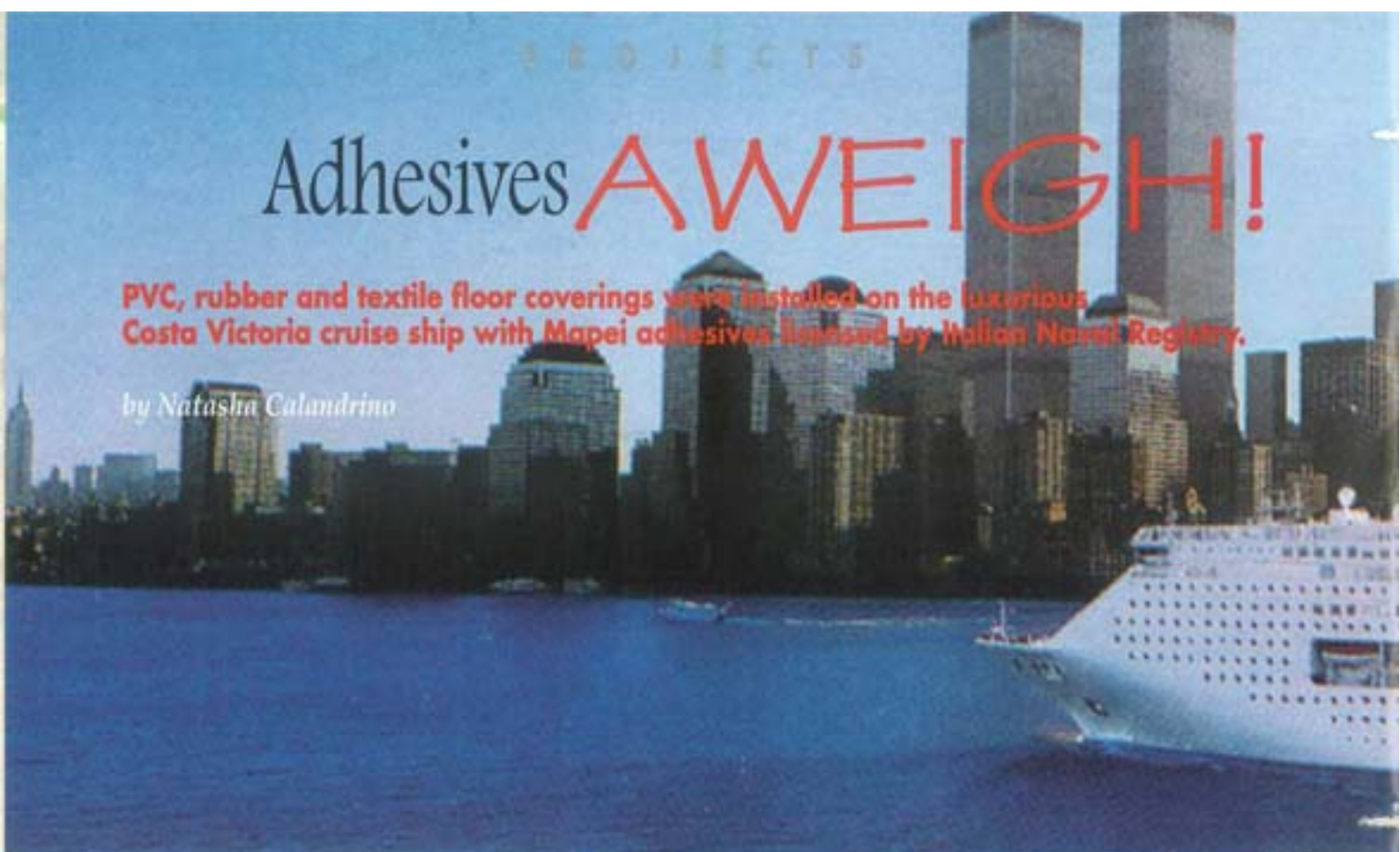


# Adhesives **AWEIGH!**

**PVC, rubber and textile floor coverings were installed on the luxurious Costa Victoria cruise ship with Mapei adhesives licensed by Italian Naval Registry.**

