



Although today Las Vegas presents itself as a modern and futuristic city with just a few buildings dating back to the 1950s, it actually dates back to 1829, when a young Mexican discovered an oasis that shortened the commercial route linking Santa Fe to Los Angeles. This area, at the time named Nuestra Señora de los Dolores de Las Vegas Grandes, was later renamed simply Las Vegas. The development of the city started after the railway industry decided to make it a stopping point. Since 1904 the railway workers' needs began to grow and hotels, restaurants, shops and saloons started to spring up in the Nevada desert. The Great Depression of the 1930s brought a new flow of energy and labour for the construction of the new Hoover Dam with thousands seeking jobs.

In 1931 Nevada legalised gambling to finance the public school and to reduce the rampant corruption, thus laying down the basis for the Las Vegas we know today. The effect of the new law was immediate: thousands of dollars from





A fantasy world of colossal hotels and casinos animate the largest and most opulent gambling and entertainment city of the world.

by Mike Venturelli - Mapei Corp. - Usa



LAS VEGAS

gambling flooded into the city and new hotels budded everywhere. In 1941 the Strip was build - the main boulevard where still today the most fabulous entertainment sites are concentrated.

A fantastic trip down the Strip

One of the reasons for entertainment pioneers to come to this corner of the desert was its constant warm climate. The city's major attractions are located on the Las Vegas Boulevard, more commonly known as the Strip, where the concentration of luxurious hotels and gambling casinos leaves visitors dizzy. Being the world's reference point for entertainment, Las Vegas calls for continual re-modernisation of its structures. For the year 2000, Las Vegas built new and larger luxury hotels and casinos down the famous Strip. To satisfy the entertainment needs of the new millennium, many hotels have been completely demolished and rebuilt. Using the most advanced technology, the new



hotels recreate the atmosphere and charm of the past and present cultures. Millions of fluttering lights attract pleasure-seeking visitors, adults, children, families, gambling addicts and anyone who wants to take time out in a problem-free world.

Great architectural remakes of historical masterpieces attract the attention of visitors. Luxor, New York New York, Monte Carlo ... hotels that ambitiously recreate the atmosphere of a whole city in a single building. Such intense construction activity requires a lot of courage and farsightedness on behalf of investors and planners. They have had to adapt to marketing strategies aimed at avant-garde levels of entertainment and technology.

Las Vegas 2000 is linked to the initiative of the eccentric multimillionaire Stephen Wynn, who in 1988 decided to transform his Mirage hotel-casino into one of the marvels of the world. Since its opening day, the Mirage proved Wynn had great intuition, triggering the real-estate boom which seems to have no end. This is the umpteenth bet that Las Vegas has won, but this time to the advantage of all gamblers.

A market in continual expansion

The population of Las Vegas is 1.2 million (full-time residents). The hotels can house up to 1 million people when completely sold out and they are typically 85% full.

CONSTRUCTION VALUES FOR LAS VEGAS

Year	Total Costs	Residential	Hotel/ Commercial
1997	\$2,233,145,043	10%	90%
1998	\$1,975,643,565	10%	90%
1999	\$1,714,637,208	5%	95%

CERAMIC TILE AND INSTALLATION PRODUCT MARKET

Total Value \$23,400,000

BUILDING PERMITS - DECEMBER 1999

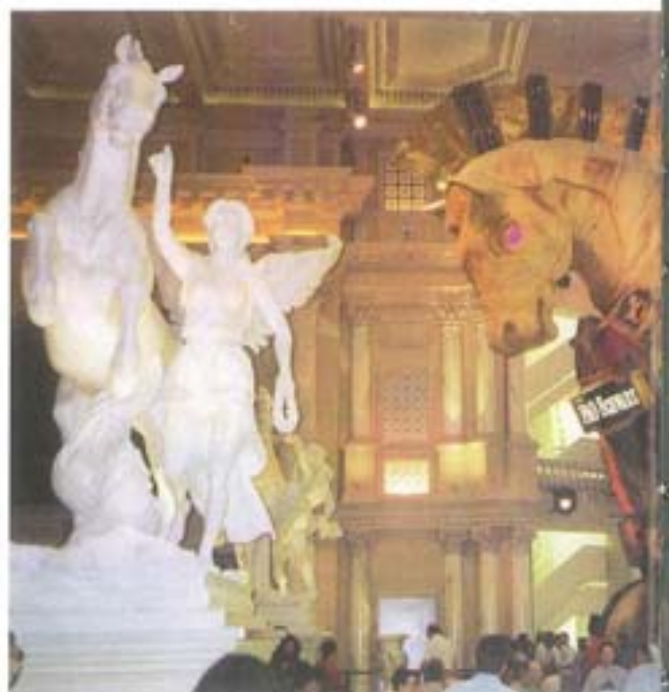
Category	Units	Permits	Valuation
Single family dwellings	575	575	\$57,697,313
High-rise flats/ apartments	34	4	\$1,375,780
Semi-detached houses	90	6	\$3,766,477
Hotel + Motel	1	1	\$20,000,000
Commercial	0	27	\$29,186,280
All others	0	446	\$5,117,442
TOTAL	700	1059	\$117,145,262
Renovation projects	0	423	\$26,357,715
TOTAL	700	1482	\$143,502,977
YEAR TOTAL	11,593	21,384	\$1,714,637,208

