Muisne Hospital (Ecuador)

Project description

Muisne Hospital in Ecuador's Esmeraldas province is currently being built as part of the reconstruction of the town of Muisne following a destructive earthquake in April of 2016. It will provide the community with a wide range of medical services, including general medicine, emergency treatment, physiotherapy, rehabilitation and dentistry, In order to ensure that the hospital will continue to fulfil its important function when it is most needed - in the aftermath of a major earthquake - the new hospital is being built to withstand future seismic events, using modern seismic isolation techniques and products.

mageba scope

The hospital's main structure is supported on a number of special bearings which isolate it at basement level from the violent ground movements that may occur during an earthquake. The RESTON®PENDULUM isolator (also known as a curved surface slider) is based on the functional principle of a pendulum. It allows a structure to become horizontally displaced (and at the same time, lifted) during an earthquake, with seismic energy being dissipated by friction. 65 RESTON®PENDULUM isolators (of the type DUPLO, which features two primary curved sliding surfaces) were supplied by mageba and installed under mageba's supervision in 2017. The isolators are designed for vertical loads of 750 kN and seismic movements of +/– 400 mm.

Highlights & Facts

mageba Products:

Type:	RESTON®PENDULUM seismic isolators
Features:	65 units
Installation:	2017

Structure:

City:	Muisne
Country:	Ecuador
Type:	Hospital
Completion:	2018
Contractor:	Arroyo & Arroyo Constructores
Engineer:	Sismica Ingenieros Consultores

The new hospital is located in Muisne on Ecuador's Pacific coast

Lifting into position of a RESTON®PENDULUM seismic isolator during the construction of Muisne Hospital

Precise positioning and levelling of a RESTON®PENDULUM seismic isolator

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