



COLORED CONCRETE WORKS®

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Case Study

Project:

Ciutat de la Justícia,
Barcelona, Spain

LANXESS
Energizing Chemistry



230,000 square meters of justice.

A city for justice.

The Ciutat de la Justícia (City of Justice) towers like a giant over Barcelona's Gran Via: Nine buildings with up to 14 stories across 230,000 square meters. The largest project to date by star English architect David Chipperfield opened for business on May 2, 2009, seven years after the start of planning. The city is the new home to the justice authorities of Barcelona and the neighboring community of Hospitalet de Llobregat. The buildings, which fit together to form a cohesive, large-format sculpture, include courtrooms, government agencies and offices as well as law offices and restaurants. Concrete integrally colored with Bayferrox® and COLORTHERM® pigments from LANXESS gives this gigantic ensemble a particular visual appeal.



The main entrance to the Ciutat de la Justícia is via a plaza. Office buildings and law offices are located above the ground floor, which is open to the public.



**Still life in integrally
colored concrete.**

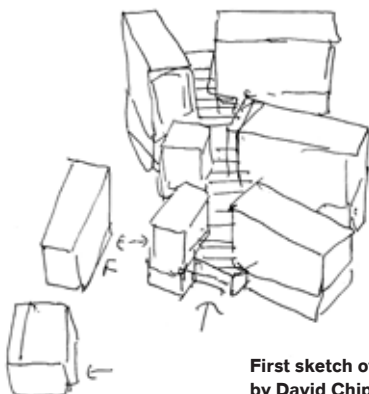




The facades of the nine buildings structure the ensemble and imbue the property with a rhythm all its own.

One requirement for buildings exceeds all others: functionality.

Architects David Chipperfield and his Spanish associate architect Fermin Vázquez stayed true to this motto with their plans for a monumental judicial quarter. For all of the project's functionality, however, a single glance is all that it takes to recognize that this functionality did not come at the expense of a unique signature and an extraordinary esthetic. The facades of the nine buildings are identically structured to create a closed form. The buildings seem almost archaic in their solidity. A clear statement cast in concrete: Justice is here. The integrally colored concrete used for the facades gives each building a certain individuality and visually softens the severe form without weakening it. With the Ciutat de la Justícia, Chipperfield has created an architectural still life of blocks that is both functional and sensational in the truest sense of the word.



First sketch of the megaproject by David Chipperfield



Colored concrete enabled us to plan a building with the character that we sought to achieve.

Sir David Chipperfield

David Chipperfield Architects

Born in 1953, Chipperfield studied architecture at the Kingston School of Art and The Architectural Association in London, England, before working in the offices of renowned architectural greats such as Douglas Stephen, Richard Rogers and Norman Foster. He opened his own firm, David Chipperfield Architects, in London in 1984.

Chipperfield is a guest professor at numerous prestigious universities. Winning numerous prizes and competitions has helped the architect to international fame.

A masterpiece of colorfulness.

The easy way to the right shade.

The architects decided against a coating because integrally colored concrete leaves the material visible rather than covering it up. Another aspect was the enduring high quality. More than 240,000 cubic meters of concrete were colored in a mixer directly on the construction site and poured. This had the advantage of enabling the architects to see immediately on site whether the shade precisely matched the one they had in mind.

Bayferrox® 130, Bayferrox® 960, Bayferrox® 660, Bayferrox® 330, Bayferrox® 920 and COLORTHERM® Green GN pigments were used. Europigments Spain, a LANXESS group company, supplied the pigments in water-soluble paper sacks, which enabled them to be added directly to the concrete mixer. The rapid and precise fine dispersion of the pigment ensured optimal integral coloration of the concrete, which retains its intense coloration even under the plentiful Spanish sunshine, and thus remains maintenance-free.

A four-storey atrium joins the individual functions of the building ensemble.





The striking facades are a visual expression of a distinctive design idea.

Location

Barcelona, Spain

Architecture

David Chipperfield Architects & B720 Arquitectos

Principal

GISA, dpto Justicia (Generalitat de Catalunya)

Project participants

Grupo JG Ingenieros Consultores, Arup (engineering office)

Builder: UTE: FCC, Ferrovial, Ohl, Comapa y Emte (construction company)

Construction period

2002 – 2008

Area

230,000 m²

Amount of concrete

240,000 m³

Pigment supply form

10 kg paper sacks



Bayferrox® 130



Bayferrox® 960



Bayferrox® 660



Bayferrox® 330



Bayferrox® 920



COLORTHERM® Grün GN

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
Poligono 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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