our support
- 36 Sponsorship: Library**
Helping the readers of San Bernardino

From the President

WORLDWIDE NUMBERS FOR MAPEI GROUP

Billion dollars (U.S.) in
estimated annual revenues

1

Plants around the world

43

Products (e.g., adhesives, sealants,
chemical products for construction)

800

Employees (with 430 people
working in our 7 R&D centers)

4,000

U.S. tons (11 793 metric tons)
of product manufactured

more than
13,000

Customers around the world

more than
40,000

MAPEI is Growing!

The world of MAPEI is continually growing. MAPEI, as you know, is a worldwide company with facilities in 23 countries around the world. We now have 42 manufacturing plants, and this will increase by another four sites within the next year. The new sites include operations that have already begun in the Southport region of Moscow (Russia), the city of Canton (China), Guadalajara (Spain) and Birmingham (England).

MAPEI Americas is growing, too. We now have 14 manufacturing plants in the Western Hemisphere – four in Canada, 7 in the United States, and 3 in South America and the Caribbean. In addition, we strategically located our Americas headquarters in Deerfield Beach, Florida, in order to best serve all of our plants.

MAPEI's most important commitment is to provide the best possible service to our customer base – not only in the quality of the products, but also in making these products available in the shortest possible time. To achieve this goal, we must have our facilities as close as possible to our customers. Therefore, with the addition of the San Bernardino plant, we feel we can certainly accomplish this, especially for the California market.

I hope you will consider MAPEI products for your flooring installation and concrete restoration needs, and take the opportunity to grow along with us!

Ciao!



Nick Di Tempora
President, MAPEI Americas

AMERICAS



Wherever your project, MAPEI has you covered.

**Introducing Manufacturing Plant #14
SAN BERNARDINO, California**

14th Plant Makes MAPEI Largest Manufacturer in Industry

MAPEI Americas' President
discusses impact on customers



Nick Di Tempora, President of MAPEI Americas, is proud of the new San Bernardino plant.

Nestled at the base of the San Bernardino mountains in California, the 14th manufacturing facility has just opened, making MAPEI the largest manufacturer of tile and floor-covering adhesives in the Americas. There for the grand-opening ceremonies, I had an opportunity to ask Nick Di Tempora, President of MAPEI Americas, about his long-range view on the California expansion and its effects on MAPEI's customers.

Editor: Why did MAPEI decide to build a plant in California?

Di Tempora: The main reason we chose California as the site of our latest expansion was to enable us to better serve the largest single state in terms of potential for tile adhesives sales. Between California

and Florida, these two states represent 40% of all ceramic tile sales in the United States. We expect a 40% increase in sales over the next 18 months as a result of our new plant in San Bernardino.

Secondly, for the past 17 years we had been servicing California customers from our full-stocking warehouse in Anaheim, which was supplied from our plant in Phoenix, Arizona. Due to the quality of the raw materials, 60% of the sand used in the Phoenix plant had to be trucked in from California. Then, 60% of the products produced in Arizona had to be trucked back to California. Ideally, we should have a plant within 300 to 350 miles of our customers. Otherwise, as you can see, shipping becomes a burden.

Editor: Why was San Bernardino



selected as the site for this new manufacturing plant?

Di Tempora: We could possibly still service the San Diego area from the Phoenix plant, but we are better able to serve Los Angeles and the areas north and east of it from our San Bernardino location. We certainly expect the future growth of California to be in that direction. We have discontinued service from our Anaheim warehouse, because from San Bernardino we are well able to provide products to our distributors, who then supply their customers in the Los Angeles area.

Editor: Did raw materials resources and transportation convenience play a role in your choice of San Bernardino?

Di Tempora: Yes, San Bernardino provides a happy medium in both those respects. Our raw materials sources are closer to San Bernardino than to Phoenix; and U.S. Highway 15 runs from San Diego to Utah, which allows us to ship products easily to Las Vegas and even Salt Lake City.

In total, we will serve California, Nevada, Utah, southern Idaho, and parts of Colorado and Wyoming.

The city of San Bernardino has been very flexible in working with us and providing assistance to help us move as quickly as possible to begin manufacturing here. Mayor Judith Valles first met MAPEI through our cycling team four or five years ago. After inviting all the team members to her office to learn more about the men who wore the colorful uniforms of Team MAPEI, her interest was piqued upon learning that we were thinking about building in Southern California. She has been behind our efforts from the very first; and the members of her

Economic Development Council have worked tirelessly with us and with our architect, Rafaele Greco, to bring this project to the point of this grand opening.

“Delivery time for West Coast clients has been cut nearly in half.”

– Nick Di Tempora, President of MAPEI Americas



Editor: What products will you be manufacturing at the San Bernardino plant to ship to these locations?

Di Tempora: At the very beginning

we will manufacture MAPEI's cementitious products, because they are the heaviest products and, therefore, the products most negatively influenced by freight costs. Eventually, we will manufacture all MAPEI product lines at San Bernardino.

Editor: What are your growth plans for the San Bernardino location?

Di Tempora: We have purchased 17 acres of land on this site. The first phase, which we have just completed, covers approximately 120,000 square feet. Within five years we will build a second 100,000 square feet. The final phase, another 100,000 square feet, should be complete within about eight years.

Editor: What other activities besides manufacturing will take place at this plant?

Di Tempora: Within the San Bernardino facility, as in all MAPEI manufacturing plants, we operate a stringent Quality Control laboratory, which checks manufactured products as well as raw materials to ensure that they meet our high quality standards.

At the San Bernardino plant, we have also established a Technical Services training room to provide a meeting place to hold seminars for our distributors and contractors. It has always been MAPEI's philosophy to provide continuous training for the flooring installation trades. We feel this is the only way to keep our industry growing and to deliver the best possible flooring installations.

Editor: How have customers been responding to being served from the San Bernardino plant?

Di Tempora: The feedback has been very positive so far. Customers are delighted that their delivery time has been cut nearly in half! 🚚

Coverage continues on next page



Solid Civic Partnerships Celebrated at Grand Opening

Thinking globally and acting locally is a key tenet of MAPEI's corporate culture. As CEO Dr. Giorgio Squinzi puts it, "We are MAPEI, but in Italy we are Italian, in Canada we are Canadian, in the United States we are American, and in California we are Californian."

This philosophy was aptly reflected in the opening of the company's newest plant. San Bernardino Mayor Judith Valles joined Dr. Squinzi and MAPEI Americas

President Nick Di Tempora in opening the "World of MAPEI" to Southern California with speeches, a ribbon-cutting ceremony and a tour of the plant.

Mayor Valles recalled, "I first learned about MAPEI four or five years ago when the MAPEI cycling team competed in an event here in San Bernardino." The mayor and her Economic Development Council have been strong supporters of MAPEI's efforts to get the new plant up and running as quickly as possible.

The work did not proceed without

challenges, however. At one point, the design had to be substantially changed because the silos had to be shortened and enclosed inside a housing to meet California's tough environmental standards. At the opening, Governor Schwarzenegger sent his representative, District Director Larry Grable, to thank MAPEI for contributing to the economic expansion of the state and for creating new jobs in the San Bernardino area.

The first phase of the plant, which opened in January, employs 32 local



1 Luncheon at the Historic Mission Inn

2 Mayor Judith Valles greets attendees at the grand opening.

3 Historic Mission Inn in Riverside, CA

4 Larry Grable (center), from the governor's office, congratulates Dr. Squinzi (left) and Mr. Di Tempora on the opening of the San Bernardino plant.

5 From left: Marco Squinzi, Simona Giorgetta and Veronica Squinzi at the ribbon-cutting ceremony

6 Mr. Di Tempora stands by the plant's distinctive front entrance.

7 Top photo, opposite page from left: Guido Trussardi, Luciano Trussardi, CEO Giorgio Squinzi, Mayor Judith Valles and Architect Raffael Greco enjoy the tour.



14th Plant

The mayor and her Economic Development Council have been strong supporters of MAPEI's efforts.


residents. More will join the staff with the expansions that are planned in the coming years. Because MAPEI uses local resources whenever possible, the plant has added to the economies of a number of raw materials suppliers in Southern California. Representatives from Apex, Cemex, JR Simplot, Lehigh, White Cement, Oglebay, Norton, Omya and Porter Warner came to the opening ceremony, took the plant tour and joined MAPEI for lunch at the Historic Mission Inn in nearby Riverside, California.

MAPEI powdered adhesives, mortars

and grouts – like those used at the San Diego airport (see article on Page 20) – will be among the first products produced at the San Bernardino plant. West Coast contractors who attended the grand opening agreed that these products, which are formulated for the requirements of their geographic region, will give them faster turnaround time on their projects due to speedier deliveries.

While it is exciting to contribute to the present economy of the area, MAPEI also feels a responsibility to the future of the people of San

Bernardino. Because of MAPEI's strong belief in education, the company made a contribution to the children's department of the San Bernardino Public Library. As he gave the check to head librarian Ophelia Roop, Nick Di Tempora announced that MAPEI will work to develop a continuing relationship with the library throughout the coming years.

"Today, we feel that we have truly become a part of the community of San Bernardino," said Mr. Di Tempora, "and we hope that San Bernardino knows that they are now an important part of the world of MAPEI." 