Mapei leads the game

To list all Mapei's activities in Las Vegas would take too long. It suffices just to point out that Mapei's sales in Las Vegas have skyrocketed from less than \$200,000 in 1997 to over 1.2 million in 1999, thanks to effective marketing and technical expertise. Mapei provides specialised Technical and Sales support that works hand-in-hand with architects, planners, local suppliers and technical sales reps to lay down technical specifications for the more important projects involving Mapei products. Once the project has been awarded to the General Contractor, the sales reps contact the tile and flooring contractors to take orders. In addition, the sales reps are responsible for providing assistance on site to ensure installation is carried out in accordance with Mapei's standards.

A number of prestigious hotels have used Mapei products - the Rio Hotel, for example, used ECO 185 adhesive and the majority of the rubber and linoleum flooring in Las Vegas was installed using ADESILEX G19 polyurethane adhesive.

To give Realtà Mapei International readers an idea of the company's level of involvement, below there is a selection of hotels that illustrate just what can be done with tried and tested ceramic or stone floor installations.





Caesars Palace

First opened in 1966, the Caesar's Palace is one of the first and most famous hotels and casinos in the world and is inspired by ancient Rome, with its copies of classical art and sculptures paying homage to the Roman Empire. To get an idea of the colossal dimensions of this hotel it suffices to know that two Grands Prix were held in its

parking lot. The hotel expanded its opulent facilities for the new millennium adding a new 29-storey tower with 1,134 rooms. Marbles imported from 23 different countries were used for the flooring of the lobby, the halls leading to the casino, guest bathrooms and the public areas by the lifts. Renovation in these areas involved the use of marble, but glass mosaics were also used for the fountains along with a 24-carat gold mosaic. The Carrara Marble Company of America – which has had commissions for over \$20 million over the past five years – used Mapei's ULTRAFLEX II and grouts for the installation of the flooring.





