

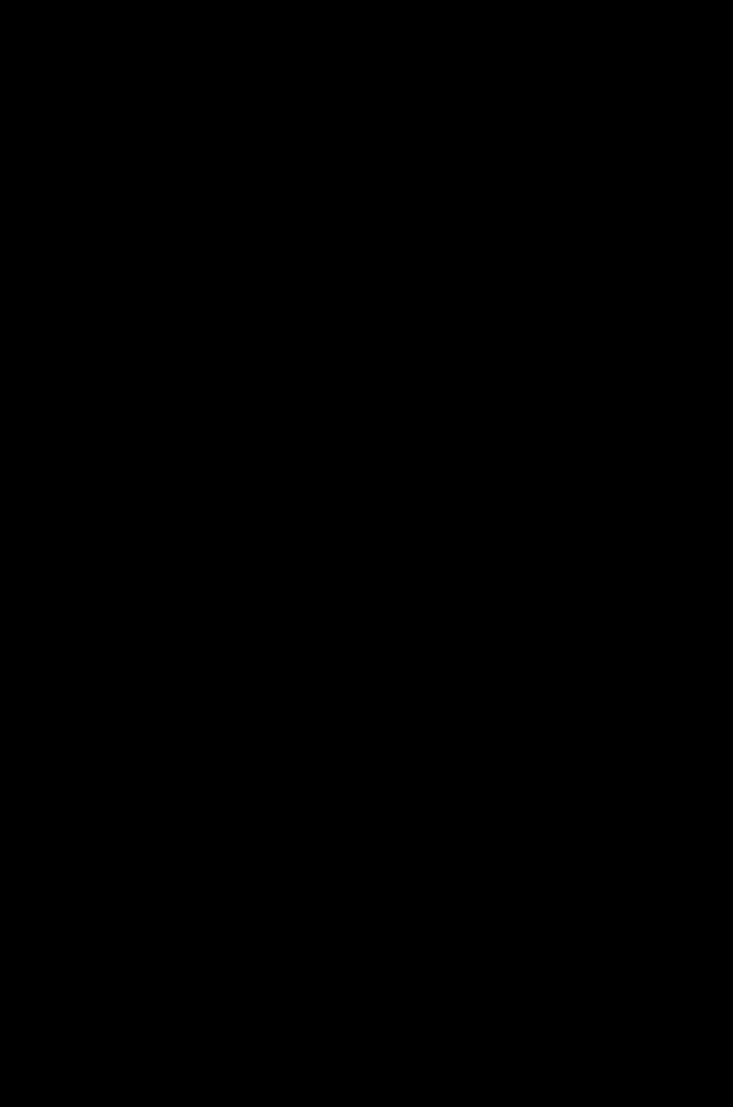
COLORED CONCRETE WORKS®

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Case study:

Project:
Emirates Palace Hotel,
Abu Dhabi,
United Arab Emirates

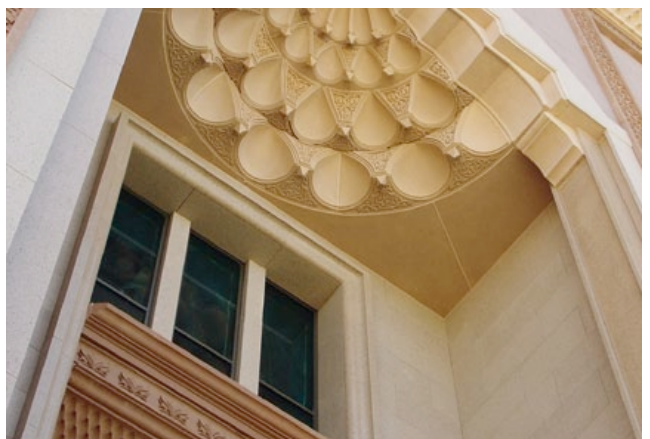
LANXESS
Energizing Chemistry



Arabian patterns provide a unique flair.