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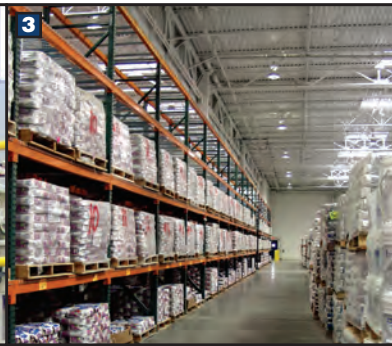


Walking the Production Line

MAPEI vendors, distributors, contractors and other customers joined in the celebration at the San Bernardino plant on January 24. A major attraction was the opportunity to see a manufacturing facility in operation. San Bernardino unit manager Jose Granillo,

to ensure that they meet MAPEI's strict standards. Approved raw materials, such as sand, cement and polymers, are then transferred into the large silos that feed into the mixing and filling equipment. "MAPEI's processes are highly automated, and the mixing is orchestrated from the highly computerized Production Control Room. As

stores MAPEI's line of installation tools and accessories, as well as products manufactured at other sites and transhipped to this location for local delivery. Guests at the grand opening were able to see all facets of production in action. They also got a look at the first two bags of product that came off the assembly line. 



whose career includes operations in the food processing industry, proudly led the way through a spotless plant. In addition to the bag-filling process and the palletizing assembly, guests were most impressed by the 27 silos that house the different raw materials used to produce MAPEI "powders." Mike Moore, MAPEI's Engineering Manager, described the process from raw materials to manufactured product: "Raw materials are received in our Quality Control laboratory each day. There they are tested

each bag is filled, it moves onto a conveyor belt, where it is sealed, weighed, marked and moved to the palletizer. The palletizing equipment stacks a predetermined number of bags to the right height and shape, then bundles them in a plasticized over-wrap. From this point, a forklift moves the pallets to a holding area, where more samples are taken for further Quality Control testing. Approved products are then moved into the warehouse and stored for future shipments." The San Bernardino warehouse also

- 1** Guests tour the plant to see a manufacturing facility in operation.
- 2** MAPEI families also toured the plant.
- 3** After products are manufactured, they are stored in the large warehouse space.
- 4** The first two bags of product manufactured at the San Bernardino plant



Plant's Architecture Reflects the Environment

by Raffaele Greco

It is difficult, but not impossible, to explain how a hierarchy of choice has been decided for an architectural design. Stylistic and aesthetic idioms and guidelines can be adopted to construct a building in a given type of environment, and this project provides a number of examples to draw from.

Due to MAPEI's great architectural awareness in constructing its image around quality building design, we were able to develop this industrial project into an icon that reflects more than the usual construction with high-tech contents wrapped in tilt-up concrete and glass surfaces. The land and the varied climate of southern California presented several opportunities to design the MAPEI San Bernardino plant to reflect the intertwined environment of desert and mountains.

The sand-and-rose colors of the exterior walls make the building appear


to be growing up from the surrounding desert. The fenestrations on the east side recall the peaks of the mountains in the background. The building was designed as an extension of the topography, a technique practiced and taught by Frank Lloyd Wright.

The rotunda looks like a sculpted structure that was rolled down from the mountain beyond and stood on end in the middle of this project overlooking U.S. Highway 215. The architecture is not only a graceful group of facades but also a set of planes that share in the same compact sculptural solid. The interior structural system is made of steel with a system called "through frame." This system keeps the center as one unit under seismic movement, transferring any damages to the outside perimeter of the structure.

In order for the MAPEI plant to be architecturally successful in the community, it needed to present a sense of open space.

To accomplish this, the surrounding landscape is reflected – and, thus artificially duplicated – in the interior as well as on the matrix of glass panels on the exterior of the building. The reflected environmental images in the interior make the occupants more aware of their position in the relationship between the landscape and the architectural space. The design and partition of the glass panels relate the concrete structure to the ground beneath, the sky above and the human scale.

Open space systems are vital for the life of buildings. Permeable building edges, sidewalks and symbiotic open space-building relationships are simple design solutions that enliven the system as well as the site.

I feel that I, as a designer, have a pivotal role in the evolution of complex open space. My vision is to make open spaces a dynamic system for successful buildings and city life. 

Architect Raffaele Greco designed the San Bernardino plant to reflect its desert location surrounded by mountains.

View of plant from Industrial Parkway



View of plant from U.S. Highway 215



Vegas Shows Offer Big Payouts

Gamblers trek to Las Vegas because they want to win the jackpot and go home rich. Trade-show attendees come to Las Vegas to visit Surfaces Expo and the World of Concrete (WOC). MAPEI goes to the shows to present our latest innovations so our customers can return home richer without the gamble! → *Coverage continues on Page 12*





MAPEI focused on demonstrations and highlighted its corporate image at the 2005 Las Vegas trade shows.



MAPEI participated in two large trade shows for the construction industry this January – Surfaces Expo 2005 at the Sands and World of Concrete 2005 at the Las Vegas Convention Center.



Surfaces Expo 2005

MAPEI Shows Off Cutting-Edge Products

Surfaces brings together manufacturers, dealers and distributors of flooring materials and installation products. The customers – contractors, distributors and installers – walk the aisles, viewing the latest examples of tile and stone fabrication, the newest colors and patterns in carpet, and the most recent innovations in hardwood and vinyl flooring. They also look for the most recent technological advances in installation products because they want their projects to run easier, faster and smoother.

MAPEI gave Surfaces attendees exactly what they wanted this year. Marketing and sales personnel brought our customers expertise and insight on new products and complete solutions for a variety of projects. The large BioBlock™ ball fountain in the center of the booth called attention to the fact that MAPEI provides antimicrobial protection in the areas of waterproofing, floor-covering adhesives, grouts, caulks and, now, mortars for tile and stone installations.

Technical Services manager Mike Micalizzi started the ball rolling when he spoke at a press conference about MAPEI's

revolutionary new *Ultralite Mortar*™ with Easy Glide Technology™ and *Ultracolor® Plus* grout with innovative Drop Effect™. Then he and other marketing and sales staff gave live demonstrations of the products at the MAPEI booth throughout the three days of the expo.

Ultralite Mortar

MAPEI's newest multipurpose mortar, due to be released commercially this spring, amazed crowds at Surfaces. *Ultralite Mortar*, pound for pound, covers twice the surface of traditional thin-set mortars. In addition, this lighter-than-light mortar can be used as a thin-bed or medium-bed mortar and in place of mastic on walls. Its fantastic grab allows even heavy stone tiles to be set firmly and dry quickly in vertical applications. Developed with Easy Glide Technology, *Ultralite Mortar* mixes to a creamy consistency and spreads like butter, lightening the workload for installers. Plus, *Ultralite Mortar* incorporates BioBlock™ technology, thus providing a complete tile and stone installation solution with antimicrobial protection.



1 The BioBlock™ fountain serves as a focal point at the MAPEI booth.

2 Pierre Herbert demonstrates new *Ultralite Mortar™* for *Surfaces* attendees.

3 The vertical application of large tiles with *Ultralite Mortar™* wows the audiences at each demonstration.

Ultracolor® Plus Grout

The MAPEI R&D laboratories are constantly working to develop new technologies that improve already great products; and their efforts were underscored with the introduction at *Surfaces* of soon-to-be-released *Ultracolor Plus* grout. Visitors to the MAPEI booth got to see the extraordinary qualities of Drop Effect™ technology, which resists the penetration of water, dirt and grime into the grout joint. During the demonstrations, viewers saw the dramatic difference between *Ultracolor Plus* and regular cementitious grout. This new formulation lessens the damaging effects water could cause to exterior installations and makes cleanup much easier. Drop Effect technology even has some short-term stain-resistance characteristics against spills, causing liquids to bead up on the surface. *Ultracolor Plus* is also formulated with built-in BioBlock™ technology to inhibit the growth of various types of odor- and stain-causing mold, mildew and bacteria.

The World of MAPEI on Display

The wall-to-wall map covering an entire side of the MAPEI booth displayed high-profile projects that highlight MAPEI's global leadership in this industry. A continuously playing video showed MAPEI Americas' product lines and gave an overview of worldwide operations. The video emphasized the company's ongoing commitment to research and development that will lead to constantly improving products and technologies in the years to come. (R&D is a cornerstone of MAPEI's philosophy, with 5% of annual revenues invested in research and 12% of the company's work force employed in this function.) A new corporate brochure for MAPEI Americas and the first issue of the *Realtà MAPEI Americas* magazine supported MAPEI's brand identity. → Coverage continues on next page

COMPLETE SOLUTIONS FOR ANTIMICROBIAL PROTECTION

BioBlock™ technology has been added to select MAPEI grouts, caulks, adhesives and waterproofing products to provide an additional line of product defense by inhibiting the growth of various types of odor- and stain-causing mold, mildew and bacteria. Now built-in antimicrobial protection for these products is available without expensive additives, extra steps or added time. (To obtain the most up-to-date information for preventing mold, mildew and bacteria growth, always consult your federal, state and local environmental and health departments for recommended guidelines.)



These select products contain BioBlock technology:

Tile and Stone Installation Systems

Mapelastic™ HPG waterproofing and crack isolation
Keracaulk™ sanded and unsanded caulks
Keracolor™ sanded and unsanded grouts
Ultralite Mortar™

Floor Covering Installation Systems

Ultrabond ECO™ 350 and 300 universal adhesives
Ultrabond ECO 800 and 200 multipurpose adhesives
Ultrabond ECO 245, 220 and 185 carpet adhesives
Ultrabond® Mach™ 6 carpet adhesive
Ultrabond ECO 290 and 160 vinyl sheet-goods adhesives
Ultrabond ECO 711 vinyl composition tile adhesive
Ultrabond ECO 575 wall-base adhesive
Ultrabond ECO 540 linoleum adhesive

World of Concrete 2005

1 A video display about *Ultratop*™ details MAPEI's self-leveling topping for decorative concrete.

2 CRS specialists give hourly demonstrations on *Planitop*® X to record crowds.

3 Here's how *Planitop X* works:

Before: Whether the damage to concrete is vertical or horizontal, *Planitop X* can be used to make a great repair.

After: Once the repair has dried (cured), it is a light gray color that matches the surrounding original concrete.



MAPEI Concrete Restoration Systems “Cement” a Strong Relationship with Concrete Contractors and Installers

Concrete contractors and installers now know MAPEI Americas better than ever before. World of Concrete 2005 provided an excellent venue for MAPEI marketing staff and salespeople to show off three important areas of concrete where the company is concentrating this year: *Planitop*® repair mortars, *Ultratop*™ decorative concrete toppings and the innovative new *Terratop*™ terrazzo installation system.

Seeing and Touching a Very Strong Product

Many show attendees watched the *Planitop X* demonstrations and signed up for a free sample of the ultimate horizontal, vertical and overhead repair mortar. In an industry where there is always a need for speed, *Planitop X*'s quick drying time made a strong impression. MAPEI's Concrete Restoration Systems (CRS) specialists passed around samples of the prepared mortar for people to feel and even invited viewers to “shave,” or sculpt, the *Planitop X* as it was curing. The pale gray color of the dried mortar matched the surrounding concrete very closely and emphasized that repairs can be almost unnoticeable with *Planitop X*!

