

Caring for you, and making you feel comfortable.

# HUMAN FRIENDLY

What we are aiming is to fill a building with safe and comfortable products and services, and to make a town even more pleasant for all the people who live, work and visit there. Always caring for you. Always getting close to you. HUMAN FRIENDLY is the business concept conveying our thoughts.

Hitachi, Ltd.

Building Systems Business Unit

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**HITACHI**  
Inspire the Next

# MACHINE ROOM-LESS ELEVATOR

Model OUG Series ON1



Caring for you, and making you feel comfortable.

# HUMAN FRIENDLY

# Creating a New History

Hitachi Group is active in a wide range of business sectors. From the technology and experience built up over many years, come the synergies that feed new innovation.

Hitachi has been developing and manufacturing elevators and escalators since 1924.

As social demands on elevators change over time, Hitachi's machine room-less elevator model OUG series ON1, developed in Japan, meets the needs of customers in terms of efficiency, safety, comfort, and space savings. Hitachi is creating a new history for elevators, and for your building.



## History of Hitachi elevators

•**1932**•First elevator is delivered: freight elevator for Tokyo Electric Co. •**1968**•300-m/min. elevator is delivered to Japan's first skyscraper: Kasumigaseki Building. •**1991**•Power-saving inverter-controlled ultra-high-speed elevator commences operations: Tokyo Metropolitan Government Building No. 1. •**2003**•300-m/min. double-deck elevator is delivered: Roppongi Hills Mori Tower, Tokyo. •**2007**•480-m/min., 2,850-kg high-rise shuttle elevator is delivered: Tokyo Midtown, Midtown Tower. •**2008**•World's largest ultra-high-speed double-deck elevator is delivered: Shanghai World Financial Center. •**2011**•600-m/min. ultra-high-speed elevator for the Middle East: Al Hamra Mixed-Use Complex, Kuwait. •**2012**•High-speed, large-capacity elevator providing access to Japan's highest (450 m) observation platform: Tokyo Skytree. •**2016**•Delivery of the ultra-high-speed elevators, with a speed of 1,200 m/min. (20 m/s), to the Guangzhou CTF Finance Centre (530-m tall) in Guangzhou, China. •**2017**•The tallest building in Singapore, famous as the winner of the World Architecture News Mixed-Use Award: Tanjong Pagar Centre, Singapore.

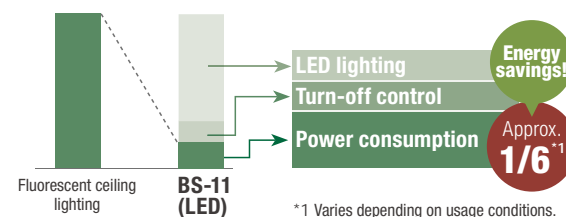
# Four classifications of value we provide for your building

## Energy efficiency

Page 5, 6

### Reduced energy consumption with standard specifications

Power consumption can be reduced to approximately 1/6.



### LED lighting

Use of LED lighting reduces the energy consumption by approximately 1/4 and its service life is three times longer compared with fluorescent lighting.

### Automatic turn-off of car lighting and fan

Standard

When the elevator is idle, the lighting and ventilation fan in the elevator are automatically turned off to conserve energy. Energy consumption is reduced by adopting LED lighting for the ceiling and by shortening the time until the lighting and fan turn off.

### Regenerative system

Option

The traction mechanism acts as a power generator and transmits power back to the building electrical network that reduces energy consumption by approximately 30%.

With regenerative system

Energy savings!

Approx. 30%\*2

\*2 Effectiveness during normal operation. Differs depending on usage conditions.

## Comfort

Page 7, 8

### Improved riding comfort

Standard

Motor control and vibration-absorbing type guide shoes provide a quiet and smooth ride.

### Group control systems

Option

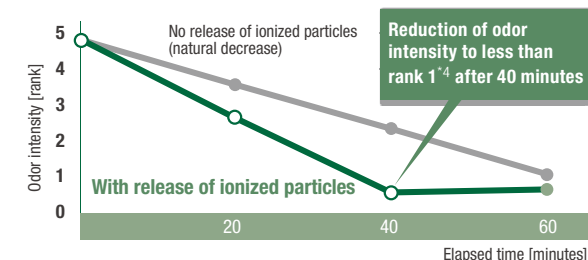
Group control systems provide passengers with appropriate guidance and help reduce the probability of long waits.