by *Natasha Calandrino*



**W**hat's the latest trend in travel? Cruising around the North Pole on a converted Russian icebreaker? Or a transatlantic crossing, now back in fashion after the film *Titanic*, with return by *Concorde*? Whatever the destination, cruises are enjoying a real boom. "Shipboard holidays that once only the rich could afford are now popular entertainment," explains Lorenzo Costa, Marketing Director of Costa Cruises, Europe's leading cruise operator. Television and the big screen have helped promote the romantic, glamorous image of these floating hotels.

New ships are launched every year, each more elegant and hi-tech than the next, and all of them designed to offer passengers a superior level of comfort with a wide range of high level attractions and services.

## A luxurious flagship

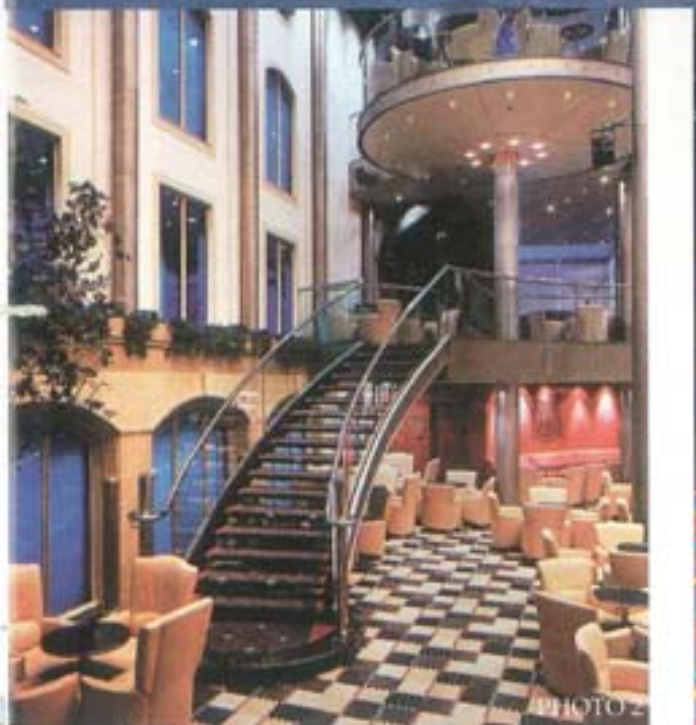
Designed to accommodate sun-worshippers wending their way through the Greek islands or the Caribbean, the 76,000-ton *Costa Victoria* is 251 meters (820 ft) long and was built in a record 603 hours (only 25 days!) in the Lloyd shipyards in Bremen, Germany.

Its 40,000 square meters (430,500 sq ft) of space are filled with the latest in stylish interior design and furnishings. Built to delight even the most demanding public,



PHOTO 1

the *Costa Victoria* was first conceived on the drafting tables of well known architects Pierluigi Cerri of the Gregotti and Associates Studio in Milan, Italy, and Ivana Porfiri and Robert Tillberg of the Tillberg Studio of Vicken, Sweden. They outfitted the ship with a two-level theater, two restaurants, a pizzeria, several bars, boutiques, a library, a beautifully equipped spa with swimming pool, a solarium, discotheque, casino, a children's game room, conference rooms, party rooms and a piano bar.



### Certified adhesives

It may seem like a contradiction, but one of the biggest dangers on board a floating hotel is a fire breaking out. In order to prevent flames from spreading in case of fire, all materials used for the finishings and their respective adhesives had to be licensed by the Italian Naval Registry (INR). Mapei was able to offer several installation solutions in various areas on the ship.