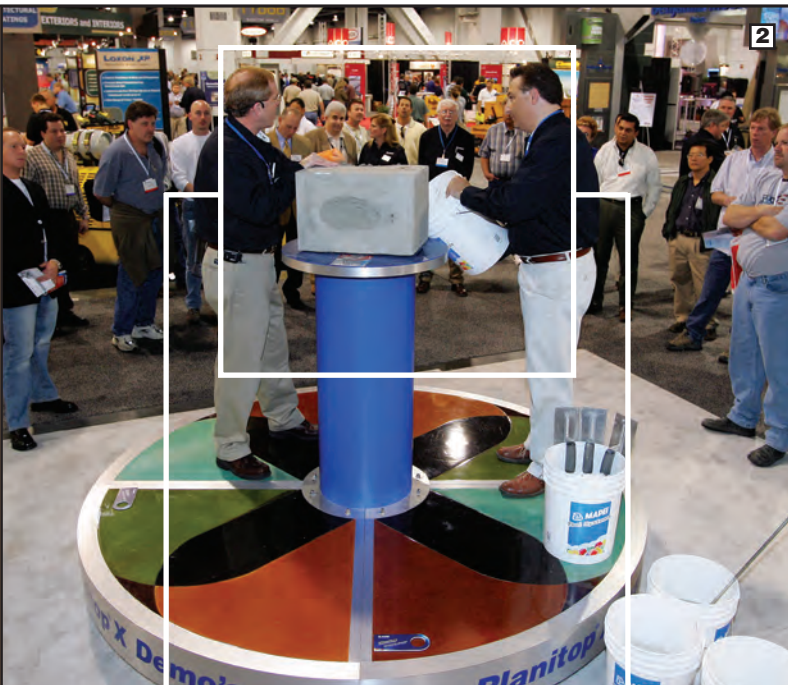
Decorative Concrete Floors Need a Good Base

Ultratop, MAPEI's self-leveling concrete topping, was also a hit with WOC attendees. A beautiful display of acid-stained *Ultratop* formed the base of the *Planitop X* demonstration area, and viewers frequently formed crowds to watch the *Ultratop* video being shown in the trade-show booth.

The number of artisans working in decorative concrete increases every year, and they are continually searching for a reliable “canvas” on which to design their masterpieces. *Ultratop*, especially when used with MAPEI's *Planibond*™ EBA primer, provides just the surface they need.

Terratop – A Brand New Innovation from MAPEI R&D

MAPEI's new *Terratop* terrazzo installation system gathered exceptional interest from WOC attendees. CRS specialist Gary Powell spoke almost nonstop with interested visitors to the booth about this new technology currently being promoted in the northeastern United States. Seamless flooring is enjoying renewed popularity because it is very long-wearing and naturally mold-resistant. MAPEI's new *Terratop* system consists of a primer, binder and grout that allow contractors to install cementitious terrazzo at depths similar to epoxy terrazzo (3/8 of an inch) rather than the traditional



three inches. MAPEI's technology also allows installers to save time and labor by doing most of their work from a standing position. At the World of Concrete, visitors saw *Terratop* displayed in the MAPEI booth and at the International Masonry Institute booth. The IMI is training and certifying craftsmen to properly use the *Terratop* technology, thus enhancing its acceptance in the terrazzo industry.

It was a good show for MAPEI at the World of Concrete 2005, and we hope to return next year with even more interesting products and technology. ♻️

Creative Uses

for *Planitop*® X Repair Mortar



The World of Concrete 2005 trade show offered MAPEI the opportunity to promote the many creative uses for *Planitop X* – a horizontal, vertical and overhead repair mortar that employs MAPEI's Easy Glide Technology™.

This newest member of the *Planitop* family of repair mortars was demonstrated to record crowds each day of the show. Concrete Restoration Systems specialists showed how fast and easy it is to place and sculpt precise repairs, which dry to a light gray color that matches surrounding cured concrete. More than a thousand visitors to the MAPEI booth signed up to receive a free 10-lb. bag of *Planitop X*, so they could get the feel of this Easy Glide Technology product for themselves.

Planitop X was developed as a repair mortar for vertical and overhead repairs as well as horizontal repairs. Initially, contractors used *Planitop X* on columns and overhead surfaces in parking garages. Then, they began to use it for repairing residential foundations after the forms had been removed. Because of *Planitop X*'s great vertical adhesion, one contractor used it as the base for stamping his texture into the vertical surface of stairs. The uses keep on multiplying as *Planitop X* users become more and more creative:

- Foundations
- Step/stair edges
- Filling bugholes
- Tilt-up concrete
- Pre-cast concrete
- Pillars
- Overhead surfaces
- Sills
- Ramps
- Curbs
- Stamp texturing on vertical surfaces of stairs
- Flooring
- Building facades
- Balcony edges

MAPEI hospitality “Lights” the way to an evening of fun at Surfaces

As always, the MAPEI hospitality event was the most popular after-hours happening at the trade show. This year, MAPEI hosted the event at the Light nightclub in the Bellagio Resort and Casino. During the festivities, Director of Marketing Ephraim Senbetta emceed a tribute to platinum-level members of the MAPEI Summit Club, those distributors who annually sell more than one million dollars' worth of MAPEI products. This yearly affair is MAPEI's way of saying “thank you” to all its customers for supporting the company.



1

1 Lisa and Gene Prunty make friends with a Cirque du Soleil character.



2

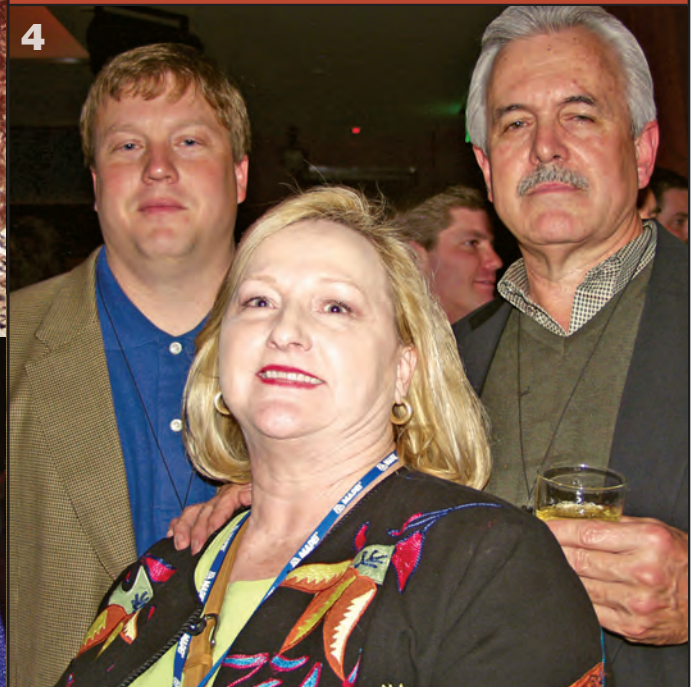
2 Cirque du Soleil performers entertain guests at the Surfaces party.



3

3 Sara and Scott Barry pose with one of the magicians from Cirque du Soleil.

4 MAPEI Regional Sales Manager Paul Hosford (left) with guests Jim and Wanda Reynolds



4



5 MAPEI Americas President Nick Di Tempora (right) and Ephraim Senbetta, Director of Marketing and Quality Management welcome their guests.

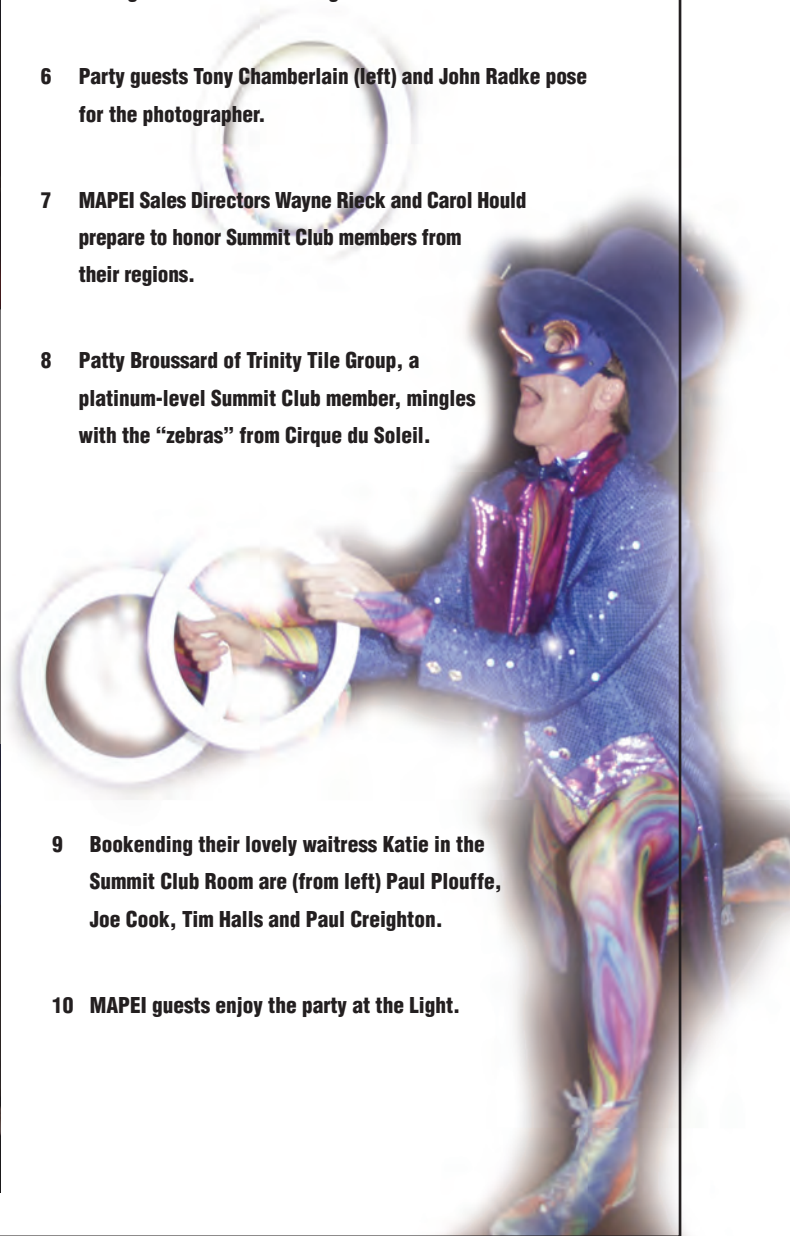
6 Party guests Tony Chamberlain (left) and John Radke pose for the photographer.

7 MAPEI Sales Directors Wayne Rieck and Carol Hould prepare to honor Summit Club members from their regions.

8 Patty Broussard of Trinity Tile Group, a platinum-level Summit Club member, mingles with the “zebras” from Cirque du Soleil.

