

# Researchers design a collective protection system for building works on sloping work surfaces

September 6 2013

---



Collective protection system.

Researchers from the University of Alicante's Department of Civil Engineering, have developed an innovative protection system for building works, suitable for use on the edges of the surfaces with a slope greater than  $10^\circ$ , such as decks and roofs.

The system allows to properly retain a would-be injured person, avoiding his/her possible impact against the system racks and also to prevent the fall of materials or objects. It can be easily installed with great flexibility to adapt to the characteristics of any building surface.

The main advantage of the technology is that it provides a simple laboratory-proven solution for the problem of impacts against the hard parts of the system with falls in building works with sloping surfaces.

"Security in such areas was not completely resolved so far, since the usual railings could protect against the fall in height but this exposed the injured person to injure him or herself even more when sliding and impact against the rail fasteners. This drawback has been overcome, adapting perfectly to the UNE-EN 13374 for Type B and C rails, without having to develop a complex system", [lecturer](#) Ramón Irles Más, the person responsible for the research explains.

This protection system is robust and allows both the injured and the [construction materials](#) or other objects to be held back with a [safety net](#), with low cost and easy installation. "It requires no equipment or skilled labour for installation, and it is completely modular so they can expand and adapt to the needs of each work", Ramón Irles Más adds.

The technology is fully developed and there are different [prototypes](#) of

protective barriers. For validation, we collaborated with the Technological Institute of Construction (AIDICO) and companies. Currently, the technology is available to any business or organization interested in selling, construction and distribution.

Provided by Asociacion RUVID

Citation: Researchers design a collective protection system for building works on sloping work surfaces (2013, September 6) retrieved 11 May 2024 from <https://phys.org/news/2013-09-sloping-surfaces.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.