Bellagio

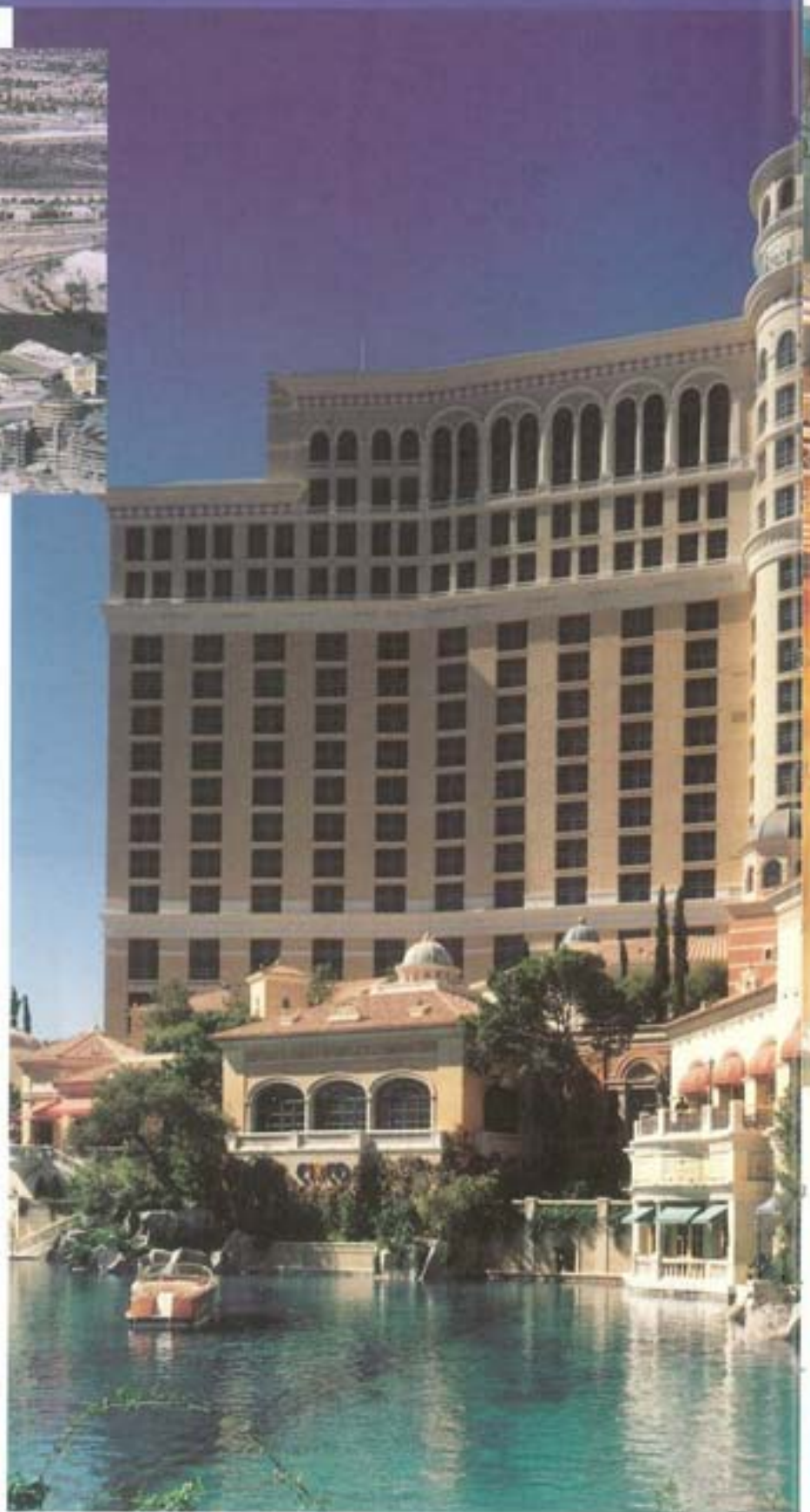
Built on an area of 10 acres in the centre of the Strip, the Bellagio hotel recalls the Italian residential atmosphere of Lake Como and is named after the locality which, literally translated, means "to feel at ease". Enchanted by the beauty and sobriety of Como's architecture, Stephen Wynn set out to recreate the Italian style in the 3,600 rooms (a figure higher than the actual population of Bellagio) which have been fully booked since the opening day. Steve's slogan for this multi-faceted entertainment centre is "it's what God would have made if he



had the money." In fact the hotel is decorated with authentic 19th- and 20th-century art. Millions were spent both at Sotheby's and Christie's to

put together the collection of works by Manet, Gauguin, Picasso, Van Gogh, Matisse, Degas and others that "embellish" the walls of this dazzling museum-cum-hotel-cum-casino.

The Bellagio is surrounded by an artificial lake containing an original 1960's wooden Riva speedboat, and its opulence is displayed in the lobby and Villa Suites which are installed with Portuguese marble accented with Italian marble mosaic patterns. The delicate



quality of the marble called for an extremely professional installation using high-tech products. Almost every surface of the Spa is covered in unique Australian limestone with inlays of marble mosaics.

The Carrara Marble Company of America completed the Spa and Villa Suites installations using Mapei's PRP 315, ULTRAFLEX II and Mapei grouts.