9 Bookending their lovely waitress Katie in the Summit Club Room are (from left) Paul Plouffe, Joe Cook, Tim Halls and Paul Creighton.

10 MAPEI guests enjoy the party at the Light.



MAPEI Honors Summit Club Members in Las Vegas

Each year at the Surfaces Hospitality Event, MAPEI gives special recognition to the distributors who reach the highest levels of MAPEI product sales for the year. These companies become members of the MAPEI Summit Club. The Club is divided into three levels – silver, gold and platinum – based on annual sales. Some of the Summit Club members have worked with MAPEI since the first plant opened in Canada in 1978.

PLATINUM-LEVEL Summit Club Members \$1,000,000+

Prosol Distributions, Inc.
 Durox Floor Accessories PS, Inc.
 American Marazzi Tile
 Carpet Cushions & Supplies
 Pacific Rim Flooring, Ltd.
 NRF Distributors
 East Coast Tile Imports
 Contempo Ceramic Tile Corp.
 Trinity Tile Group
 Les Importations Ciot
 Brandon Co.
 Morris Tile
 Swift-Train Company
 Big D Floor Covering
 Brolain Distributors, Ltd.
 Mid America Tile Distributors
 Tile International
 Boone Distributors, Inc.
 Shamrock Flooring Accessories, Ltd.
 Dragona Flooring Supplies
 Pro Tile Distributors
 Southland Flooring
 Superior Products
 Hoboken Floors
 Royal Tile Co.
 Desoto Sales
 Xpress Global Systems, Inc.
 Patriot Flooring Supplies
 Wheeler Supply
 Patcor Flooring Access, Ltd.
 Golden Flooring Accessories

GOLD-LEVEL Summit Club Members (\$500,000 – \$1,000,000)

Golden Flooring Accessories, Ltd.
 KLS Acquisition Corp.
 Matco International, LLC
 Tierra Sol, Ltd.
 Coleman Floor Co.
 Pro Floor Supplies, Ltd. (Res)
 Savoia Canada, Inc.
 Northland Construction Supply
 Design Materials
 Walcro, Inc.
 Centura Toronto
 David C. Greenbaum/California
 City Tile, Ltd.
 William M. Bird/Hosford
 Jaeckle Wholesale, Inc.
 U.S. Adhesives
 L. Fishman & Son, Inc.
 CDC Distributors, Inc.
 Gerlinger, Inc.
 Arley Wholesale, Inc. – Scranton
 Azulejos y Ceramica
 Premier Ceramics
 Viking Distributors, Inc.
 Quality Flooring Supply
 Monterrey Tile

Access-Sol A.M., Inc.
 Pro-Line Tile Distributors
 Mountain Trade Supply
 Primco (PWL) Limited (Calgary)
 Les Ceramiques Royal, Ltee
 Ceroquip, Inc.
 BNC
 Midgley & West, Ltd.

SILVER-LEVEL Summit Club Members (\$100,000 – \$499,999)

F.I.S.C., Inc.
 W.J. Grosvenor
 Bestflor Distributors
 Kent Building Supplies
 Pembroke Tile & Stone
 Heuler Tile Company
 Advanced Floor Supplies, Ltd.
 Innovasia, Inc.
 Carpet Products
 Systematic
 Blackton Supply
 De Marco Tile, Inc.
 Ft. Worth Flooring Supply
 George's Cutting Edge
 Fromkin Bros.
 Alcon Technologies, Inc.
 Norman D. Lifton Co. Tile Market of
 Delaware
 Ames Bros. Distributors, Ltd.
 Southeastern Interior Systems
 La Loseta FZ Corp.
 Universal Concrete Acc., Ltd
 Ceramic (Trinidad), Ltd
 E.J. Welch Co., Inc.
 Stanley Stephens
 McKenna's Flooring supplies
 Hudson Flooring Sales, Inc.
 All Pro Materials, Inc.
 Eagle Wholesale Tile Distributors
 Imagination DBA Plum Electric
 Terra Tile & Marble
 Cerimport
 All County Flooring Supply
 Cronin Co.
 Bayard Sales Corporation
 International Stone Design
 W.W. Supply
 Carreaux Ceragres Canada, Ltee
 Rigo Cabrera Tile Warehouse
 Paradise Ceramics, Inc.
 SCP Distributors
 Best Made Products, Inc.
 Graham Dist. Co.
 Exclusive Floor Supply, Inc.
 Carpet Installers Supply
 Floor Seal Technology Inc.
 D & B Tile Distributors
 Tabor Associates
 Laufen Int'l. – Jacksonville
 Rivalda Ceramic Tiles, Inc.
 D'Mundo Tile
 A-American Custom



1

Summit Club Members Enjoying the Party

- MAPEI representative Bruno Boulanger (second from right) and guests (from left) Marc Papillon, Nicole Frappier and Lloyd Cordero enjoy the entertainment at the Light nightclub.
- From left: Keith Sams, Mike Grayson, Eddie Sorrell, Mark Payne and Jim Grass enjoy the party from the Summit Club Room, reserved for MAPEI's top sellers.
- From left: Glenn Boone, Pauline Boone and Bob Boone Sr. – Summit Club members who have attended many of the MAPEI hospitality events – enjoy the night with MAPEI Sales Director Wayne Rieck.



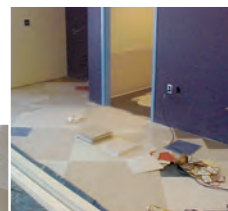
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3

NEW MEXICO

MAPEI Follows the Sun at Children's Center




Above: The mosaic tile medallion



At the exact moment of the summer solstice on June 21, 2004, the sun shone through the skylight in a new "kiva" in Farmington, New Mexico. Where the sun struck the floor, a mosaic tile medallion was installed using MAPEI mortars and grouts.

The placement of the medallion signaled the opening of San Juan Regional Medical Center's new Children's Discovery Place.

To be sure the floor coverings in the day-care center could withstand the tests of time and children, the installers used total solutions from MAPEI. After preparing all the floor surfaces with *Planipatch*[®] patching compound, the workers used environmentally friendly *Ultrabond ECO*[™] 710 to install 7,200 square feet of vinyl composition tile in the classrooms and *Ultrabond ECO* 575 for the wall base. They used *Type 1*[™] mastic to cement the wall tiles and *Ultracontact*[™] mortar for the floor tiles. *Keracolor*[™] S grout in warm gray and the matching *Keracaulk*[™] S caulk filled the spaces between the tiles.

"We've always used MAPEI products and have been very satisfied with them," says James Telford, installation manager for Carpet One Plus. 

Our partners:

MAPEI Distributor: Carpet One Plus of Farmington, New Mexico

Installer/Contractor: Okland Construction

Architect/Designer: ROFDW Architects of Dallas, Texas

Our products:

Planipatch[®] fast-setting, polymer-modified, cement-based patching compound

Ultrabond ECO[™] 710 clear thin-spread adhesive

Ultrabond ECO 575 premium wall-base adhesive

Type 1[™] professional-grade floor and wall tile adhesive

Ultracontact[™] ultra-premium, full-contact mortar

Keracolor[™] S premium-grade, polymer-modified sanded grout

Keracolor[™] U premium-grade, polymer-modified unsanded grout

Keracaulk[™] S premium sanded acrylic caulk



New MAPEI Products Bring New Strength to San Diego Airport

Golden limestone interspersed with granite tiles was installed on the walls and floors of the San Diego Airport concourses. Then, passengers began to move across the floors with their luggage. And that's when the problems began. "Unfortunately, the limestone did not wear well or clean well, and it began to crack," says Bob Bolton of the San Diego Airport Authority. "After nine months of testing different solutions to correct the problem, we reached the conclusion that we could not save the limestone on the floors."

The airport concourses could not be closed for the installation, and dust and debris had to be kept to a minimum.

MAPEI Meets Requirements with Flexible Formulations

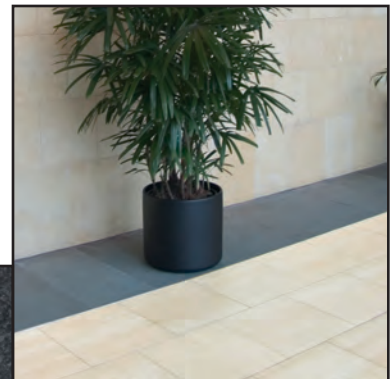
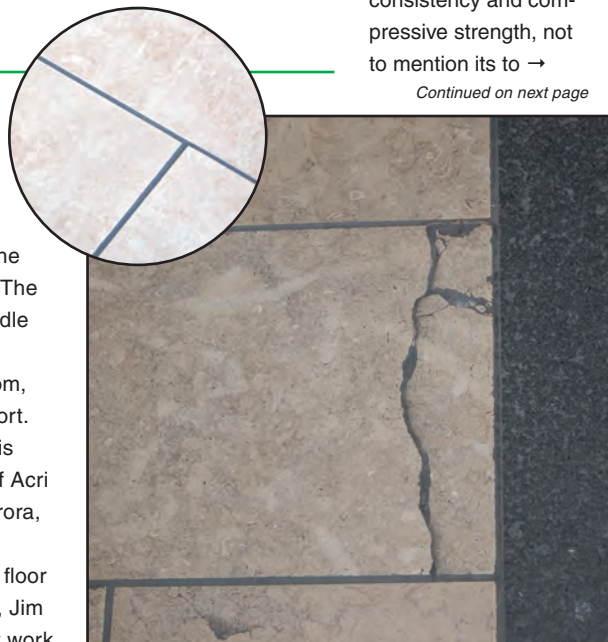
Further investigation showed that the mortar bed beneath the limestone also had problems. The welded wire placed in the middle of the mortar bed for added strength had sunk to the bottom, neutralizing its intended support. At this point, Bob contacted his outside consultant, Jim Aciri of Aciri Stone & Tile Consulting in Aurora, Colorado. Understanding the challenges of replacing entire floor systems in operating facilities, Jim recommended that the airport work

with MAPEI for the best possible solution.

Bob Bolton had certain constraints under which the work could be done. The airport concourses could not be closed for the installation, and dust and debris had to be kept to a minimum. Bolton also knew that it would be difficult, if not impossible, to set new welded wire in the mortar bed because of the limited access and work area that would be available each day, as well as certain security issues. In addition, the work time was limited to 11 p.m. to 5:30 a.m. in order to reduce any effects on travelers passing through the airport.

