# Lerma Building – Telmex (Mexico)



## **Project description**

Telmex, the largest telephone company in Mexico, owns several buildings in Mexico City. One of these buildings is currently obsolete due to the new seismic specifications in the city. The Lerma Building is a 17-floor structure including 4 parking levels, 12 office floors and 1 penthouse. The building's dimensions is 25m x 15.3 m with an area per floor plan of 393 m². The high risk of damaged in a highly likely earthquake, motivated the development of a retrofitting plan. After a detail evaluation of the options, it was decided to add dampers in different levels in order to improve the dynamic response.

### mageba scope

To improve the seismic response of the building, the engineers in charge of the seismic retrofitting studied multiple configurations of dampers, evaluating variations of loads, displacements and number of devices. After a detailed analysis of several configurations, it was decided to install 76 mageba RESTON®SA Shock Absorbers in strategic location along the building.

Two types of SA were chosen, one for 800 kN of maximum load (50 units), and another one for 600 kN (26 units). The displacement capacity of both types is 50 mm.

#### **Highlights & facts**

#### mageba products:

Type: RESTON®SA Shock

Absorber (800 and 600 kN)

Installation: 2014

## Structure:

City: Mexico City
Country: Mexico
Completed: 2014

Type: Office Building

Contractor: CTBR SA de CV (Telmex)

The structure is located in Mexico City, Mexico



Typical RESTON®SA Shock Absorber similar to the ones to be installed in Lerma Building



RESTON®SA Shock Absorber ready to be shipped for installation on a building



