



Dow Performance Silicones

DOWSIL™ Products Used on a Sea-based Hotel



Case Study: Burj Al Arab Hotel



City and Country

Dubai, United Arab Emirates

Products*

- DOWSIL™ 993 Structural Glazing Sealant
- DOWSIL™ 3793 Insulating Glass Sealant
- DOWSIL™ 795 Silicone Building Sealant
- DOWSIL™ Firestop 400 Sealant

Key Participant

- **Architect**
WS Atkins and Partners

*Prior to February 2018, products listed were branded as Dow Corning.

The Project

Probably the tallest sea-based hotel in the world at a height of 321 metres, the Burj Al Arab Hotel is a landmark icon on the Dubai skyline. An artificial island was created to support this architectural and technical marvel. Inspired by the wind-filled sails of an Arab trading ship, the sail facade features a unique double-skinned Teflon-coated woven glass fibre screen.

The DOWSIL™ product range was chosen to provide the reliable solutions such as a unique construction project required, especially under these particular weather conditions. The facade was sealed with DOWSIL™ 993 Structural Glazing Sealant. The very large aquarium in the foyer was sealed with DOWSIL™ 795 Silicone Building Sealant, while DOWSIL™ FIRESTOP 400 Sealant was used internally.

The Project

An island was needed to build what is probably the world's tallest sea-based hotel. There were no islands off the Jumerieh coast, south of Dubai, so it was decided to create one.

WS Atkins and Partners have thus signed an architectural and engineering marvel, the Burj Al Arab Hotel in Dubai. At 321 metres high, Burj Al Arab is one of the world's tallest buildings. The design was inspired by the wind-filled sails of an Arab trading dhow ship. With its helipad on the 28th floor and a 1,000 square metre restaurant seemingly suspended in mid air, this hotel has already become a landmark and icon on the Dubai skyline.

The 120 metre long, triangular artificial island was constructed by driving 260 piles 45 metres into the sea bed, a necessity since the wind load on the 28th floor can be as high as 6100 Pa.

The finest materials have been sourced from around the world to support this architectural and technical challenge. The sail facade features a double-skinned Teflon-coated woven glass fibre screen. It is the first time such technology has been used vertically in this form and extent in any building worldwide.

The Products

The DOWSIL™ product range was once again chosen to provide the reliable solutions



such a unique construction project required, especially under these particular weather conditions. The facade was sealed with DOWSIL™ 993 Structural Glazing Sealant and DOWSIL™ 3793 Insulating Glass Sealant. The very large aquarium in the foyer was sealed with DOWSIL™ 795 Silicone Building Sealant. DOWSIL™ FIRESTOP 400 Sealant was used internally.

Additionally, the completion of the project required Dow's co-operation with companies in the UK, US, Japan and Dubai. Dow successfully met the challenge of delivering solid solutions for imaginative construction projects when operating on a global basis.

Combining the latest technological trends and working globally, Dow has sealed what is considered a symbol of

Arabian hospitality. The Burj Al Arab Hotel symbolises the very essence of Dubai, embracing the best of the new alongside traditions of the past.

Contact Us

Dow is collaborating with industry professionals around the world to develop solutions to improve the energy efficiency of buildings for a more comfortable environment. Learn more about Dow's full range of High Performance Building solutions by visiting us online at **consumer.dow.com/construction**.

Dow has sales offices, manufacturing sites and science and technology laboratories around the globe. Find local contact information at **consumer.dow.com/ContactUs**.



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