With these issues in mind, Bolton knew that he would have to use bag-mix mortar rather than ready-mix concrete. He also wanted the bag-mix because of its reliable consistency and compressive strength, not to mention its to →

Continued on next page



Opposite page: The installation has already been completed successfully on the lower level of San Diego Airport.

Above: The new porcelain tile from Ceramiche Caesar closely matches the existing limestone on the walls.

Left: Damage to the original limestone on the floor necessitated the renovation.

REFERENCE PROJECT: SAN DIEGO AIRPORT

the work area. Plus, he needed a rapid-setting installation mortar to fit into the limited working time available each night. Because welded wire support could not be used, Bolton pushed for fiber-reinforced mortar. He requested through Jim Aciri that MAPEI make a custom mix for this project.

MAPEI's R&D Department started by reformulating *Mapecem® Premix* for the mortar bed. The scientists added fibers to the mix, then tested the results in the laboratory and at the installation site to make certain that it would meet the airport authority's requirements and be workable for the installers. The special formulation passed with flying colors.



The *Mapecem Premix "S"* special formulation was so successful that it was recently specified for the New York City School System. *Mapecem Premix "S"* can be special-ordered through your local MAPEI representative.

The next job researchers tackled was to adjust the characteristics of MAPEI's *Granirapid®* – a rapid-setting, yet flexible, latex mortar system – to meet Bolton's stringent requirements for bond strength and compressive strength. Because MAPEI makes its own polymers, it has the ability to adapt proven products to meet the needs of specific projects, as the scientists demonstrated with *Granirapid*.

MAPEI's Technical Services team went to the site numerous times to ensure that the newly formulated products gave a proper installation. MAPEI's distributor, Daltile, ensured that products were shipped regularly and on time as needed for the installation. Bolton said, "The supply line of materials to our job has been uninterrupted, and all quality-assurance field testing on the products went even better than expected!"

Matching the Tiles

The Airport Authority decided to replace only the floor tiles, but they wanted the new, more durable tiles to match the existing limestone on the walls. Looking for good quality, good color and pattern consistency, and a reputable company, they turned to Ceramiche Caesar S.p.A. of Spezzano, Modena. Marco Ferrari, the company's National Sales Manager, said, "It was a big job to make 105,000 square feet of porcelain tile match exactly during production, but we accomplished the task thanks to good teamwork."

Ferrari continued, "Before starting the installation, all lots of our tile were manufactured and approved for specific areas. We produced an 18" x 18" rectified monocottura tile that is three times stronger than marble and even stronger than granite. Each single tile is different, so we matched lots for placement in adjacent areas. For a special fit in some areas of the airport, we did water-jet cutting of the tiles at our plant to pre-cut 18 different shaped field tiles save the installers time at the site." Ceramiche Caesar shipped the tiles in two batches via cargo ship from Livorno to Long Beach. The tiles were then stored in Anaheim, ready for the installers to requisition as needed.

Working with the Best Team

As Cleveland Marble, under the direction of Project Manager Elias N. Ghattas, Foreman Bryan King and his crew began the installation with MAPEI's specially formulated products, things started to look good. Ghattas set up the project in five stages:

Stage 1 – Wet-Saw Cutting

The first group of workers used wet saws to cut the limestone from the floor in 2' x 2' square blocks. The wastewater from the cutting was vacuumed up and discarded of in an environmentally safe manner. (See green box on next page for discussion of ecological wastewater disposal.)

Stage 2 – Removal of Old Materials

A second group of workers lifted out the tile and the mortar bed. (See green box on next page to learn about techniques used to recycle demolished materials.) After removing the old materials, the workers used thick support boards and plywood to keep the floor level for passengers who used the concourses during the day.

Stage 3 – Mortar Bed Placement

The third work group slid a slip-sheet into place and floated the mortar bed. Bob Bolton reported that on a typical night, the group placed 457 square feet of the special *Mapecem Premix "S"*, mixing 181 bags. Ghattas set up five mixing locations around the airport to meet the challenges of working with the cement and sand where aircraft engines were running. An extended forklift was used to raise wheelbarrows of mortar to the second floor of the airport facility. The mortar beds set up so well, workers were able to lay plywood over it to level the walking area.

Stage 4 – Tile Setting

The fourth group consisted of the tile installers, who set the porcelain tile with the customized *Granirapid* System. Ghattas arranged for the

STAGES 1 & 2



STAGE 3



STAGE 4



Environmental Sensitivity Results in Cost Savings

San Diego is a port city on the Southern California coast. Because of their location, the San Diego Airport Authority was very conscious of the waste materials that resulted from their re-tiling project. They used two solid environmental practices to minimize the impact on the local ecology.

Wastewater from the wet-saw cutting was vacuumed up and put into buckets. The buckets were then emptied into shallow dumpsters that had been lined with a heavy plastic and filled with sand and gravel. As the moisture evaporated into the atmosphere, the fines (particulate matter from the wastewater) remained in the dumpster and solidified into a concrete-like material.

The fines, plus the demolished old mortar bed and limestone, were removed to a special dumpsite. There the materials were chipped into pieces and sold as a sub-base for new roadways. In this way, the contractor, Cleveland Marble, was able to recognize a savings on its dumping costs and was able to minimize actual waste.

The city of San Diego was so impressed with the Airport Authority's efforts that they awarded the airport their highest environmental recycling award for the second year in a row.

Granirapid "S" to be mixed inside the terminal. His people used a spare utility room whenever possible, or else set up a plastic shed to contain the dust from the mixing operation. In this stage, approximately 500 square feet of tile were set every night. The *Granirapid "S"* adhesive cured so quickly, Bob Bolton was able to open the area to traffic even before the space had been grouted.

Stage 5 - Grouting and Sealing

The last group of workers filled the 1/8-inch grout joints with a customized formulation of MAPEI's *Ultracolor*® premium grout to provide a rapid cure and prevent efflorescence.

Partnering for Success

Bob Bolton reported that the San Diego Airport Authority was extremely pleased with the work of all the "partners" involved – MAPEI Corporation, Cleveland Marble, Ceramiche Caesar and consultant Jim Acri. "This has been a 15-18 month project," Bolton

said, "and Cleveland Marble has been really great with regards to safety, security and cleanliness on the project." He added, "Everyone involved had to be very flexible, especially over the holidays when increased passenger traffic caused delays and adjustments. Jim Acri met with MAPEI R&D to fine-tune the products, and MAPEI delivered everything on time through their distributor, Daltile. Followup and support from the local MAPEI representatives have been fantastic. Caesar, of course, provided exactly what we wanted with the porcelain tile, which matches the limestone on the wall so closely, it's hard to tell them apart!"

Because MAPEI makes its own polymers, it has the ability to adapt proven products to meet the needs of specific projects.

The project will be completed around April 2005, and the resulting friendships and goodwill that resulted from the teamwork of all the groups involved almost outshine the beauty of the new golden tiles at the San Diego Airport. ♻️

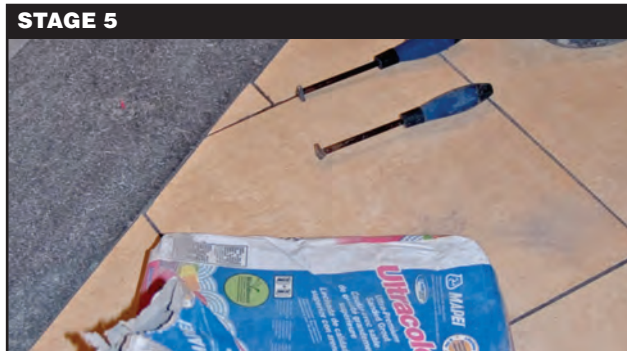


Our partners:

Project Owner: San Diego Airport Authority
Project Manager: Bob Bolton
MAPEI Distributor: Daltile
Installer/Contractor: Cleveland Granite and Marble
Installation Manager: Elias N. Ghattas
Tile Manufacturer: Ceramiche Caesar
Consultant: Acri Consulting of Denver, CO

Our products:

Mapecem® Premix "S" fast-setting, pre-blended mortar mix (special formulation)
Granirapid® "S" premium rapid-setting flexible latex mortar system (special formulation)
Ultracolor® "S" ultra premium sanded grout (special formulation)
Mapelastic SM professional crack-isolation and sound-reduction sheet membrane



Tempests in Paradise

How we weathered the storms

Charley, Frances, Ivan, Jean. Common names for uncommon storms! This past year, four hurricanes tore through the Caribbean and slammed into Florida in a single season. They hit the islands one after another as they all followed westward paths that turned north to rake both coasts of the Sunshine State.

MAPEI employees pulled together at the Fort Lauderdale plant and the Deerfield Beach headquarters to secure the buildings at work. Then they went home to repeat the process for their own buildings and personal possessions.

After the winds and rain delivered their devastating blows and moved on, everyone returned to work to find the buildings still standing strong. MAPEI was able to keep products moving out of the plant and into the supply lines for distributors and retailers to meet the needs of contractors who were busy making repairs.

Once communications were restored after

Hurricane Ivan, news began to trickle in from employees in the Caribbean. The MAPEI plant in Puerto Rico made it through without problems; but MAPEI representative Ray Harris and his family, who live in the Cayman Islands, suffered severe damage to their property. A customer of Ray, the Ritz Carlton Hotel on Grand Cayman, also reported that a major project under construction had taken a disastrous blow.

Company employees pooled their contributions to help out, and MAPEI sent a cargo container loaded with relief supplies for Ray and his neighbors on the next ship headed for the islands. Ray's community began to rebuild almost at once, and so did the Ritz. Several months later, life is getting somewhat back to normal. Tourism is up in Florida and the Caribbean, but the island people still have a lot of work ahead of them before life returns to "another day in paradise." 🌴

Environmental Evolution in Floor Covering Adhesives

“Environmental Evolution in Floor Covering Adhesives” by Craig Dahl originally appeared in the November 2004 issue of Construction Canada (Vol. 46, No. 6). This condensed version was reprinted with permission of Kenilworth Publishing. Visit www.constructioncanada.net.

by Craig Dahl

Our floors – and our methods of keeping them in place – have evolved significantly over the last century to become safer and more environmentally friendly. Floor covering adhesives originally consisted of animal, vegetable and casein glues before asphalt formulations and linoleum paste were developed in the mid-1900s. Solvent-based adhesives were then used until the 1980s, when manufacturers abandoned them because of their flammability hazards.