### Ion generator

Option

Ion generator works to improve air quality.

### Elevator interior deodorizing test\*3



\*3 Results after 40 minutes in test performed in (13-passenger) elevator measuring approx. 5.5 m<sup>3</sup>. Results may differ from those in actual usage space.

\*4 Odor strength rank 1 is defined as "extremely weak odor that is hardly noticeable."

Note: Testing organization: Hitachi Power Solutions Co., Ltd. Testing method: Verification using six-rank odor intensity indication method in passenger elevator with 13-person capacity Deodorizing method: Release of ionized particles Subject: Methyl mercaptan was released and the change in its concentration was measured.



\* Artist's conception.

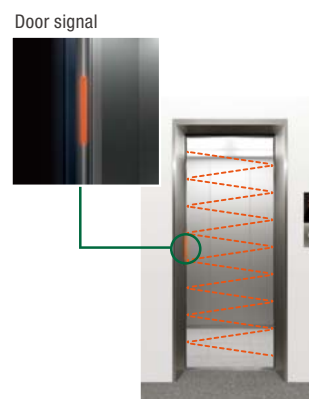
## Safety & Emergency

Page 9, 10

### Door signal with multi-beam door sensor

Option

Door signal that tells when the door is going to close for enhanced safety.



### Micro-leveling

Standard

Automatically corrects the elevator landing level when there is a level difference between car and floor.

### Automatic rescue device for power failure

Option

When a power failure is detected, the drive power supply switches over to battery power, and the elevator automatically moves to the nearest floor and releases the passengers.

## Design

Page 11, 12

### LCD indicators

Option

In-car indicator and hall indicator with color LCD are available. They provide a quick overview of the operating status.



### Car and hall designs

Select the most suitable design from the options available, including ceiling and 3 side walls designs created by Hitachi's designers to match a variety of building types.



P5

Energy efficiency

P7

Comfort

P9

Safety & Emergency

P11

Design variations

P27

Functions

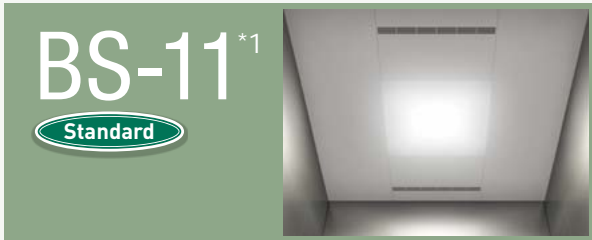
P30

Dimensions



LED lighting

By adopting LED lighting for all ceiling designs, energy consumption is reduced and service life is prolonged compared with fluorescent lighting.



**Power consumption approx. 1/4**  
that of fluorescent lighting  
Employs LED lighting with  
**approx. 3x<sup>\*2</sup> longer service life.**

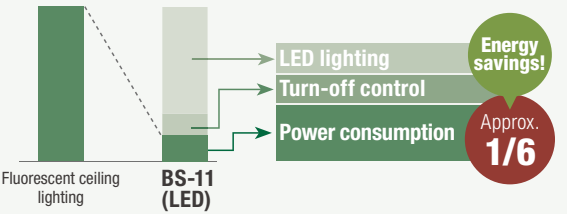
	Fluorescent ceiling lighting		<b>BS-11 (LED)</b>
Power consumption	69 W	➤	<b>17 W<sup>*3</sup></b>
Service life	Approx. 12,000 hours	➤	Approx. <b>40,000 hours<sup>*4</sup></b>

By changing the time until the lighting turns off during standby from three minutes to one minute...

**Power consumption can be reduced to approx. 1/6**

	Fluorescent ceiling lighting		<b>BS-11 (LED)</b>
Annual illumination duration	Approx. 3,000 hours	➤	Approx. <b>1,500 hours<sup>*5</sup></b>
Annual power consumption	Approx. 207 kWh/year	➤	Approx. <b>35 kWh/year</b>

•Reduction of power consumption



**Power consumption approx. 1/6**  
that of fluorescent lighting  
Employs LED lighting with  
**approx. 3x<sup>\*2</sup> longer service life.**

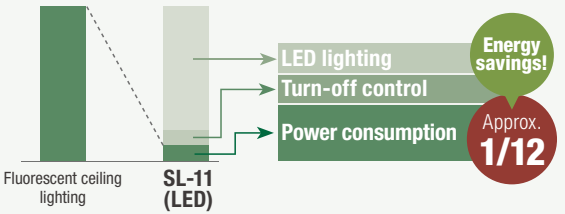
	Fluorescent ceiling lighting		<b>SL-11 (LED)</b>
Power consumption	207 W	➤	<b>33 W<sup>*3</sup></b>
Service life	Approx. 12,000 hours	➤	Approx. <b>40,000 hours<sup>*4</sup></b>

By changing the time until the lighting turns off during standby from three minutes to one minute...