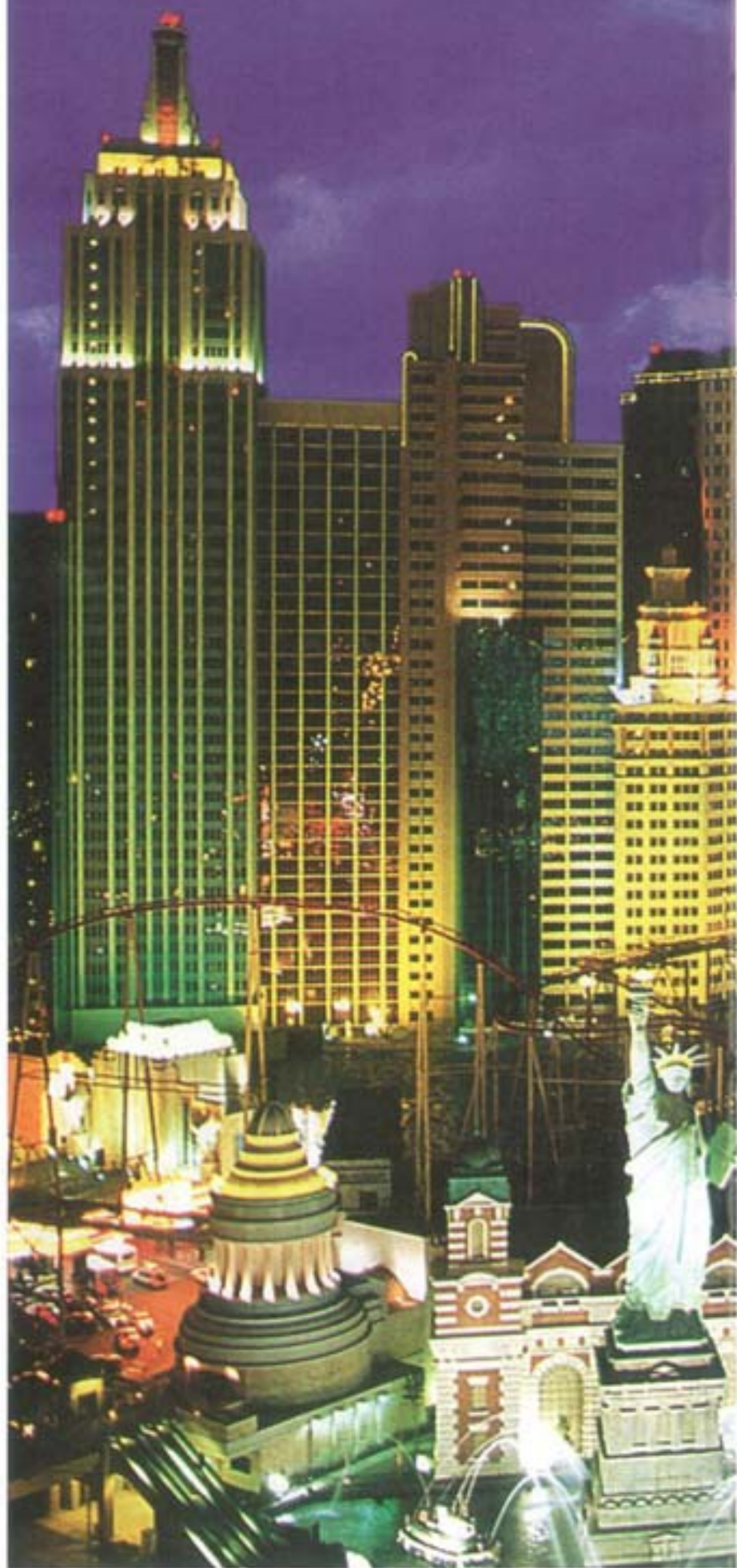
New York New York

With over 2,000 suites and a casino covering no less than 80,000 m², the New York New York is the most stunning on the Las Vegas strip. It reproduced the Manhattan skyline with a replica of the Statue of Liberty, the Coney Island roller coaster and a replica of the Brooklyn Bridge. With its 12 hotel towers – including the tallest casino in Las Vegas – it really looks like a corner of New York City that has sprouted up in the middle of the desert.

11,000 m² of cotto tiles were used for the flooring in the rooms and passage ways, while ceramic

tiles were used in the guest and public bathrooms.