In the 2,250 passenger cabins as well as

in the public spaces (boutiques, lounges and the largest floating gambling casino in the Mediterranean) the floors were covered with an elegant, creatively patterned carpet installed with AQUACOL T<sup>®</sup>, a synthetic polymer-based water dispersion adhesive that met the high standards of the Lloyd shipyards (Photos 1, 2, and 3). AQUACOL T is non-flammable and contains no harmful substances, so it is ideal for areas such as these with strict fire resistance classifications.



The steel-plates forming the subfloors were covered with lightweight concrete screeds that were then treated with PRIMER G\*, a synthetic resin-based water dispersion primer. Solvent-free AQUACOL T was used to install a total of 18,600 square meters (200,000 sq ft) of carpet. AQUACOL T dries in about 24 hours and forms a flexible film that can withstand intense passenger foot traffic and wheelchair traffic.

Another adhesive, ADESILEX V4\*, was used to install PVC flooring on the bridge. The special properties of this solvent-free acrylic water dispersion adhesive enabled 17,200 square meters (185,000 sq ft) of PVC to be installed extremely easily. ADESILEX V4 is a contact adhesive with high bond strength and cohesion. Like AQUACOL T, ADESILEX V4 is non-flammable and contains no harmful substances, thus meeting INR specifications. Since flooring in the entrance foyers and the service areas used by the 800-strong crew is subject to frequent contact with water, it was installed with



ADESILEX G19\* two-component polyurethane adhesive for rubber, PVC, and linoleum. ADESILEX G19 hardens without shrinkage and is highly resistant to moisture and water.

#### Marble adhesives

Adjoining the thousands of square





PHOTO 7



PHOTO 8

meters of resilient flooring and, in some areas, on top of it, precious marbles were used to add a touch of refined elegance, drawing passengers into a sumptuous reception area whose floors and walls are covered with beige Filetto Hasana marble (Photo 4). A dramatic staircase covered with Crema Marfil marble (Photos 5 and 6) guides passengers to their cabins or suites where they can refresh themselves in luxurious bathrooms decorated in Rosa Portogallo marble (Photo 7). When the ship weighs anchor, passengers can shop in the chic boutiques furnished with crystal-columned showcases rising from bases of Verde Vecchia Chiesa marble (Photo 8), the same marble used on the pilasters flanking the displays (Photo 9). Vacationers can pamper their bodies in the Pompeii Fitness Center (Photo 10), or splash in the heated pool (Photo 11) surrounded by walls of Crema Marfil marble.

Life on board continues far into the night at the "Capriccio" bar whose curved wall is covered in Azul Macabas marble (Photo 12), as are the walls of the staircase to the upper decks (Photo 13). In the Concorde Plaza lounge on the prow, passengers gaze at the sea through majestic windows as they tap their feet to the rhythm of a live orchestra.

The centerpiece of this high-ceilinged, luxuriously carpeted salon is a marble inlay of Filetto Hasana, Noir St. Laurent and Calacatta Vagli marbles (Photo 14).

All of these rich marbles were installed with GRANIRAPID\*, a two-component fast-setting and hydrating adhesive



PHOTO 9



PHOTO 10

system that makes installations ready for traffic in only 24 hours. GRANIRAPID is virtually shrinkage-free with high bond strength on all normal substrates and excellent resistance to impact, vibration,



PHOTO 12

thermal shock and aging. The marble was grouted with KERACOLOR FINE GRAIN\* (for joints 0-4 mm wide) or ULTRACOLOR\* (2-20 mm), depending on the size of the slabs. These durable, high strength color-fast grouts do not form surface efflorescence. The marble-covered surfaces were so large that they required expansion joints sealed with MAPESIL LM\* (Photo 15), an odorless solvent-free silicon sealant that is especially recommended for acid-sensitive surfaces like marble. MAPESIL LM seals remain unaltered over time, even when exposed to severe weather conditions, thermal shock and water, and remain flexible at temperatures as low as  $-50^{\circ}\text{C}$  and as high as  $+120^{\circ}\text{C}$ .