As part of larger industrial – and indeed, societal – trends, many floor companies have worked to include a green element in the latest generations of floor covering adhesives. While the definition of “green” may differ among individuals, organizations and regulatory agencies, they are all nonetheless working toward minimizing the construction industry’s environmental impact.

Flooring Through the Years

Flooring generally went without adhesives until the mid-20th century – the first commercial carpet installation took place only 40 years ago at the Ford Rotunda in Dearborn, Mich. Around this time, wood flooring technology evolved and asphalt as an adhesive grew in popularity. Unfortunately, other than its low cost and decent holding power, asphalt’s merits were slim – it had to be heated and melted, making it neither practical nor workable. Since the asphalt was hot-mopped onto a substrate, and the wood flooring laid directly into it, cleanup and repairs were extremely difficult.

To make things easier, job-site chemists began adding mineral spirits to the asphalt, producing an adhesive that was easier to apply, and yielded a strong, flexible hold. (Commercial companies eventually began pre-packaging this adhesive to eliminate the need for on-site chemists.) This type of adhesive was used until the introduction of rubber and other synthetic-based adhesives in the 1960s. All performed quite well, but shared one common, problematic characteristic with the asphalt (or “cutback”) adhesive in that they contained dangerous solvents. At the time, however, little was known of the hazardous side effects presented by certain solvents. The only major concern regarded flammability.

Going Solvent-Free

Until recently, adhesives were produced in paste form and remained “wet” until applied to the substrate. They would then transform into a tacky adhesive film as the integral solvent evaporated. The solvent quickly entered the surrounding air as vapor, though, raising local VOC (volatile organic compound) levels. It became a major challenge for adhesive manufacturers to achieve acceptable performance without solvents.

Early generations of low-VOC adhesives were harder to work with than traditional products, giving them a bad name with installers. However, manufacturers continually improved product performance as they gained additional experience with new aqueous-based formulations. The main problem, however, was water’s evaporation

rate, which is much slower than that of petroleum-based solvents. Research led to the development of new water-based adhesives with high-technology resins and polymers. Today these water-based adhesives provide performance equal to, or even exceeding, their solvent-based predecessors.

Moisture Problems

Fast-track construction and non-breathing flooring types present a dangerous combination. Moisture is the Number One cause of flooring problems, but these failures usually stem from the severity of the moisture, rather than problems with the adhesive. A compromised (or missing) vapor barrier under the slab frequently causes this situation, especially when the slab is unable to cure completely. When this situation is added to the non-breathing nature of vinyl, rubber or thermoplastic-based flooring products, it creates a challenge. Wood flooring’s natural moisture sensitivity is also a concern. The best solution is to use a reliable moisture reduction barrier.

Even when an adhesive resists vapor, the potential remains for other moisture-related problems (such as mold) in adjacent areas. Given the industry’s new attention to indoor air quality, mold has become an area of great concern.

Only three things are needed to support mold growth: spores, moisture and a food source. Since spores are abundant in the environment (and necessary), trying to do away with them altogether is a lost cause. →

Continued on next page



Eliminating food sources is near impossible, as mold feeds on anything organic. The battle against mold is most often waged through managing moisture in the environment through climate control and an effective building envelope, but leaks can still develop.

As a secondary line of defense, many adhesives include antimicrobials. Antimicrobials can inhibit mold growth in adhesives in both wet and dry states. This added protection is especially helpful for those times when the moisture source cannot be seen. When moisture from a hidden source gets under the floor covering, mold can flourish long before it is ever noticed. By reducing moisture and employing antimicrobial agents, installers can prevent many problems.

Specifying Appropriate Adhesives

Proper adhesive specification is crucial before beginning a project. Important aspects requiring consideration include flooring type, project needs and the adhesive

including retail stores and healthcare facilities.

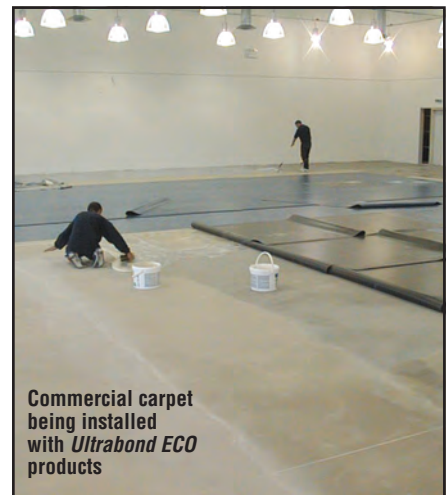
In strength terms, SBR (styrene butadiene rubber), acrylic and urethane technologies lead the way. SBR is particularly well known for its wet suction and early grab, which makes it especially suitable for carpet installations. Acrylics and urethanes, on the other hand, are commonly used for high-end homogenous flooring and wood flooring applications.

Flexibility – Some flooring tends to react quite noticeably to its environment, and needs to remain flexible while being held firmly in place. For example, wood flooring can move considerably with changes in humidity. Suitable adhesives must accommodate such movements without losing their bond with the material. Two-part or moisture-cured urethanes are among the strongest and most flexible adhesives on the market, taming solid wood plank and exotic lumber species alike.

Hardness defines an adhesive’s rigidity once it has cured. The hardness an adhesive requires depends on the floor covering.



Ultrabond ECO™ 185 being used to install carpet at a research center



Commercial carpet being installed with **Ultrabond ECO** products

| CHARACTERISTICS OF THE FOUR MAJOR ADHESIVES | | | | |
|---|--------------------------------|------------|-----------|-----------------|
| | SBR (styrene butadiene rubber) | Acrylic | Epoxy | Urethane |
| Hardness | Low | Medium | Very high | High |
| Strength | Medium | Medium | High | High |
| Flexibility | High | Medium | Low | Medium |
| Ease of use | High | High | Medium | Medium |
| Moisture-resistance | Low | Medium | High | High |
| Best used with | Carpet | Resilients | Rubber | Wood, resilents |

characteristics described in the above table. (Other factors include pricing and manufacturer recommendations.)


Strength refers to an adhesive’s ability to grab the substrate and floor covering. Adhesives need to resist the floor covering’s natural movement due to temperature/humidity fluctuations. Flooring manufacturers test their products with a variety of adhesives to determine which are most compatible. FEICA (the Association of European Adhesives Manufacturers) has established a “peel and shear” test to quantify the bond strength of adhesives. Results are reported in terms of pounds per linear inch required to break the bond. Difficult-to-bond floors are becoming the norm in heavy commercial settings,

for example, rubber flooring is inherently flexible and needs an epoxy, which is among the hardest-setting adhesives. Likewise, this extreme hardness precludes epoxy use for adhering wood flooring because of its inflexibility. Solid vinyl planks also require harder-setting adhesives, such as acrylics or polyurethane, to limit movements associated with temperature changes.

Water resistance – Some epoxies and urethanes are inherently waterproof due to their composition and curing process. These adhesives cross-link during curing, and the chemical reaction makes them difficult to re-emulsify. Urethanes are especially well suited for exterior, specialized floor covering installations, such as sport

flooring, running tracks and hybrid outdoor carpets, thanks to their flexibility, ability to bond to various substrates and resistance to temperature extremes and moisture.

Conclusion

Adhesives have advanced a long way since their early development – highly engineered solvent-free adhesives are now readily available. These adhesives are designed specifically for individual flooring types to provide optimum installation, low VOC levels and long-term performance. Today’s adhesives also offer high/low tack, shear and peel strengths and various other characteristics to meet different needs. 

Commercial Carpet Installations

- Green products – solvent-free, low-odor, low in TVOCs
- BioBlock™ technology built into select adhesives
- IAP- and CRI-approved

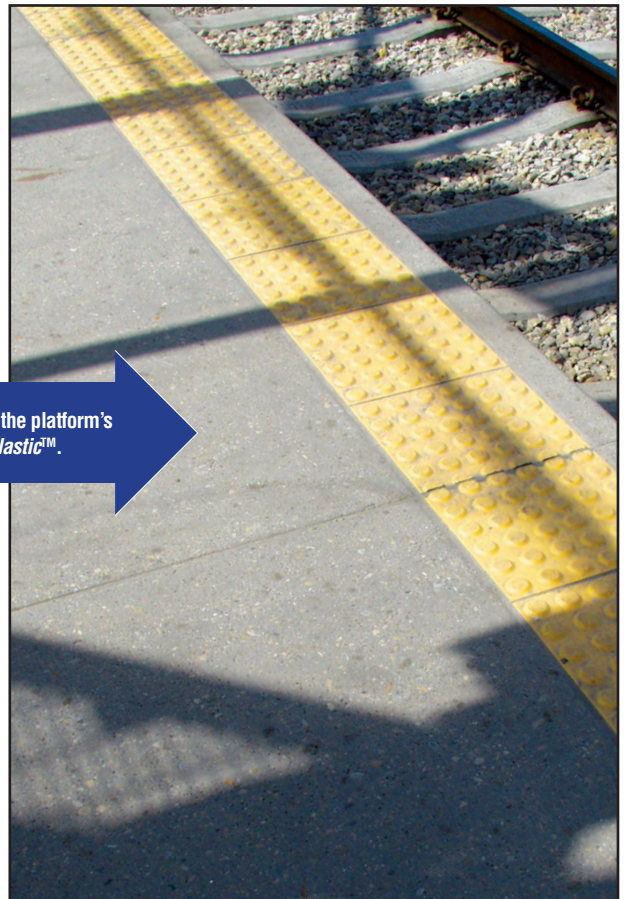


ALBERTA, CANADA

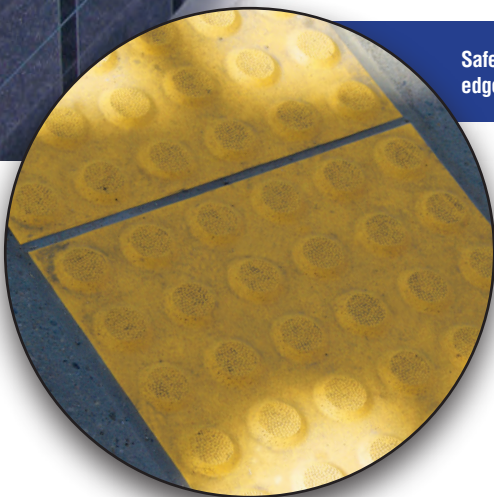
Getting Around Calgary – Dalhousie Transit Station

Calgary is a forward-looking city, one that is environmentally conscious and caring of its commuters. The CTrain, part of Calgary's light rapid transit (LRT) system, follows two paths along rails in the city. Route 201 goes north-south, while Route 202 goes east-west. At the northern end of Route 201, passengers disembark at the Dalhousie transit station.

