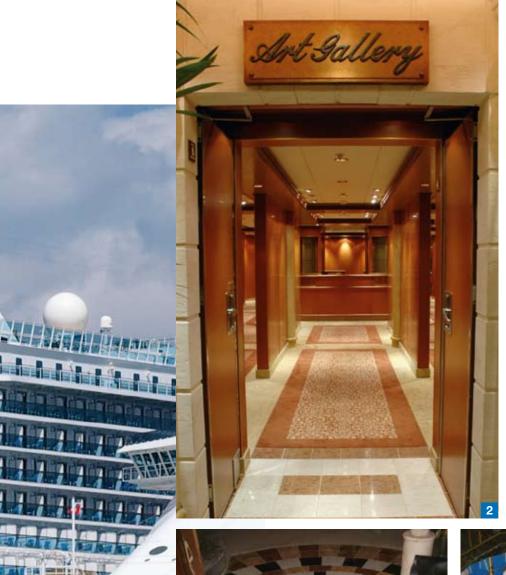
RUBY PRINCESS

Marble and granite for Princess Cruises' new flagship liner





a jewel of elegance and innovation. This is Ruby Princess, the new flagship liner of the Princess Cruises fleet, a company which carries more than one million passengers every year towards an incredible range of destinations all around the globe. The new liner, built in the Fincantieri shipbuilding yards in Monfalcone (Gorizia, Italy), carried out its maiden voyage to the Caribbean in 2008.

A dream cruise for this liner: gross tonnage 116,000 tonnes, 289.6 metres long and 36 metres wide with 18 passenger bridges.

Ruby Princess hosts more than 4,600 people (3,500 passengers and 1,100 crew members) and reaches a top speed of 22.1 knots. And in the usual family tradition, the liner offers luxurious comfort and an impeccable onboard service.

As with its sister liners (Crown and Emerald) the Ruby Princess also has a large foyer similar to a large piazza overlooked by various bars and restaurants.

The elegance of this ship combines perfectly with some of the latest novelties in entertainment: four swimming pools and 6 Jacuzzis, the grand Princess Theatre, Gatsby's Casino, the



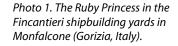


Photo 2. Once the marble and granite had been laid, the joints were grouted with ULTRACOLOR PLUS mortar.

Photo 3. The marble inlay work in the floor in the foyer and corridors on the various floors were bonded using GRANIRAPID.

Photo 4. A decorative rosette with marble and mosaic inlays immediately after laying with GRANIRAPID adhesive.



Lotus Spa and fitness centre, a jogging track and a giant open-air "Movie Under the Stars" cinema screen which shows sporting events, concerts and the latest releases from the cinema world. And there is even a wedding chapel: so it's not just a coincidence that the successful television series "The Love Boat" was set on one of the company's liners.

A Successful Working Partnership

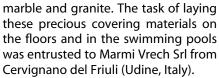
In such an elegant, fascinating context nothing but luxurious covering materials could have been used, such as





Photo 5. In the sumptuous foyer, similar to an enormous piazza overlooked by bars and restaurants, the marble and granite floors were laid using GRANIRAPID while the granite covering on the lightweight aluminium panels for the columns and stairways were bonded using KERALASTIC T.

Foto 6. The marble and granite floors in the corridors leading to the cabins were also laid using GRANIRAPID.



The company, considered leader in this sector, was founded by Giocondo Vrech, and is a craftsman stonemason's specialised in marble and granite and the fitting out of civil and naval environments.

A faithful customer of Mapei for more than ten years, the Friuli company selected products made by the leading company in the adhesives for ceramics and stone sector for this high-class liner. More than 30 types of marble and 15 types of granite were laid on board, covering a total of 4,950 m² of surfaces and floors, of which 1,235 m² alone were laid with granite tessera in the bathrooms and around the swimming pools.

