# Safe security in a disaster



Wall-climbing robot on a bumpy mortar surface wall

## **Secured Elevation Devices for Construction Gondolas**

#### Accidents happen everywhere

Construction gondolas for high-rise work can violently shake due to sudden winds or earthquakes. This is the cause of numerous accidents worldwide, and threatens the safety of construction workers. Up until now, there was no simple way to secure a construction gondola to the side of a building when ascending and descending.

Our newly developed gondola safety equipment can easily attach to existing gondolas, and the gondola stays attached to the side of the building even when moving vertically. Vertical movement becomes smooth, and swinging action caused by natural disasters or regular work is prevented.

This small-sized, light, and portable device easily attaches to the gondola, increasing safety, work efficiency, and sense of security, and reduces the stress that comes with working in high places.



A gondola strikes a building after being violently blown by the wind in Denver, Colorado (2005/12/01 NHK News).

### **Features**

- Creates a safe, secure, and stable work environment by preventing the construction gondola from swinging.
- Increases workability by maintaining a set distance between the gondola and the side of the building.
- Easily attach objects to the gondola for carrying purposes. Also possible to attach multiple devices as necessary.
- Excellent handling; can go over non-flat surfaces.
- Possible to go up not only glass, concrete or metal walls, but also bumpy surfaces like mortar or tile

Secured elevation device for a construction gondola



## Sophisticated Suction pads for the safe use of construction gondolas

We have developed a new suction pad to safely run construction gondolas up buildings. This pad has excellent suction abilities, even to highly uneven surfaces

Suction pad used by a secured gondola elevation device on non-flat wall surfaces



## **Application and Effects**

- 1. Can be used on buildings that can't accommodate a gondola guide rail, as well as both new and existing gondolas.
- 2. Also possible to use with gondolas for various construction uses, not just buildings
- 3. Reduces swinging during work and vertical motion, increasing safety and work efficiency, and reducing stress.

### **Specifications**

Size	350mm wide x 440mm long x 180mm high
Unit weight	Less than 10kg
Applicable surfaces	Glass, concrete, mortar, tile, metal, etc.
Required removal force	100kgf
Power required for suction pump	100V or 200/220V

Note: specifications are subject to change

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