

Stavros Niarchos Center (Greece)

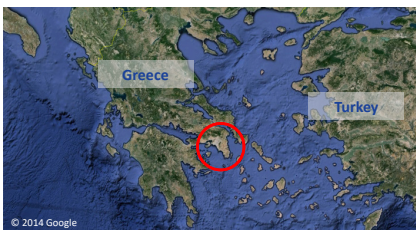


Project description

The Stavros Niarchos Foundation Cultural Center (SNFCC) in Athens is a multifunctional arts, education and recreation complex. It includes, within its 170,000 m² park, new state-of-the-art facilities for the National Library of Greece and the Greek National Opera.

The buildings were designed by Renzo Piano, the internationally acclaimed architect who achieved worldwide fame in the 1970s with the Centre Georges Pompidou in Paris. With a budget of €566 million, the SNFCC is one of the largest construction projects in recent Greek history.

The SNFCC is located 4.5 km south of the centre of Athens, Greece



mageba scope

In order to ensure that the building structure can withstand even a severe earthquake of the type Athens has known for thousands of years, the buildings of the National Library of Greece and the Greek National Opera are built on 323 RESTON®PENDULUM Curved Surface Sliders. The 323 seismic isolators allow dynamic movements of +/- 350 mm and carry loads of up to 70,000 kN per unit.

A solar collector roof canopy with an area of 10,000 m² is also equipped with 60 RESTON®SA shock absorbers and 120 RESTON®SP spring devices to resist the strong wind forces arising. All these devices regulate the connections to the 30 column heads that hold the roof, damping all vertical vibrations.

A ROBO®CONTROL structural health monitoring (SHM) system is also linked to all damper and spring devices.

The RESTON®PENDULUM isolators allow large movements and carry loads of up to 70,000 kN



Highlights & facts

mageba products:

Type: RESTON®PENDULUM Curved Surface Sliders
RESTON®SA shock absorbers
RESTON®SP elastic spring devices
ROBO®CONTROL SHM

Installation: 2013–2015

Structure:

City: Athens
Country: Greece
Completed: 2016
Type: Cultural centre
Owner: Stavros Niarchos Foundation (to be donated to Greek state)
Contractor: Impregilo-TERNA JV
Designer: PENELIS SA / EXPEDITION / OMETE

Testing of one set of four RESTON®SA shock absorbers, arranged as used in roof canopy