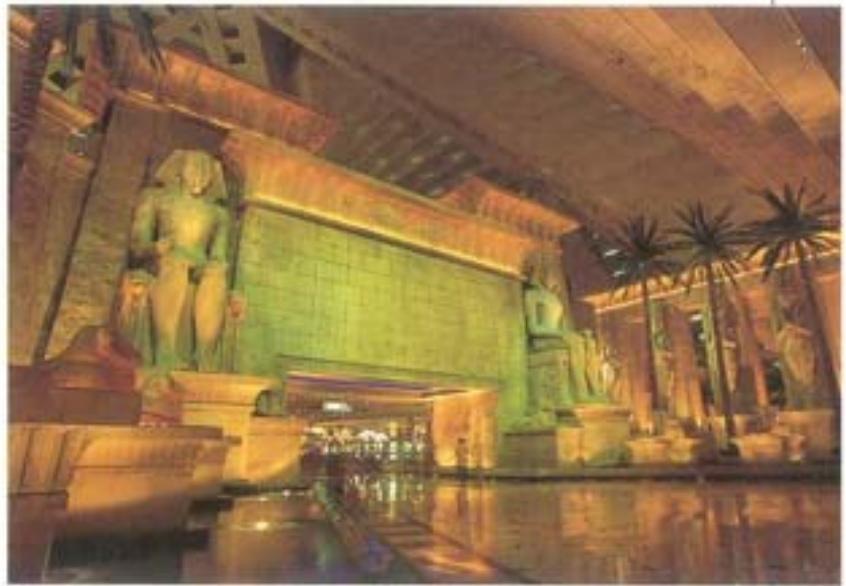
ULTRAFLEX II and Mapei grouts were used extensively for installing tiles in many parts of the New York New York. Mapei's PRP 315 was also used by Western Tile & Marble, Superior Tile and other contractors involved in laying the flooring in the 2,000 guest bathrooms and in the public spaces.



Luxor

Probably no hotel in the world has ever tried to challenge the sacredness of ancient Egypt without seeming disrespectful. The Luxor hotel definitely tried with its 30-storey bronze-coloured glass pyramid plus a couple of other small pyramids that attempted to come close to the splendour and mysticism of the pharaoh era. A beam of light emanates from the top of the glass pyramid and is the most powerful in the world – equal to 40 billion candles. Its atrium is large enough to stack nine Boeing 747s on top of each other. Here the electricity bills alone add up to over \$3 million a year, while the Sultan of Brunei gambles \$250,000 a time on ten different roulette tables and someone even whilst sat on his horse.

It seemed impossible to reconstruct years of history in a question of a few months, but help came once again from Mapei's installation systems. Western Tile & Marble installed limestone imported from Portugal by Villeroy & Boch in the 1,948 guest rooms using Mapei's PRP 315, ULTRAFLEX II and Mapei grouts.



Monte Carlo



Monte Carlo

The Monte Carlo Hotel is one of the most elegant hotels in town. Guests enjoy an atmosphere characterised by Renaissance statues surrounded by fountains and waterfalls. And that's just outside!

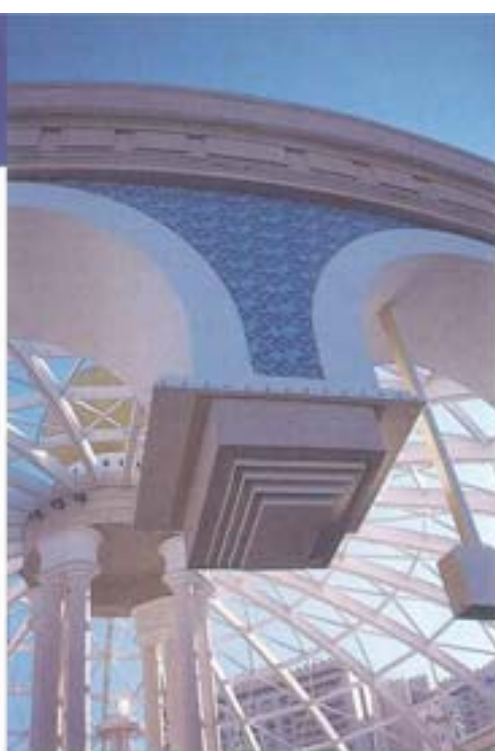
Exhausted by hours spent at the slot machines and at the gambling tables, the American Monegasques can relax in their rooms tiled with Italian marbles and smooth granite, dreaming that one day they really will be able to reside in the Principality of Monaco. As Steve Wynn says, "it's true that we are not masters of our destiny, but we can certainly design it." Here too Western Tile & Marble installed Villeroy & Boch's limestone imported from Portugal using Mapei's PRP 315, ULTRAFLEX II and grouts. PRP 315 was chosen for its waterproofing characteristics and the way it prevents cracks appearing.



