

ADVANCED DRYLINING TECHNOLOGY PROVIDES MORE DESIGN FREEDOM

Shanghai Lingang Warehouse, Shanghai, China



Lingang Warehouse C06-01 used a completely different language in the façade design. As two-story high storage facilities, it was built with the four extremely large building volumes. What emphasizes the industrial character of the project is the concave and curved cement panel elements, which applied AQUAPANEL® Cement Board Outdoor in the façade.

Shanghai Lingang Warehouse C06-01

Shanghai, China

Architect: gmp

Local Design Institute:

Shanghai Urban Architectural Design

Completion: 2021

Products:

AQUAPANEL® Cement Board Outdoor

AQUAPANEL® System accessories

Type of building:

Logistics Warehouse

Application area:

35,000 m² Façade

SHANGHAI LINGANG WAREHOUSE C06-01

As one of several large-scale industrial quarters in Lingang Industry Area, Lingang Warehouse C06-01 plays a decisive role in establishing a company's identity-or even that of an entire industrial area. With no requirements for daylighting, only openings at regular distances for access by fire brigade was requested. Given by the access requirements, the design forms its specific rhythm and utilizes the concave, curved cement panel elements that reminisce silos. In contrast to the sky, sharp shadows were produced on the bright, smooth concrete plaster surfaces, which enhances the plasticity of the façade.

The architect at gmp was particularly concerned with how to create the monolithic design of smooth exterior surface with no visible or open joints. To guarantee that there wouldn't be any cracks or splits in the appearance, even in the distant future, it is critical to select the right building material for the exterior wall. Considering these and other stringent requirements, a proven system solution was found for the jointless exterior walls, using the AQUAPANEL® Cement Board Outdoor as a panel material for the exterior façade.

Designed as ideal for outdoor applications, AQUAPANEL® Cement Board Outdoor is made of inorganic components and 100% resistant to moisture, water and mould. The unique structure of cement board offers even more design freedom for the innovative curved walls, with the bending radius of up to three metres (full board) and one metre (300 mm strips). As expansion joints only need to be installed every 15 metres, this allows for a continuous area of up to 250 m² that still tolerates expansion and contraction due to weathering, which minimises disruption to the appearance of the building. It was processed with the joint filler and joint tape that are part of the system delivering the required appearance.

During the project, Knauf AQUAPANEL® team supplied the architect, contractor and installer with technical details as well as to ensure everything was installed using the correct procedures. Thanks to the fact the AQUAPANEL® Cement Board is lightweight drywall system, without pre-processing, the installation went very quickly and smoothly.