Reminiscent of the monumental buildings of the ancient Orient.





Emirates Palace: A hotel from A Thousand and One Nights.

A fairytale castle with five stars

In a part of the world where impressive buildings are not exactly thin on the ground, a hotel building needs to have quite a few special attributes to make it stand out. The Emirates Palace in Abu Dhabi certainly has an awesome number of those.

The five-star hotel is one of the largest in the world and offers a whole range of superlatives. 250,000 cubic metres of concrete coloured with Bayferrox® pigments were used to build the hotel on an area of 243,000 square metres. 20,000 building workers were involved in the construction of the palace. The giant building has a perimeter of 2.5 kilometres, and the 40-metre high archway at the hotel entrance is taller than Berlin's Brandenburg Gate. The inside of the hotel also matches up to these structural superlatives: 102 elevators take the guests to the 302 rooms and 92 suites. The kilometer-long corridors are provided with several thousand signs to prevent the guests from getting lost.



A hotel sets new standards.



“The contrast between modern technology and traditional forms fascinated me!”

*Jeremy Heyes,
Senior Vice President*

Wimberly Allison Tong & Goo

Jeremy Heyes' career is marked by more than 20 years of experience in planning and architecture, both at home in the U.K. and abroad. He combines top design skills with a flair for project management. One of his showcase projects is the Emirates Palace Hotel in Abu Dhabi, now famed as the most expensive and most exclusive hotel in the world. Jeremy Heyes received his Postgraduate Diploma and Bachelor of Arts in Architecture with honors at the Leeds Polytechnic School of Architecture in England.

Arabian tradition meets modern construction engineering

Designed like a fairytale castle, a dream from A Thousand and One Nights. In style the Emirates Palace is reminiscent of the large buildings of the ancient Orient. Integrally coloured concrete combined with marble, granite and sandstone give the building a unique appearance. The colour of the façade matches the various shades of sand in the Arabian desert. Traditional oriental patterns have, with the help of modern technology, become an integral part of the façade.

The architectural highlights are the 114 domes decorated with gold leaf. The highest of them has a diameter of 42 metres, a size matched only by St. Peter's Basilica in Rome.



Pure luxury across an area of 243,000 square metres.

Oriental magnificence built with state-of-the-art technology.



Designed in the colours of the desert.

Natural stone and coloured concrete become one.

In the design and implementation of large buildings like the Emirates Palace Hotel with its perimeter of 2.5 kilometres, both aesthetic demands and economic issues play a crucial role. Concrete, integrally coloured with Bayferrox® pigments, and natural stone form a perfect union in the façade of the Emirates Palace: On an area of 120,000 square metres, decorative, sweeping elements made of glass fiber-reinforced, integrally coloured concrete, have been blended into the flat surface, while natural stone was used to create special highlights, and has also been used in the reception area. The concrete components coloured with Bayferrox® pigments simulate the natural texture and colourfulness of various granite shades such as Salisbury Pink, Royal Red

and Juparana, and thus blend harmoniously with the natural stone. "The Emirates Palace Hotel displays concrete in its optimal form. The use of flexible moulds not only allows a high level of versatility in architectural design, it also ensures economic efficiency," said Dr. Bernd Trompeter, Managing Director of Reckli GmbH. A total of 60 tons of Bayferrox® 920, Bayferrox® 960 and Bayferrox® 130 pigments were used. They were added to the cement slurry to create a monolithic, homogeneous colour effect. Fibrex Co. in Abu Dhabi was responsible for producing the highly decorative prefabricated glass fiber reinforced concrete elements.

Concrete in the colours of the desert.





Arabian ornamentation with 'fairytale' highlights.



Project data

**A building from A Thousand
and One Nights.**



Location

Abu Dhabi

Architecture

Wimberly Allison Tong and Goo (WATG)

Client

Private Board of Directors representing
the Government of Abu Dhabi.