Calgary builds their buildings to last through extremes of climate and years of use, so the Dalhousie station's interior is



Safety tiles were placed at the platform's edge using *Kerabond/Keralastic™*.



sheathed in granite. When it came time to set the granite tile, the installers from Granite Works turned to MAPEI's *Ultraflex*® 2 because this mortar has a high content of a unique dry polymer, resulting in excellent adhesion to the substrate and tile.

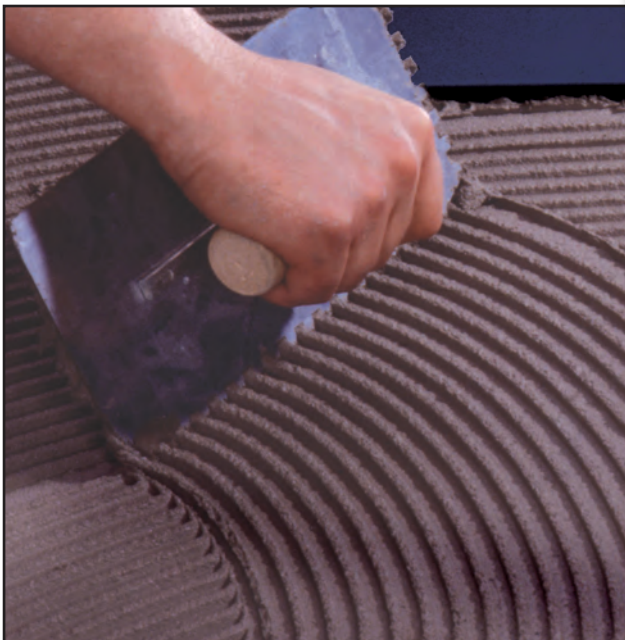
Outside, a safety strip of tiles was installed with the *Kerabond/Keralastic*™ System. This system combines *Keralastic*™, a highly flexible acrylic latex admixture, with *Kerabond*™ premium dry-set mortar to provide long-term performance for the most demanding application. The bright yellow tile with raised discs was placed at the edge of the platform as a visual and tactile cue to remind passengers of the proximity of approaching trains.

The Kerabond/Keralastic System provides long-term performance for the most extreme of climates.

For both the granite and the safety tiles, *Ultracolor*® grout was used to fill the joints between tiles. Today, the Dalhousie station presents an inviting stepping-on and stopping-off point for students, retired citizens, professionals and others who ride the Calgary LRT trains. ♻️



The *Granirapid*® System was used install granite tiles.



Our partners:

- Project Owner: City of Calgary
- Architect: Leblonde Partnership Architects/Planners
- Contractor/Installer: Granite Works
- MAPEI Distributor: Active Marble & Tile

Our products:

- Kerabond/Keralastic*™ premium flexible mortar system
- Granirapid*® premium rapid-setting flexible latex mortar system
- Ultracolor*® ultra premium sanded grout

NEW JERSEY

MAPEI Helps Make History at Tropicana Casino

Acid-stained Ultratop™ is being used more and more to give artistic touches to famous attractions.



Decorative concrete at the casino's entrance

Atlantic City has been a tourist mecca along the New Jersey shore since the end of the 19th century. When casinos became part of the attraction at American resorts, the tourists went west to Las Vegas. Aware that there was a need to entertain the whole family, the Vegas casino owners quickly developed family-style attractions.

Now, Atlantic City is wooing tourists and their families back to the East Coast with entertainment complexes large enough to be small cities by themselves. One example of this trend can be found at the Tropicana Casino and Resort, and its new addition dubbed "The Quarter" – a Latin-themed shopping, dining and entertainment megaplex reminiscent of Havana in its heyday.

Visitors will enter The Quarter from a courtyard off the Palm Walk in the Tropicana. Taking a page from the incredible success Las Vegas casinos have experienced with decorative concrete, the Tropicana architects turned to the versatility and flexibility of MAPEI's *Ultratop* self-leveling concrete topping. The general contractor selected ARCON of Las Vegas and Bomanite of New Jersey Inc. because they have worked previously with the Tropicana. Ira Goldberg of Bomanite managed the project.

First, *Planibond™ EBA* epoxy bonding agent and primer was used to prepare the surface for the *Ultratop* pour. *Planibond EBA* minimized any potential for hairline cracks that can occur in seamless concrete toppings. *Ultratop White* formed the canvas upon which Bomanite executed the architects' designs. Goldberg said,

“Using acid stains, we can create any colors and shapes imaginable on a durable surface. The designs in the courtyard form a large checkered floor in bright white and rusty bronze that adds elegance and

“This kind of work never allows anyone to cut on MAPEI for their high quality.”


— Ira Goldberg, Bomanite of New Jersey Inc.

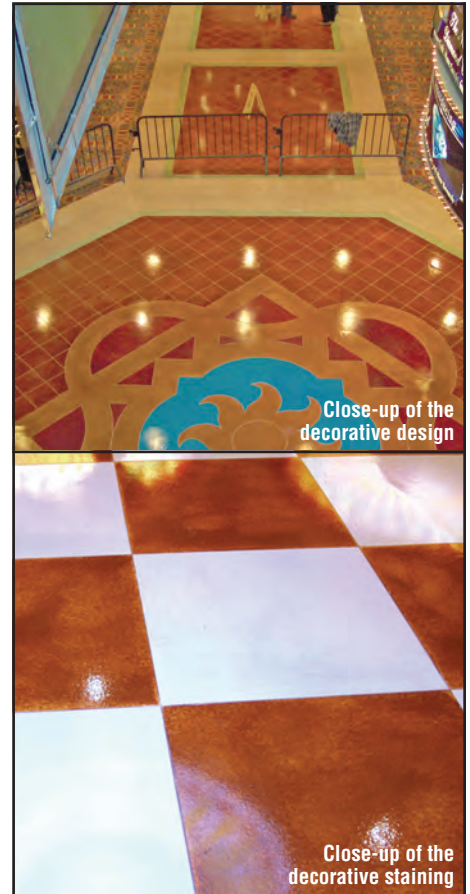
charm to the fountain in the center. A windowpane design in soft tans and rusts provides a subtle balance to the vibrantly realistic, three-story-tall mural of old Havana that highlights The Quarter.

“This kind of work could only be achieved through teamwork with the other contractors operating in the area at the

same time,” said Goldberg. “The general contractor, Keating Construction Inc., was incredibly well-organized and helped make sure we had the room and the time to get our work done. And, most important, they made sure no one left footprints in or on the finished product!”

Bomanite enjoyed working with MAPEI products because of their proven track record. Goldberg commented, “This kind of work never allows anyone to cut corners, so we depended on MAPEI for their high quality. The MAPEI customer service was also very reliable, making sure we had all our supplies on time.”

Bomanite’s artistry in developing magnificent colors created a wonderful atmosphere at the Tropicana. Now, the work continues in the soon-to-open Quarter. Goldberg summed up his thoughts on the project: “We feel like we will be leaving a piece of history behind when we complete the project. The durability and beauty of our art will last a lifetime.” MAPEI is proud to be a part of that history. 



Upper left: The prepared surface of the courtyard is ready for its new look.

Lower left: After the project’s completion, the result is durability and beauty that will last a lifetime.



Our partners:

MAPEI Distributor: Gamka Sales/ICF Systems

Contractor: Keating Construction, Inc.

Installers:

ARCON of Las Vegas

Bomanite of New Jersey Inc.

Architect: Wimberly, Allison, Tong & Goo of Las Vegas

Our products:

Ultratop™ White high-performance, quick-setting, self-leveling concrete topping

Planibond™ EBA epoxy bonding agent and primer

Answers

From the Experts

Q: What is that chalky, white haze that sometimes appears on the *Keracolor™ S* or *Keracolor U* grout?

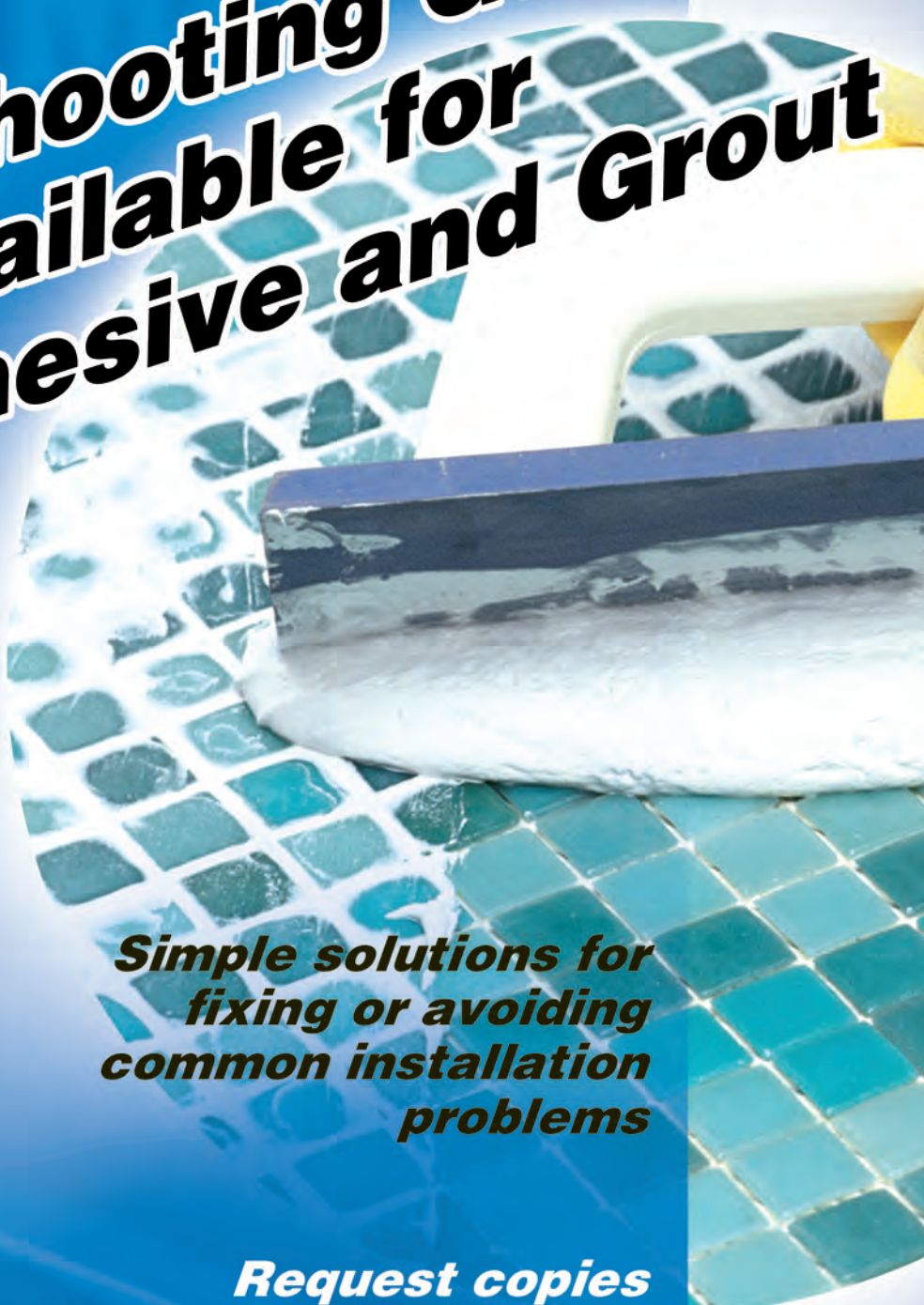
A: EFFLORESCENCE (pronounced eff-luh-RES-ens) is a crystallization of minerals that can occasionally form on the surface of Portland-cement grout joints. The term “efflorescence” is derived from the Latin word *efflorescere*, meaning “to blossom out.” Efflorescence typically occurs when soluble salts from the Portland cement are carried by moisture to the top of the grout joint. As the moisture evaporates, it can leave behind salt deposits,

