

# QUALITY COLORS.

## Case Study

Inagawa Cemetery, Japan



COLORED CONCRETE WORKS®  
An initiative of LANXESS

# QUALITY WORKS.

**LANXESS**  
Energizing Chemistry



## COLORFUL DEVOTION

The cemetery of Iganawa sits on a steep site in the Hokusetsu Mountain Range of Hyogo prefecture, about 40 kilometers north of Osaka. It is open to all religions – and therefore one of the few places in Japan offering an alternative to the traditional Japanese cremation according to Buddhist rites.

To complete the ensemble of chapel and visitor center British architect Sir David Chipperfield designed a building made of flat concrete structures, arcades and freestanding walls. He stacked the wall panels, following the natural slope, slightly offset one above the other. The new building is conceived as an aggregation of contemplative spaces under a single sloping roof, whose composition is defined by the terraced site. The roof pitch of 12.7 degrees corresponds exactly to the viewing angle from which the visitor can view the sacred cemetery shrine at the high point of the plant.

The spiritual center of this new meeting place is an interdenominational chapel. The room with its transcendent, peaceful atmosphere evolves from the strict monolithic presence of the building in conjunction with the guided incidence of indirectly incident light.







## ITS COLOURING LETS THE BUILDING BLEND IN PERFECTLY WITH THE NATURE AROUND

The contemplative relationship with nature is an integral part of Japanese sepulchral culture. Architect David Chipperfield deliberately opted for a building made of sandblasted concrete elements, as their massive appearance naturally represents immortality.

The pigmentation transfers the material concrete into the realm of the natural and lends the building

a natural, earthy color. This earthy shade of the material takes much of its formal hardness from the building. The open-pored, red-pigmented concrete surface is constantly changing: colorfulness and reflection are changing in interaction with light, weather and the seasons – but also over the years.

The use of inorganic pigments in concrete requires profound technical know-how. Here, LANXESS

played a supporting role for Chipperfield and the contractor.

Based on conceptual suggestions by the architect, the LANXESS experts designed a series of concrete color samples. In the end they were able to develop the perfect desired tone. After a few practical tests, David Chipperfield decided in favor of a bright reddish-brown.

# PIGMENTED CONCRETE GENERATES SUITABLE ATMOSPHERE

The ensemble of buildings at the cemetery is a place of arrival and departure. The building forms the entrance to the area and at the same time offers its space for saying farewell to the deceased.

The monolithic concrete body conveys a sense of tranquility, eternity and protection. The coloring of the material lends the building a natural appearance and allows the complex to merge gently with the context. „Colored concrete can be optimally combined with a wide variety of materials and makes it possible to integrate modern buildings in a wide variety of environments and

natural spaces,“ explains Chipperfield. Moreover, the open-pored, red-brown pigmented concrete surface never appears the same. Colorfulness and reflection change depending on light, weather and the season.

The reception building of Inagawa Cemetery is an outstanding example of how pigmented concrete is able to enrich even the atmosphere of such a sublime environment. A place has been created that is deeply spiritual, and also in terms of its architecture and physique intended for eternity.







## PROJECT FIGURES

### LOCATION

Inagawa Cemetery,  
Japan

### ARCHITECT

David Chipperfield Architects,  
London, Berlin, Milan, Shanghai

### CONSTRUCTION YEAR

2017

### BUILDER-OWNER

Boenfukyukai Foundation, Japan

### AMOUNT OF CONCRETE

1430 m<sup>3</sup>

### AMOUNT OF PIGMENT

12,250 kg

### DELIVERY FORM

Powder

### PIGMENTS



BAYFERROX 4610



# WHAT IS COLORED CONCRETE WORKS®?

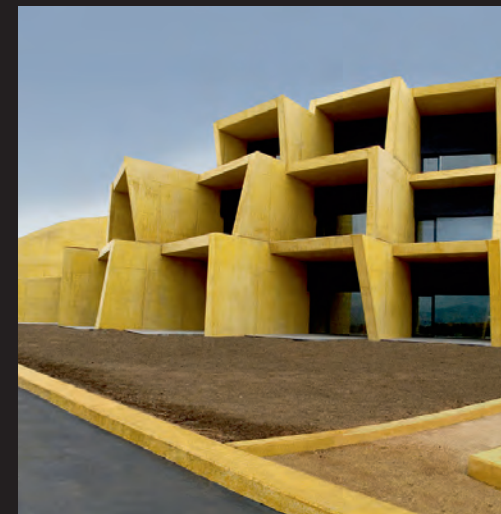
## More publicity for colored concrete.

Colored Concrete Works® is a LANXESS initiative for more color in architecture which aims to present the versatility and aesthetic properties of concrete colored with Bayferrox® pigments to an interested professional audience.

Colored Concrete Works® is designed as a series of case studies documenting the use of colored concrete in international construction projects. It is accompanied by forums and workshops that provide a platform for architects, construction managers and building companies to exchange ideas and discuss the possibilities of coloring concrete with pigments.

**X COLORTHERM®**  
Color for Life.

**X BAYFERROX®**  
Color for Life.



# HOW CAN WE HELP YOUR BUSINESS?

Get in contact with us.



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