Smooth sailing!



The technical data sheets for the products mentioned in this article are contained in Mapei binders No. 1, "Ceramic Tile Installation products" and No. 2, "Resilient Flooring Line"



PHOTO 13



PHOTO 14

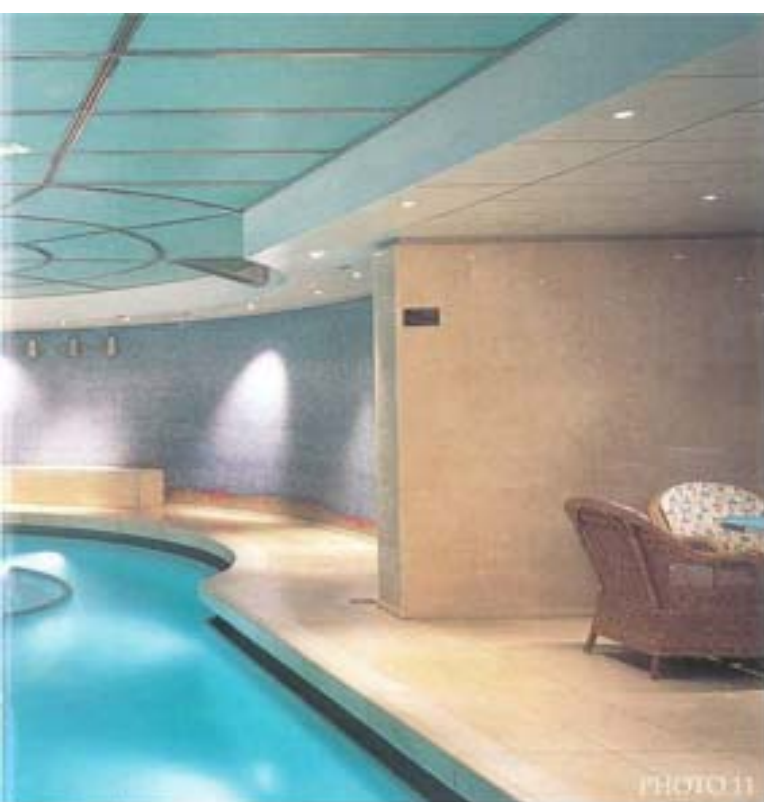


PHOTO 11



## TECHNICAL DATA

**S/S Costa Victoria**

**Shipyard:** Bremen, Vulkan Group  
(Bremerhaven), Germany

**Built:** 1996

**Architects:** Pierluigi Cerri and Ivana Porfiri,  
Gregotti and Associates, Milan, Italy, and  
Robert Tillberg, Tillberg Studio - Vicken,  
Sweden

**Commissioned by:** Costa Crociera S.p.A.,  
Genoa, Italy

**General Contractor:** Saathof Fussbodenbau  
GmbH Klingenberg, Germany

**Gross tonnage:** 76,000 tons

**Materials used:** carpet: Darsk Wilton  
and Due Palme; rubber: Mondo; PVC: Forbo;  
marble (Azul Macaubas, Filetto Hasana,  
Noir St. Laurent, Calacatta Vagli, Verde Vecchia  
Chiesa, Crema Marfil, Rosa Portogallo):  
supplied by Technostone.

**Mapei products for carpet:\***

PRIMER G  
AQUACOL T

**Mapei products for rubber:\***

ADESILEX G19

**Mapei products for PVC:\***

ADESILEX V4

**Mapei products for marble:\***

GRANIRAPID  
ULTRACOLOR  
KERACOLOR FINE GRAIN  
MAPESIL LM

\*The products mentioned in this article are  
manufactured by Mapei in Europe.

**Mapei Coordinator:** Mapei GmbH (Germany)  
Technical Service