which give the appearance of a chalky, white haze. The darker the color of the grout, the more noticeable the efflorescence will be.

TIP: The *Mapecem Premix “S”* special formulation was so successful that it was recently specified for the New York City School System. *Mapecem Premix “S”* can be special-ordered through your local MAPEI representative.

| TOP 10 POSSIBLE CAUSES OF EFFLORESCENCE | 10 THINGS YOU CAN DO TO HELP PREVENT EFFLORESCENCE |
|---|--|
| 1. Concrete slab or mortar bed was not fully cured or was still wet or moist before tile installation (due to water leak, cool temperatures, prolonged moisture, etc.). | Allow new slabs and newly constructed mortar beds sufficient cure time. Use calcium chloride tests to ensure concrete slabs and mortar beds are ready to receive tile installations. Use moisture-reduction barriers, such as MAPEI's <i>Planiseal™ MRB</i> , over concrete slabs when needed. |
| 2. Concrete slab had a moisture vapor issue (a membrane was not used under slab or was damaged prior to pour). | Use calcium chloride tests to determine if moisture vapor transmission rates are at acceptable levels. Use moisture-reduction barriers, such as MAPEI's <i>Planiseal MRB</i> , over concrete slabs when needed. |
| 3. Grouting was performed too soon (thin-set mortar used to set tile was still very wet or very moist). | Always follow manufacturers' directions on the thin-set. Also avoid grouting before tile is completely set and thin-set mortar is dry. Use MAPEI's HCT (High-Hydrated Cement Technology) products such as MAPEI's <i>Ultraflex® RS</i> , <i>Ultracontact™ RS</i> or <i>Granirapid®</i> when a fast-track installation is necessary. |
| 4. Water used to mix the grout had a high mineral content (well water, pond water, and ingredients added to home water softeners may contribute). | Use city water straight from the tap whenever possible. Bring bottled water to job sites where potable water is not available. |
| 5. Too much water was used to mix the grout (water was not measured or grout was reslaked). | Using a drill and paddle, mix entire contents of grout container at one time with the designated amount of water listed on the bag. |
| 6. Curing process was slowed (grout was “damp-cured” or was cured in cool temperatures). | Install grout in temperatures between 50°F (10°C) and 100°F (38°C). Maintain these temperatures until grout is fully cured. In Northern climates, schedule exterior installations during summer months. Damp-curing (misting or covering area to retain moisture) is <u>not</u> recommended with MAPEI grouts. |
| 7. Clay tiles or brick containing enough mineral salts to cause efflorescence were used (terra-cotta tiles, Saltillo tiles, pavers, etc.). | Take preventive measures to eliminate moisture under and over tile installation. Apply a penetrating sealer over unglazed clay tiles and pavers according to sealer manufacturers' instructions. |
| 8. Excess water was left on grout joints during initial cleanup (sponge was too wet). | Rinse and wring out sponges thoroughly after each wipe. |
| 9. Grout joints were wiped excessively during initial cleanup (rough or textured surface of tile made cleaning difficult). | When grouting heavily pitted tiles, use a grout bag and avoid getting grout on tile surface as much as possible. When grouting unglazed, rough finish or textured tiles, use a grout release agent or sealer. This will make cleanup easier and require fewer passes with the sponge. |
| 10. Grout was prematurely exposed to water (immersion, misting or rain). | Wait at least 3 days after grouting before using shower. Do not fill freshly grouted pools for at least 21 days. Protect freshly grouted areas from rain / sprinkler systems for at least 7 days. Using a total HCT (High-Hydrated Cement Technology) installation system from MAPEI will allow full submersion after only 72 hours. |

Troubleshooting Guides Available for Tile Adhesive and Grout



***Simple solutions for
fixing or avoiding
common installation
problems***

***Request copies
from your local MAPEI
representative today!***



Children – A Cause Worthy of Our Support



Boys' Towns of Italy was built on the philosophy of giving young people responsibilities and expecting the most from them in return.

Sixty years ago, a young Irish priest accepted the challenge of saving children from the ravages of World War II in Italy. Monsignor John Patrick Carroll-Abbing began by providing a refuge for the street children in a cellar near the railroad station. Dubbed the "Shoeshine Hotel" because it protected the young boys who roamed the city streets and shined shoes for a living, the residence provided a bed, meals and recreation for each youngster. In 1945, this meager shelter was replaced with the first Boys' Town of Italy, located in Civitavecchia, 45 miles northwest of Rome. Over the years, the Monsignor built a total of eight boys' towns and one girls' town.

Boys' Towns of Italy was built on the philosophy of giving young people responsibilities and expecting the most from them in return. In his book *But for the Grace of God*, Monsignor Carroll-Abbing says, "I dreamed of a future Boys' Town, where the innate rights and duties of each child in society would be respected and fostered. A fraternal community where suspicious youngsters would learn the difficult art of living together in liberty, mutual tolerance, in peace and brotherly love. A place where each day could be a period of growth, encouraging the young people to develop the gifts with which nature has endowed them. A place that would have as its ultimate goal to help each boy (and girl) find his true place in society as a responsible God-fearing citizen."

Monsignor Carroll-Abbing's success can be measured in many ways – through the 180,000 children his efforts fed and clothed, through the 30 day-care centers he started in southern Italy, through his relief projects for 30,000 malaria victims. But his greatest success cannot be measured in numbers. He



This facility provides homeless and disadvantaged youth with shelter, meals, education and opportunity.



gave love and a second chance in life to the boys and girls of Italy, and around the world, whose lives have been marred by war, natural disasters and dysfunctional homes.

As he grew older, Monsignor Carroll-Abbing placed the Boys' Towns outside of Rome in the care of religious orders and civic organizations. He continued to oversee Boys' Town of Rome (Civitavecchia) and Girls' Town of Rome until his death in 2001. Boys' Towns of Italy, Inc., the oldest American charity working abroad, continues to support these two residential facilities.

Man of the Year: Nicholas Di Tempora

This year, as we celebrate the 60th Anniversary of Boys' Towns of Italy, Nicholas Di Tempora, the President of MAPEI Americas, is being honored as the Boys' Towns Man of the Year.

Nick also felt the strictures of the final years of World War II. In 1951, his parents immigrated with Nick and his sister to Montreal, Quebec. Through hard work, Nick turned his young life into a success story measured by accomplishments first in the field of real estate and more recently in the construction industry through his career at MAPEI.

Nick feels strongly for the youth who have found safety and security in the Boys' Towns of Italy. In his words, "Children do not ask to be brought into the world. When they arrive, they should be given every chance to learn about love and caring so they can develop into the best individuals they can be." Nick sees Boys' Towns of Italy as a way to give children that opportunity. 🌱

"Children do not ask to be brought into the world. When they arrive, they should be given every chance to learn about love and caring so they can develop into the best individuals they can be."

— Nick Di Tempora, President of MAPEI Americas



Mr. Di Tempora visits with children of MAPEI employees. From left to right: Nicole Smith, Andrea Smith, Matthew McCrory, Nick Di Tempora, Jackson Dahl.



Any individual or group interested in supporting the efforts of Boys' Towns of Italy, Inc., can visit the Website at www.boystown.it for more information.

MAPEI Supports the Future with Donation to San Bernardino Public Library

With the opening of the San Bernardino plant, MAPEI established itself as a member of the community and a good corporate citizen.



Nick Di Tempora with Library Director Ophelia Roop at the San Bernardino plant's grand opening



Above and below: The library is a strong asset of the San Bernardino community.



Cutbacks in state government funding have hit public libraries hard in Southern California. The Children's Department at the San Bernardino Public Library has been unable to purchase new books for two years. Library Director Ophelia Roop put out a plea for community support on the library's Website, and now MAPEI is lending a helping hand.

At the luncheon to celebrate MAPEI's grand opening for the new San Bernardino plant (see story on Page 8), Nick Di Tempora handed Mrs. Roop a check for \$2,500 to start things rolling. "We believe that our future depends on the children, and children need a strong educational background," said Di Tempora.

"We hope to establish an ongoing partnership with the library through our presence in the San Bernardino area."

Mrs. Roop accepted the check, with sincere thanks to MAPEI for its contribution to today's children and to the future of San Bernardino. ♻️



Any individual or group interested in supporting the efforts of a local public library can find more information at www.ala.org/ala/librariesandyou/supportlibraries/supportlibraries.com.

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Long on Coverage

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- Available in 25-lb. bags for easy transport
- Four products in one: performs like a mastic as well as thin-set, medium-bed and nonsag mortars
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