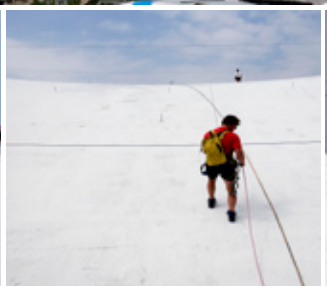
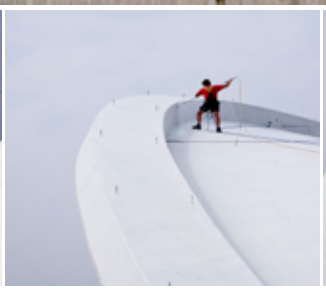
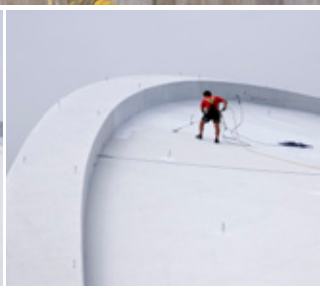
Sika at Work

Exposed Roof Refurbishment Congress Hall / House of World Culture Berlin, Germany

Sikalastic®







Project Description

Congress Hall / House of World Culture (Local Name: Kongresshalle / Haus der Kulturen der Welt / Schwangere Auster) in Berlin's Tiergarten district was designed by Architect Hugh A. Stubbins as the American part of the International Building Exhibition in 1957. The roof of the hall, rising to a height of 18 m, resembled an open oyster shell, therefore christened the "Pregnant Oyster". In front of the hall is a large pool with a sculpture by Henry Moore. In 1980, the southern outer roof and the peripheral tie of the Congress Hall collapsed because of inadequate structural planning and unsatisfactorily executed construction of the outer roofs and, consequently, to corrosion-induced fractures in the tendons bearing the roof arch. From 1984 to 1987, the architects, H.-P. Störl and W.-R. Borchardt redesigned the roof to make it technically safer. In 1989, at the reopening, the Congress Hall was renamed as House of World Culture after reconstruction (25 Mio EUR). Today, the House of World Cultures has become one of the City Symbols of Berlin, and is used for exhibitions, films, music concerts, dance and theater performances by artists from all over the world

Project Requirements

Its extraordinary architecture makes the Congress Hall an unusual type of building. Its symbolic function as a manifesto for the freedom of thought and expression is reflected in the architecture, and the most outstanding feature of the building is its remarkable curved roof.
Over time there had been a constant increase in the amount and extent of damage and thus in the cost of repairs. As a result it was clear that an overhaul was required. This overhaul of the technical infrastructure took place from summer 2006 until spring 2007; during this time the building was closed.
The overhaul of the 3.400 m² roof included overcoating the existing waterproofing. The requirements of the new coating were: a valid ETA with the classifications P3, TL3, TH3, the chemical basis of a one component PU, and a rollable and fast application. The coverage rate was defined as 300g/m2.

Sika Solution

The **Sikalastic® 445 RAL 9010** and **Sikalastic® 810** fulfilled all the requirements and were chosen as the most appropriate product for the Roof refurbishment. Prior to the installation of the existing coat was removed where necessary. **Sikalastic®** 445was then applied by a special roller with automatic material feed, which allowed a high application speed. The difficult and exciting thing in the application was also the safty matter of the applicators. When looking at the pictures above, you would see that they had to be equiped like mountain climbers.
The work was finished in time for the 50th anniversary of the Congress Hall in August 2007, when the building was reopened.

Project Participants

Owner: Federal Government, Berlin
Contractor: Roofing Account Manager Niels-Ole Iversen
Sika Organisation: Sika Deutschland GmbH (Germany)
Refurbihsment period: 2007
Application time: 4 Weeks

Sika Services AG
Corporate Business Unit Contractors
Industriestrasse 26
CH-6060 Sarnen
Switzerland
Phone +41 58 436 79 66
Fax +41 58 436 76 60
www.sika.com

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