Innovative twins

Al Bahar Towers, Abu Dhabi, United Arab Emirates

Al Bahar Towers, Abu Dhabi (UAE)

Building owner: Abu Dhabi Investment Council (ADIC) (UAE)
Architects: Aedas, London (UK)
Completed: 11/2012
Plumber: BK Gulf LLC, Dubai (UAE)

Geberit know-how
Duofix WC elements
Actuator plates Samba, Bolero and Sigma20
Electronic WC flush controls Mambo
Electronic urinal flush controls Mambo

→ **Green building: nominated for LEED Silver certification**

Haitham El Maghraby, Technical Advisor, Geberit Golf Region

"Geberit provides interior designers, architects and planners in the Gulf Region with a tight support network of technical consultants at each stage of a building project, from delivery right through to construction on the building site. For the prestigious Al Bahar Towers project, Geberit products met all the requirements for LEED certification and in doing so played their part in creating this green building."

↑ The translucent elements cover the towers like honeycombs.

The Al Bahar Towers in Abu Dhabi are not only remarkable due to their unusual facade – the twin towers also distinguish themselves through their innovative, sustainable design. The 145-meter-high towers were designed by the London-based architecture firm Aedas. One of the 25-story towers is home to the headquarters of the Abu Dhabi Investment Council (ADIC), which was also the building owner for this project. The head office of Al Hilal Bank is located in the second tower.

The greatest challenge for the architects was designing a sustainable building that is also compatible with the difficult climatic conditions. They achieved this by means of a cream-colored outer skin made of 2,099 translucent elements that cover the two towers like honeycombs and serve as a computer-controlled shading screen. These elements are mounted on the west, east and south side of the towers and automatically open and close as the sun moves over their surface. With its design, Aedas was inspired by the traditional Arabian latticework known as "mashrabiya", which was mounted on the facade of houses to protect the private interior from public view. According to the architects, this dynamic solution has resulted in a reduction in energy consumption in the towers of around 50 percent compared with conventional buildings. Furthermore, photovoltaic cells are installed on the south-facing roofs of each tower, generating an additional five or so percent of the required energy. ←