

Case Study Burj Al Arab Hotel, Dubai

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 Dow Corning 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 Dow Corning® 993, Dow Corning® 984 and Dow Corning® Q3-3793 silicone sealants. The very large aquarium in the foyer was sealed with Dow Corning® 795. Firestop 400 was used internally.

Additionally, the completion of the project required Dow Corning's co-operation with companies in the UK, US, Japan and Dubai. Dow Corning 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 Corning has sealed what is considered as 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.



Building:	Burj Al Arab Hotel
City:	Dubai
Country:	United Arab Emirates
Product:	Dow Corning® 993 Dow Corning® 984 Dow Corning® Q3-3793 Dow Corning® 795 Firestop 400
Architect:	WS Atkins and Partners

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 Dow Corning product range was chosen to provide the reliable solutions such a unique construction project required, especially under these particular weather conditions. The facade was sealed with Dow Corning 993, Dow Corning 984 and Dow Corning Q3-3793 silicone sealants. The very large aquarium in the foyer was sealed with Dow Corning 795, while Firestop 400 was used internally.**