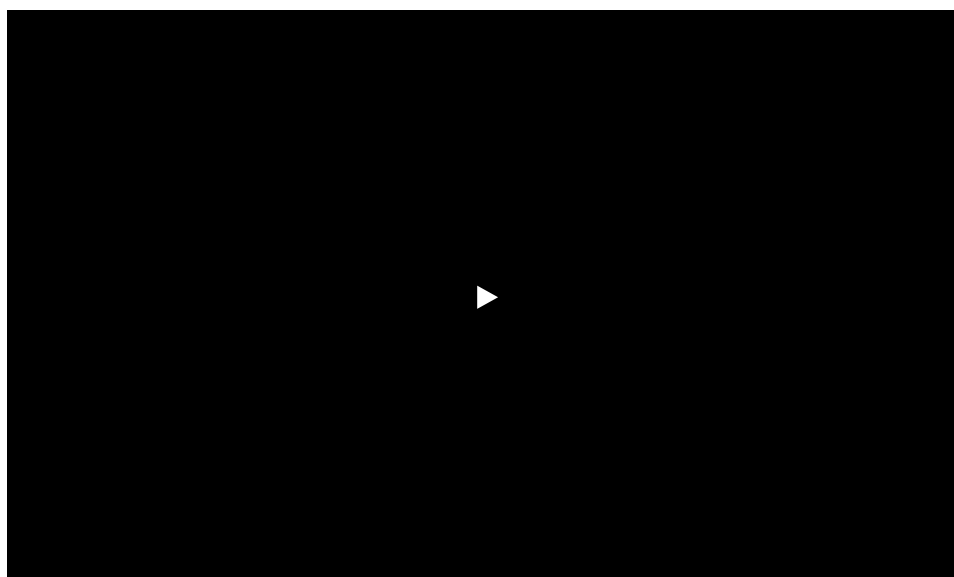


## Unique steel structures: Louvre Abu Dhabi

The product of architect Jean Nouvel's unique vision, Louvre Abu Dhabi is a gem that adorns a new urban quarter of the UAE's capital city. This building is a symphony in steel, concrete, water and the subtle play of reflected light.



Its design was inspired by the region's rich architectural traditions and the museum's unique location at the point where the Arabian sky meets the sands of Saadiyat Island and the waters of the Persian Gulf.



Now considered one of the modern urban wonders of the world, Louvre Abu Dhabi is not only the Arab world's first universal museum, but a powerful symbol of the UAE's ambition and achievement. This architectural marvel cost approximately EUR600 million to build, while the rights to use the Louvre name for 30 years cost an additional US\$550 million. Louvre Abu Dhabi is beautiful from both the outside and the inside, where it exhibits the original of Leonardo da Vinci's *Salvator Mundi*. The masterpiece was purchased for the museum in 2017 for a record price of US\$450.3 million.



Impressive? Then let's take a deeper look inside.

### **A floating dome of light and shadow**

The centrepiece of Jean Nouvel's vision is a giant silver dome that seems to float over the museum. Despite its featherlight looks, the dome weighs around 7,500 tonnes, like the

[Eiffel Tower in Paris](#)

. The dome's base is 180 metres in diameter.

To build the dome, 85 super-sized steel elements each weighing 50-70 tonnes were put in place. They initially rested on 120 temporary support towers and were later braced together using steel joints. When the construction work was completed, the dome was raised off the temporary pillars and lowered onto four permanent ones. Nouvel's dome is a complex geometric structure of 7,850 stars, the largest of which measures 13 metres in diameter and weighs 1.3 tonnes.



These stars are repeated in various sizes and angles to form eight different layers. The four outer layers are made of stainless steel and the four inner layers are made of aluminium.

As the sun passes above, its light filters through the perforations in the dome to create an enchanting effect within the museum, known as the 'rain of light'. This tribute to nature is inspired by the palm trees of Abu Dhabi. Their leaves filter and soften the bright sunlight from above to project a dappled pattern on the ground.



### A seaside urban museum

According to Jean Nouvel, the Louvre Abu Dhabi is a welcoming space that serenely combines light and shadow, reflection and calm. It embodies the country, its history and geography without being a simple interpretation.



Louvre Abu Dhabi is surrounded by water, allowing visitors to arrive by land or sea. Just like wandering the narrow streets of an Arabian medina, visitors can explore the 55 buildings scattered on the territory of 58,000 square meters, 23 of which are galleries. They are architecturally inspired by the low-rise houses of the region.



On the walking paths encircling the museum, visitors can relax, think and discuss the artwork while enjoying the sun, sea, art and architecture.

### Natural cooling

The dome is both beautiful and environmentally friendly, as it reduces the energy consumption in the buildings below. The structure protects the open area from the scorching sun. Walking between the buildings, tourists can bathe in the rain of light.



### Microclimate

Along with the aesthetic dimension, Louvre Abu Dhabi is LEED Silver certified and was awarded an Estidama 3 Pearl Design and Construction Rating.

The museum has a very comfortable microclimate. It combines passive cooling, water and energy saving solutions with highly efficient HVAC, lighting and plumbing systems.

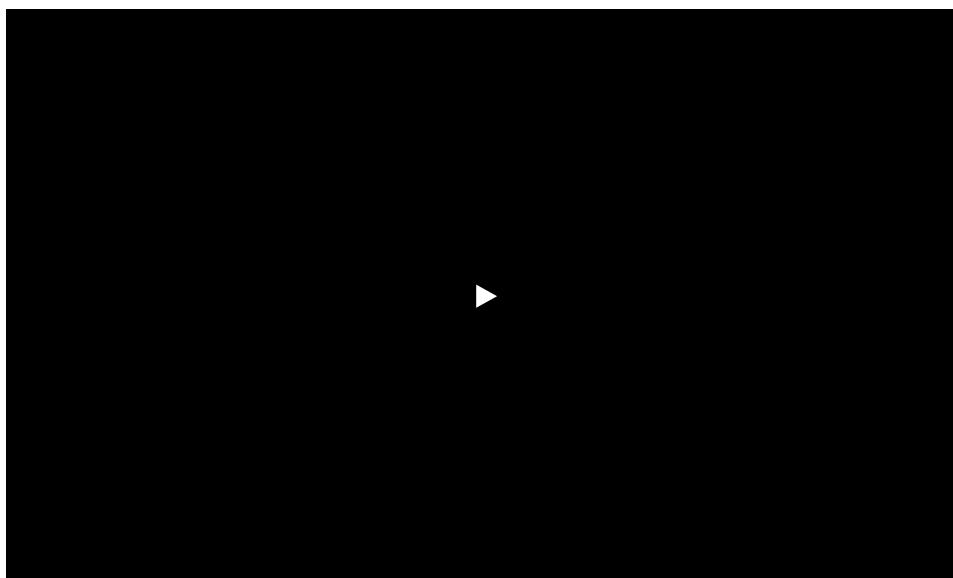


The laced design of the dome lets in daylight without excessive heat or wind, while the stone floor and wall cladding keep the building cool for longer in hot afternoons.

The area around the museum is home to NYU Abu Dhabi's campus, which covers 10 square miles and features 30 hotels, three marinas, 8,000 villas and 38,000 houses along a 15 kilometre coastline.



The spectacular Louvre Abu Dhabi is the first major building constructed as part of one of the most ambitious cultural plans ever undertaken. This is a must-see destination.



\*Foto <https://www.louvreabudhabi.ae/>

<https://metinvestholding.com/en/media/news/unikalnie-sooruzheniya-iz-stali-luvr-abu-dabi>