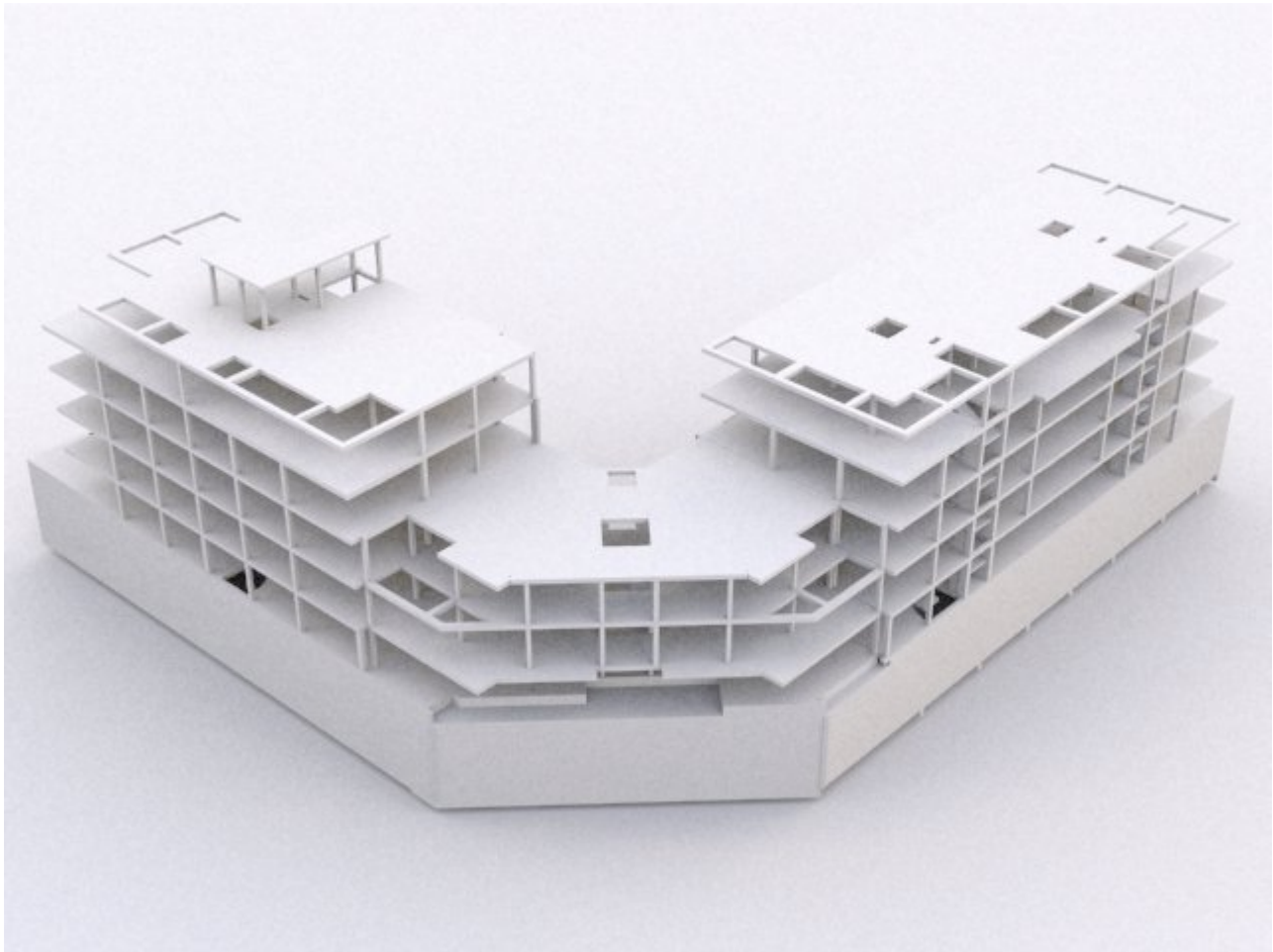


FORQUES. Joint applicable in new construction and renovation tha

New joint between slabs and walls, easy to install, which avoids stress transmission between structural elements and interior walls



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Technological Offers type

[Technological solutions](#)

Research and innovation areas

- [Industry, Materials and Circular Economy](#)

ODS



Available from: 2020

Where?

Building Monitoring and Technological Innovation (MITE) Maritime and Ports Engineering Research Group

Keywords: | [applicable gasket](#) | [new construction](#) | [rehabilitation](#)

Brief description of the technology solution and the added value it provides

Researchers from the Technical University of Madrid (UPM) have developed a board that solves the encounter between slabs and walls, designed to prevent the stress transmission between such components, essentially due to slabs' deformations. This solution, valid for walls and floors of every kind and nature, will allow to visually detect the correct positioning of the joint between the wall and the upper slab. In addition, it prevents the appearance of fissures and cracks in walls due to excessive deflection of slabs.

Description of the technological base

The solution consists of a device designed to solve the joint that occurs in the encounter between the walls and slabs in buildings. The system proposed does not allow transmitting the slab deformation to the interior walls. This joint is placed during the wall construction, in its encounter with the top slab.

It is a prefabricated element easy to carry and handle.

"Our solution will reduce the transmission of forces between the slabs and interior walls, both in new construction and renovation"

Market demands

Construction

- Concern in the construction sector due to the deformation of increasingly flexible structural elements.
- In recent years, over 30% of building slabs have led to excessive deformation problems (Cercha nº 73/2004)
- The main claim to building insurance companies refers to interior walls damage (Cercha nº 73/2004)

"The solution developed avoids the appearance of cracks and fissures in walls due to excessive deflection of slabs"

Competitive advantages

- Valid for both new construction and renovation.
- Effective for walls and slabs of every kind and nature.
- Prefabricated element, easy to carry and handle.
- Avoids transmitting vertical loads from slabs to walls, preventing damage to the latter.
- Enables to visually check the correct construction of the wall.
- Allows to visually detect, during construction, the correct positioning of the joint between the wall and the upper slab. It decreases the risk of future problems and associated costs.
- Avoids the appearance of fissures and cracks in walls due to excessive deflection of slabs, resulting in cost savings.
- Avoids force transmission to the partition of indoor plants.
- Allows creating a joint between a deformed slab when renovating.

Previous references

- Extensive research activities and collaboration with industry.
- Research group oriented to technological innovation and implementation of patents.

Intellectual property

- Patent granted in Spain ES2398273

Development stage

- Concept
- R&D

- Lab-Prototype
- **Industrial Prototype**
- Production

Contact

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