**Power consumption can be reduced to approx. 1/12**

	Fluorescent ceiling lighting		<b>SL-11 (LED)</b>
Annual illumination duration	Approx. 3,000 hours	➤	Approx. <b>1,500 hours<sup>*5</sup></b>
Annual power consumption	Approx. 621 kWh/year	➤	Approx. <b>50 kWh/year</b>

•Reduction of power consumption



<sup>\*1</sup> These ceilings are not compliant with EN81-20/50 and SS550. In case of EN81-20/50, they can be used if the customer agrees.  
<sup>\*2</sup> Comparison with 10-passenger model with fluorescent ceiling lighting. Results may differ depending on ceiling configuration and dimensions.  
<sup>\*3</sup> Power consumption of fixture including lighting power supply.  
<sup>\*4</sup> Rated service life of fixture including lighting power supply. Actual service life may vary depending on usage conditions.  
<sup>\*5</sup> Varies depending on usage conditions.

Automatic turn-off of car lighting and fan

Standard

When the elevator is idle, the lighting and ventilation fan in the elevator are automatically turned off to conserve energy. Energy consumption is reduced by adopting LED lighting for the ceiling and by shortening the time until the lighting and fan turn off.

Regenerative system

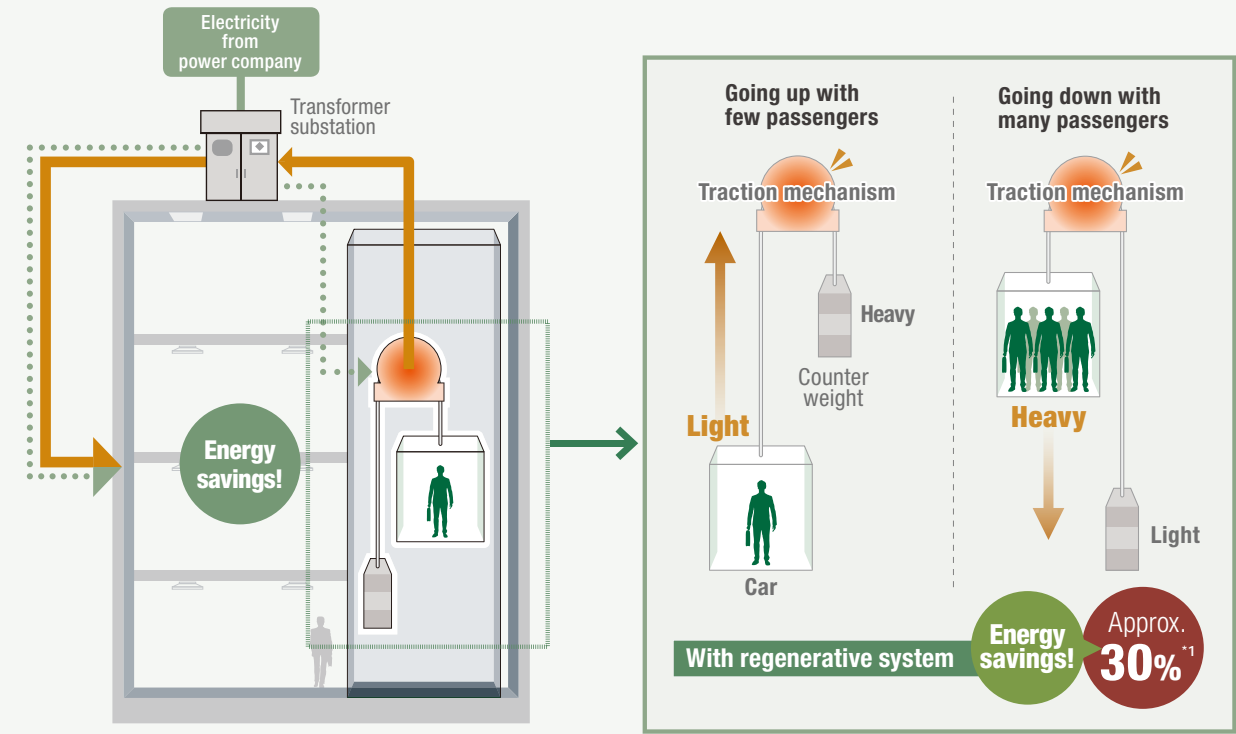
Option

Making use of energy generated by the elevator

Making use of the energy generated by the elevator when traveling downwards with a heavy car load or upwards with a light car load, the traction mechanism acts as a power generator and transmits power back to the electrical network in the building.