The granite and marble were laid using GRANIRAPID high-performance, deformable, fast-setting and hydrata-

tion two-component cementitious adhesive for ceramic tiles and stone materials.

Granite was also laid on the lightweight aluminium panels, in this case using KERALASTIC T high-performance, two-component, thixotropic polyurethane adhesive for ceramic tiles and stone. The final touch to the coverings was the grouting of the joints with ULTRACOLOR PLUS high-performance, anti-efflorescence, fast setting and drying polymer-modified mortar, water-repellent with DropEffect® and antimould with BioBlock® technology for joints from 2 to 20 mm wide.

The working partnership between Marmi Vrech and Mapei is yet another success story: work progressed without a hitch and, once again, the floorlayers were perfectly at ease with the Mapei products. In this particular case it is only too fair to say, therefore, that with Mapei shipbuilders will always find everything shipshape and Bristol fashion!



TECHNICAL DATA

Ruby Princess liner, built at Fincantieri shipyards in Monfalcone (Gorizia, Italy) **Designer:** arch. Giacomo Mortola from Studio Gem (Genoa) and arch. Teresa Anderson from Princess Cruises

Year of Construction: 2008

Year of the Intervention: 2008 Intervention by Mapei: supplying products and technical assistance for laying marble and granite coverings

Designers: arch. Giacomo Mortola and arch. Teresa Anderson

Clients: Vitrani (TS), Zago (TV), Ancv (VE), IVN (PD)

Works Directors: Riccardo Vrech and Giuseppe Stellato

Laying Company: Marmi Vrech srl – Cervignano del Friuli (Udine, Italy) Mapei Distributor: Marmi Vrech srl Mapei Co-ordinators: Ivan Carlon and Paolo Alberti, Mapei SpA (Italy)

IN THE SPOTLIGHT

KERALASTIC T

This an improved **(2)** reaction resin and slip resistant **(T)** adhesive **(R)** classified as class **R2T** according to **EN 12004**. It is suitable for indoor and outdoor wall and floor bonding of ceramic tiles, stone material and mosaics of all types on screeds, renders, concrete, asphalt, wood, metal, PVC, reinforced polyester, asbestos-cement, gypsum, gypsum board, gypsum panels, etc. On mixing the two parts together, the result is a paste with the following properties:

- easy workability
- excellent durability and resistant to ageing
- perfect adhesion on all surfaces used in

Reralastic

building

- hardens by chemical reaction without shrinkage (until it becomes highly resistant)
- high deformability.

It can be applied vertically without slump and without letting even heavy or large tiles slip. It is especially recommended for bonding ceramic tiles, stone material and mosaics in showers and on sheets used for prefabricated bathrooms, on wooden work surfaces or kitchens, on balconies, external terraces, flat roofs subject to foot traffic or domes. It is ideal for bonding natural stones and reconstructed stone (marble of every type, slate, etc.) also subject to movement and size variation due to the absorption of water (class C of size stability according to Mapei standards).

Mapei Products: the products mentioned in this article belong to the "Products for Ceramic Tiles and Stone Materials" range. The technical data sheets are available at the web site: www.mapei.com. Mapei's adhesives for ceramics and stone materials conform to EN 12004 and have been awarded the CE mark in compliance with EN 12004, Annex ZA. Mapei grouts for ceramics and stone materials conform to EN 13888. Almost all the Mapei products for laying floors and walls are also GEV-certified. Granirapid (C2FS1, EC1, CE EN 12004):

high performance, deformable, fast-setting and hydration, two-component cementitious adhesive for ceramic tiles and stone material. **Keralastic T (R2T, CE EN 12004):** high

performance two-component polyurethane adhesive with no vertical slip for ceramic tiles and stone material.

Ultracolor Plus (CG2, EC1): fast-setting and drying, high performance, anti-efflorescence, grout for joints from 2 to 20 mm, water repellent with DropEffect® and anti-mould with BioBlock® technology.