

# Buildings Systems



1 Elevator car operating panel with vertical LCD indicator and emergency display in four languages

## 1 New Optional Specification for Standard Elevator

To expand its product range, Hitachi is now offering an elevator car operating panel with a vertical liquid crystal display (LCD) indicator as an option on its Hitachi standard elevator. The elevator car operating panel has received particularly positive feedback from customers among the specifications of its HF-1, a new-generation elevator, designed based on the “HUMAN FRIENDLY” business concept.

The design of the elevator car operating panel features a smooth stainless-steel surround frame with black and white highlights and a glossy surface finish. The vertical LCD indicator smoothly tracks the current car location to provide passengers with an intuitive indication of which floor they are currently on. The buttons use white text on the black background, with the characters embossed to allow for tactile reading. User comfort during elevator travel is also enhanced by the use of notification sounds that are easy on the ear.

“Four-language display function during an emergency” is a standard function. The function displays to inform passengers how to respond in the event of an earthquake, fire, or other emergency in four languages, alternating between Japanese, English, Chinese (both simplified and traditional) and Korean.

(Hitachi Building Systems Co., Ltd.)

## 2 Escalator with Soft-stop Function for Power Failures

Hitachi has developed an escalator that makes it less likely that passengers will stumble or fall over when a power failure occurs, by bringing it smoothly to a stop instead of halting abruptly. Escalators with this soft-stop function were supplied to the Public Interest Incorporated Foundation of the Nippon Life Saiseikai Foundation Nippon Life Hospital opened in April 2018.

The escalator slows down gradually by an inverter, and applies an electro-magnetic brake to make a complete stop when it reaches close to zero speed.

The system continually monitors the escalator usage in order to ensure regeneration during a power failure and to keep the optimal deceleration rate for passengers regardless of the number of passengers or direction of travel.

In the future, Hitachi will continue supplying escalators designed with safety, security, and comfort in response to customer needs.

(Hitachi Building Systems Co., Ltd.)



2 Nippon Life Hospital (top) and supplied escalators (bottom)

## 3 Firefighters Elevator without Machine Room

Hitachi has commenced sale of firefighters elevators that do not require a machine room to provide greater flexibility in the architectural layout of high-rise buildings.

Under a June 2017 directive from the Ministry of Land, Infrastructure, Transport and Tourism, it is permitted for traction machines and control panels to be installed below the floor level of the top-most floor, including in the case of firefighters elevators, provided it is given the required level of waterproofing (IPX2 or better). In response, Hitachi has developed a firefighters elevator without machine room that satisfies the waterproofing requirement, incorporating measures such as placing protective covers over the traction machine and control panel.

By eliminating the need of a machine room at the top of the elevator shaft, architectural designers can benefit from greater flexibility in the building layout.

The elevators are also equipped with some features that provide a comfortable and pleasant ride in normal operation. This firefighters elevator comes with an 8.4-inch color LCD indicator. A variable-speed drive system, which increases the rated speed depending on how many passengers are in the car, is available as an option.

(Hitachi Building Systems Co., Ltd.)



3 Interior design of firefighters elevator without machine room (left) and elevator entrance design (right)