Flow of regenerated power

Industrial power  
Regenerated power



<sup>\*1</sup> Comparison of effects during normal operation in our model released in 2016. Differs depending on usage conditions.

FI-600 Group control system

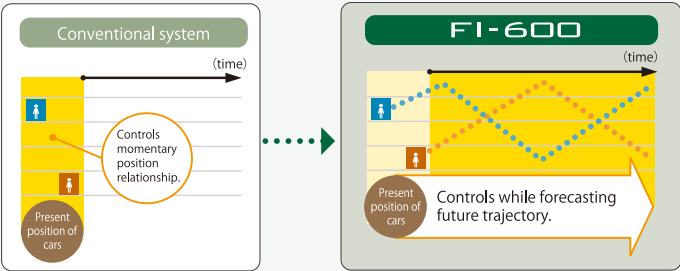
Option

Group control systems help reduce waiting time.

Shortening average waiting times and reducing the probability of a long wait<sup>\*1</sup> are the most important tasks of the group control system of an elevator. Hitachi continues to develop control algorithms to meet these needs. The FI-600 employs a new type of algorithm, future reference trajectory control. It helps reduce the probability of long waits.

<sup>\*1</sup> "Long wait" refers to a waiting time of over 60 seconds.

Summary of future reference trajectory control

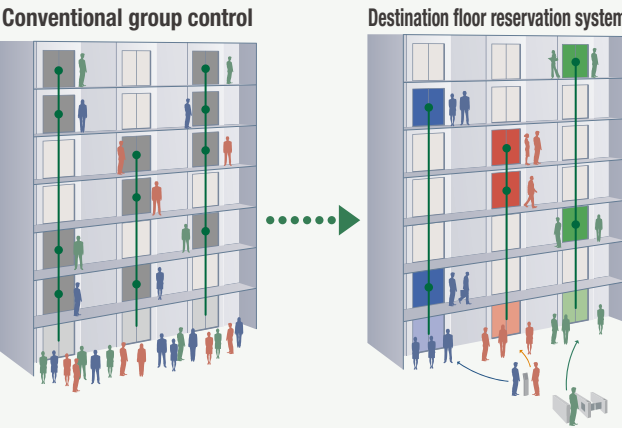


FIBEE Destination floor reservation system

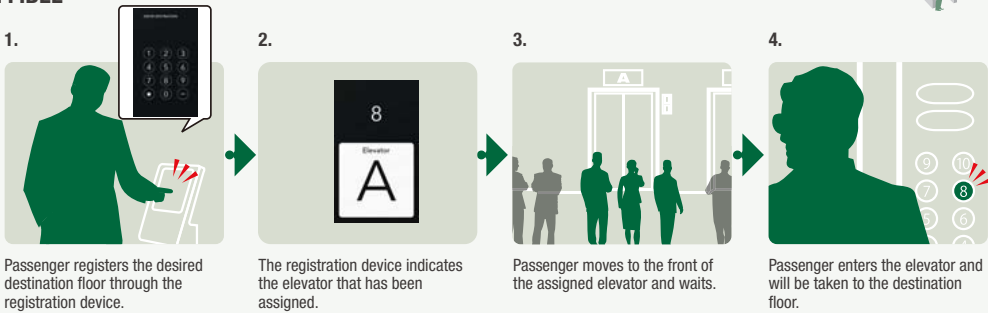
Option

FIBEE leads passengers more reliably to their destination floors.

