



Spectacular interior design

German pavillon at Expo 2010 Shanghai China



Project: German Pavilion,
EXPO 2010, Shanghai, China

**Architecture and
general planning:** Schmidhuber + Kaindl

**Exhibition and media
design:** milla & partner

**Implementation and
project management:** NÜSSLI

Market segment: Boothbuilding, Art

Product: Makrolon® UV clear 2099
Makrolon® GP clear 099
Makrolon® multi UV 3/16-16
clear 1099
Makrolon® multi UV 3/16-16 clear
4099 no drop

Spectacular interior design

German pavillon at Expo 2010 Shanghai China

Polycarbonate sheets from Bayer MaterialScience combine wide design freedom with low weight. Tailor-made for use in trade fair/exhibition construction and interior design.

A tour of “balancity”, the German pavilion at EXPO 2010 Shanghai China, takes visitors on a journey through a city in balance. The route passes through various areas of the city, including a harbor, a garden and a city square, where visitors will also encounter solid and multiwall sheets made from the polycarbonate Makrolon® from Bayer MaterialScience. “This creative usage of our sheets reflects the extensive design freedom they offer thanks to their easy formability, lighter weight when compared with glass, and their robustness in trade fair/exhibition construction and interior design,” explains Markus Hoschke, who is responsible for the Bayer Sheet skills network in Asia.

Lightweight design, excellent flame retardance

Three-dimensional, curved solid sheets from Bayer Sheet Korea appear as floating “flakes” in the “Harbor”. They symbolize the surface of an area of water that visitors break through from below to reach the harbor. The flakes, which have a synthetically processed surface and are shaped like potato chips, are flexibly interlinked and, with their bluish transparency, reinforce the spectacular effect of the entire space. An area of around 320 square meters has been designed with flakes made from 4.5-millimeter thick solid sheets of Makrolon® UV clear and GP clear grades. The sheets were thermoformed and then fashioned by an artist.

Safety issues also played a key role in the choice of material. The polycarbonate sheets do not produce burning droplets if a fire breaks out. They meet the strict B2 fire safety classification, unlike many comparable products from other suppliers. This was also reaffirmed in fire safety tests commissioned by the EXPO organizers.

Excellent cold-bending properties, simple processing

In the “Garden” area, nine wave-like sails suspended from the ceiling float over the visitors’ heads, offering visual insights into the world of German gardens that are reinforced by images on

the walls. The backlit sails were produced by cold forming multi UV triple-wall sheets (3/16-16) of transparent Makrolon® from Bayer MaterialScience. In a similar way to collages, the sails are lined with canvas or paper and fastened to steel tubular frames attached to steel cables.

The 16-millimeter thick, impact-resistant triple-wall sheets also come into their own in the “City Square”. They have been used to make ten visually striking, backlit images that represent a skyline and frame a large sculpture that serves as a film projection surface. “In addition to their familiar applications in dome construction, stadium roofing and conservatories, Makrolon® multi UV twin-wall sheets are also highly suitable for use in the design of trade fair and exhibition stands. EXPO 2010 Shanghai China provides a prime example of this,” observes Guenther Winnerl, head of marketing at Bayer MaterialScience. Some of the multi-wall sheets are also given a special, longlasting, water-dispersing coating on the side facing the room. This ensures that any condensation becomes an even film of water that can drain off in a controlled process, thereby preventing unwanted droplets of water from forming on the inner side of the sheets, which can affect refraction.

“balancity” shows that that life in a city can be eminently desirable provided the city is in balance. The “Harbor”, “Garden” and “City Square” areas form part of “balancity” at the German pavilion. The term “balancity” is a combination of the elements “balance” and “city”. The theme of the German pavilion therefore fits in perfectly with the motto of EXPO 2010 Shanghai China – “Better City, Better Life”.



Product liability clause: This information and our technical advice - whether verbal, in writing or by way of trials - are given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to verify the information currently provided - especially that contained in our safety data and technical information sheets - and to test products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility. Our products are sold in accordance with the current version of our General Conditions of Sale and Delivery. Makrolon® is a registered trademark of Bayer AG MF0247 e - July 2010



Bayer MaterialScience

Bayer MaterialScience GmbH
Otto-Hesse-Straße 19/T9
64293 Darmstadt, Germany
Tel. +49 6151 1303-0
Fax +49 6151 1303-500

www.bayersheeteurope.com

Picture source: milla & partner