High-rise building Horw (Switzerland)

Project description

The Horw high-rise building in the Canton of Lucerne is modern new building with apartments, commercial space and a parking hall in skeleton construction, with the exterior walls designed as non-load-bearing walls.

Typical for this type of construction is that the walls, however, must take all horizontal loads such as those caused by wind. As a result it was necessary to support the wall on both ends and also from top by shear pins which were distributed unevenly corresponding to the load distribution.

The shear pin must have a high load-bearing capacity at a small diameter and fit into the recesses of the bricks.

mageba scope

For this project mageba supplied more than 1,000 unites of VIBRAX®STAIRTOP SL shear pin with plastic installation sleeves.

The sleeves of the vibration-absorbing retaining pins were installed in a reinforced brick masonry. By using the appropriate steel grade of the pin, the required static load capacity could be achieved and also proved.

An advantage of this construction is that no change of material on the wall surface, which would require additional, expensive measures, is required, which makes this system very economical to use.

Highlights & Facts

mageba Products:

Type:	VIBRAX®STAIRTOP SL shear pin
Installation:	2018

Structure:

City:	Horw
Country:	Switzerland
Type:	High-rise building
Built:	2018
Contractor:	Estermann AG
Engineer:	Schubiger AG Luzern

The building is located in Horw, Switzerland

VIBRAX®STAIRTOP SL shear pin built into the brick before bricklaying

A brick with a shear pin built into the masonry before concreting

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