Partners in the project

Fibrex Co.
Reckli GmbH

Construction period

December 2001 to February 2005

Area

243,000 m²

Volume of concrete

250,000 m³

Form of supply

20-25 kg paper sacks

Pigments



Elastic formliners and moulds



Bayferrox® 130



Bayferrox® 920



Bayferrox® 960

For more information contact our LANXESS country representative.

Germany

LANXESS Deutschland GmbH
Business Unit Inorganic Pigments
Rheinuferstraße 7–9
47829 Krefeld
GERMANY
Tel.: +49 2151 88 7741
Fax: +49 2151 88 4133

USA

LANXESS Corporation
Business Unit Inorganic Pigments
111 RIDC Park West Drive
Pittsburgh, PA 15275-1112
USA
Tel.: +1 412 809 2000
Fax: +1 412 809 3599

Singapore

LANXESS Pte. Ltd.
Business Unit Inorganic Pigments
3A International Business Park
#07-10/18 ICON@IBP Tower B
SINGAPORE 609935
Tel.: +65 6725 5828
Fax: +65 6266 5329

Australia

LANXESS Pty. Ltd.
Business Unit Inorganic Pigments
Unit 1, 31 Hill Road
Homebush Bay NSW 2127
AUSTRALIA
Tel.: +61 28748 3910
Fax: +61 28748 3999

Japan

LANXESS K.K.
Business Unit Inorganic Pigments
Marunouchi Kitaguchi Building 23F
1-6-5, Marunouchi, Chiyoda-ku
Tokyo 100-8215
JAPAN
Tel.: +81 3 5293 8017
Fax: +81 3 5219 9776

United Kingdom

LANXESS Ltd.
Colour Works
Lichfield Road
Branston
Burton-on-Trent
Staffordshire, DE14 3WH
UNITED KINGDOM
Tel.: +44 1283 714222
Fax: +44 1283 714201

Brazil

LANXESS Indústria de Produtos
Químicos e Plásticos Ltda.
Av. Maria Coelho de Aguiar, 215
Bloco B - 2º Andar
05804-902 São Paulo
BRAZIL
Tel.: + 55 11 3741 3284
Fax: + 55 11 3741 2676

South Korea

LANXESS Korea Ltd.
Business Unit Inorganic Pigments
395-62, Shindaebang-Dong
Dongjak-gu
Seoul, 156-712
REPUBLIC OF KOREA
Tel.: +82 2 6715 5170
Fax: +82 2 847 3062

Central Eastern Europe

LANXESS Central Eastern
Europe s.r.o.
Stetinova 4
811 06 Bratislava
SLOVAKIA
Tel.: +421 905 719 637
Fax: +421 2 32151624

Spain

Europigments, S.L.
Business Unit Inorganic Pigments
Arquitectura, 27
Polígono Industrial Els Garrofers
08340 Vilassar de Mar
SPAIN
Tel.: +34 93 75407 70
Fax: +34 93 75407 84

China

LANXESS Shanghai Pigments
Co. Ltd.
Business Unit Inorganic Pigments
No. 845, Qi Lian Road
Shanghai, 200331
CHINA
Tel.: +8621 52847860
Fax: +8621 52500337

India

LANXESS India Private Ltd.
Business Unit Inorganic Pigments
Kolshet Road
Thane – 400 607
Maharashtra
INDIA
Tel.: +91 22 2531 1251
Fax: +91 22 2545 5152

France

LANXESS S.A.S.
Inorganic Pigments
Le Doublon A
11, avenue Dubonnet
92407 Courbevoie Cédex
FRANCE
Tel.: +33 (0) 961 35 77 87
Fax: +33 (0)1 30 41 36 90

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LANXESS Deutschland GmbH
Business Unit Inorganic Pigments
Rheinuferstraße 7–9
47829 Krefeld
GERMANY
Fax: +49 2151 88 4133
E-Mail: coloredconcreteworks@lanxess.com
www.lanxess.com
www.bayferrox.de
www.colored-concrete-works.com

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