

Louvre Abu Dhabi (United Arab Emirates)



Louvre Abu Dhabi's exterior with Abu Dhabi's skyline (night)
© Louvre Abu Dhabi, Photography: Mohamed Som

Project description

The Louvre Abu Dhabi Museum, an affiliate of the renowned Louvre Museum in Paris, is located on the Saadiyat Island. In November 2017 the museum opened its doors to the public after ten years of planning and construction time. Designed by the French architect Jean Nouvel, the museum building is a fitting venue for the world-class art collections to be hosted in the years to come.

The building's most striking feature is its roof, a beautifully designed dome with a diameter of 180 m and a weight of approximately 8000 tonnes. The web-patterned dome allows the sun to filter through, much like rays of sunlight passing through palm branches in an oasis.

mageba scope

mageba supplied four large RESTON®PENDULUM bearings (type Mono) to support the museum's enormous roof. These bearings are designed to carry vertical loads of up to 33,000 kN each and to allow horizontal sliding movements of up to +/- 315 mm.

The contract to supply the bearings included a provision for full-scale testing to be carried out prior to the use of the bearings in the structure. This testing was successfully completed in 2014, at the SRMD testing facility of the University of California, San Diego – one of the world's foremost institutes for testing of this kind.

Highlights & facts

mageba products:

Type: RESTON®PENDULUM seismic isolators (type Mono) for loads of up to 33,000 kN

Testing: Caltrans SRMD, USA

Installation: 2015

Structure:

City: Abu Dhabi

Country: United Arab Emirates

Type: Art museum

Completed: 2017

Roof span: 180 m

Architect: Jean Nouvel

Engineer: Buro Happold

The museum was built in Abu Dhabi, the largest of the seven United Arab Emirates



Testing of an isolator at the SRMD testing facility of the University of California, San Diego



A RESTON®PENDULUM bearing (type Mono) as fabricated, showing its spherical sliding surfaces