Sahara

It took two years and \$100 million to renovate the Sahara Hotel & Casino which welcomes guests to a warm and stimulating atmosphere that recalls African desert oasis. Built in an Arabian style, the hotel has large spaces dedicated to tourists, one of which houses a massive Indy race simulator that, according to professional drivers, is very close to the real thing.

By renovating the hotel and building an inviting new swimming pool, the hotel's president, William Bennett, intended to return the famous hotel to its 1950 splendour when it was one of the stars of the Strip. Among its frequent guests were Frank Sinatra and Sammy Davis Jr. Tall, blue and green tiled towers sprout over the Nevada desert recalling the Moroccan landscape. Extensive renovation in the lobby, casino and concierge lodges was carried out by Castello Tile using Mapei's KERAPLY, ULTRAFLEX II and grouts.





Sunset Station

Before leaving this lively gambling city it's worth paying a visit to Sunset Station in Henderson, a hotel that pays homage to Spain and is built in typical Iberian style throughout – from the rooms to the casino. Built on a 100 acre site, the hotel is the most popular among Las Vegas fans of those not on the Strip. It suits all tastes with Mexican, Italian and American restaurants, the casino, a multi-screen theatre with 13 screens, a 300-seat concert hall, bar and poker room are all enclosed in a single complex for a complete holiday. In the centre of the facilities is the Gaudi Bar – a real homage to that most eclectic of Spanish architects. The floors are in cotto and ceramic tiles that perfectly interpret Spanish style. Castello Tile and others laid the tiling using Mapei's PRP 315, ULTRAFLEX II and grouts.





We wish to thank "Tile & decorative surfaces", November 1999, from which extracts have been taken.



LAS VEGAS

TECHNICAL DATA

Different requirements, a single method

Nothing could be left to risk when constructing these huge entertainment edifices. Hotel and casino owners rightly summoned the help of building specialists, perfectly aware of the fact that even a minor error in making a repair could mean billions of dollars lost.

That's why tried and tested methods were used and adapted to different needs: for example, ULTRAFLEX II* - a single-component, high-performance polymer-modified mortar which bonds ceramic and natural tiles in one go. ULTRAFLEX II* was used extensively by contractors on various sites, because it helps avoid problems that usually arise when installing tiles. Ease of use and versatility are the advantages that made ULTRAFLEX II* popular for most of the new constructions in Las Vegas. KERAPLY* was used in other cases.

Mapei PRP 315* was used in a lot of cases to create a waterproof layer before laying the tiles. PRP 315* forms a protective barrier in just a few hours, and sets into a crack-resistant membrane which isolates the tiles from possible cracks in the underlying foundation. ULTRA/COLOR* - a rapid setting and hardening, non-shrinking cement grout formulated in Mapei's laboratories - was used to grout internal and external wall and floor tiles. ULTRA/COLOR* is a mixture of special hydraulic binders, graded aggregates, special polymers and pigments that remain stable even after prolonged exposure to outside elements.

*These products are produced by Mapei Corp. (USA)



Site description:

CAESARS PALACE

Year: 1998

Materials used: Marble, DalTile glass mosaics, Bisazza gold mosaics

Contractor:

Carrara Marble Company of America

BELLAGIO HOTEL

Year: 1998

Materials used: Portuguese marble and Italian marble mosaics; Australian limestone with marble mosaics inlays

Contractor:

Carrara Marble Company of America

MEW YORK NEW YORK HOTEL

Year: 1997

Materials used: Cotto, ceramic tiles

Contractor: Western Tile & Marble, Superior Tile and others

LUXOR HOTEL

Year: 1998

Materials used: Portuguese limestone

Contractor: Western Tile & Marble

MONTE CARLO HOTEL

Year: 1998

Materials used: Portuguese limestone

Contractor: Western Tile & Marble

SAHARA HOTEL

Year: 1998

Materials used: DalTile ceramics

Contractor: Joe Cattello Tile

SUNSET STATION HOTEL - Henderson

Year: 1998

Materials used: DalTile ceramics

Contractor: Joe Cattello Tile and others

The Mapei team in Las Vegas

Mike Venturilli: Area Manager

Lonnie DeGooyer: Technical Sales Rep

for Ceramic

Steve Hobbs: Technical Sales Rep for FCIP

Kevin Vaughn: Architectural Rep

All product lines