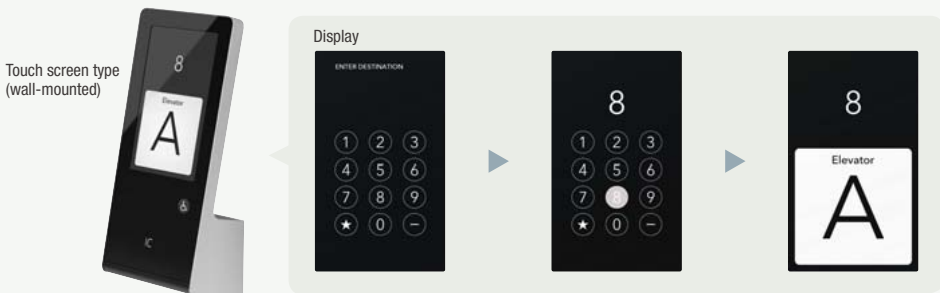
Hitachi has added a destination floor reservation system to the group control system. After each passenger registers their destination floor at the hall, they are informed ahead of time of the elevator they should use. This helps reduce congestion in the hall.



Using elevators with FIBEE



Destination floor registration device



Ion generator

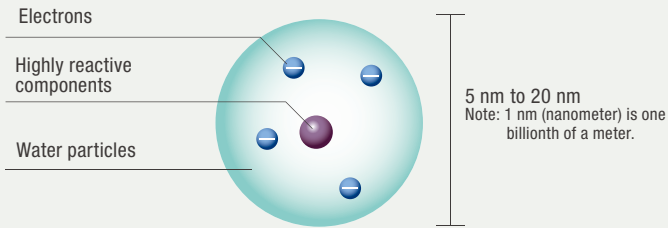
Option

Ion generator improves air quality.

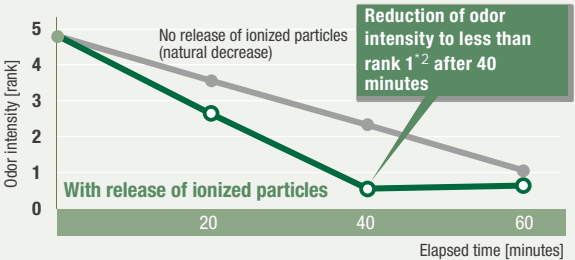
An ion generator manufactured in Japan is mounted on top of the car. Nano-sized electrostatic atomized water particles work to improve air quality.



Note: Artist's conception.



Elevator interior deodorizing test<sup>\*1</sup>



<sup>\*1</sup> Results after 40 minutes in test performed in (13-passenger) elevator measuring approx. 5.5 m<sup>3</sup>. Results may differ from those in actual usage space.  
<sup>\*2</sup> Odor strength rank 1 is defined as "extremely weak odor that is hardly noticeable."

Testing organization: Hitachi Power Solutions Co., Ltd.  
Testing method: Verification using six-rank odor intensity indication method in passenger elevator with 13-person capacity  
Deodorizing method: Release of ionized particles  
Subject: Methyl mercaptan was released and the change in its concentration was measured.

About ionized particles

The ionized particles released into the air come into contact with odor molecules and the OH radicals break down substances that cause odor.<sup>1</sup> Also, the ionized particles come into contact with allergens (pollen<sup>2</sup> and mites<sup>3</sup>), bacteria,<sup>4</sup> and viruses,<sup>5</sup> and the OH radicals denaturize their protein and suppress them.

1. Testing organization: Panasonic Corporation Product Analysis Center. Testing method: Direct exposure in 250-liter test space and verification using six-rank odor intensity indication method. Deodorizing method: Release of ionized particles. Subject: Accumulated cigarette odor. Test result: Odor intensity reduction of 0.8 after 30 minutes. Test number: E02-090313MH-01 2. Testing organization: Panasonic Corporation Product Analysis Center. Testing method: Direct exposure in 45-liter test space and measurement using ELISA method. Suppression method: Release of ionized particles. Subject: Allergen (pollen). Test result: Over 99% suppression after two hours. Test number: E02-080303IN-03 3. Testing organization: Panasonic Corporation Product Analysis Center. Testing method: Direct exposure in 45-liter test space and measurement using ELISA method. Suppression method: Release of ionized particles. Subject: Allergen (mites). Test result: Over 98% suppression after two hours. Test number: E02-080204IN-02 4. Testing organization: Kitasato Research Center for Environmental Science. Testing method: Direct exposure in 1-square-meter test vessel and measurement of bacteria count. Suppression method: Release of ionized particles. Subject: Airborne bacteria. Test result: Over 99% suppression after 20 minutes. Kitasato Biogenetic: 20\_0154\_1. Test performed for one type of bacteria only. 5. Testing organization: Kitasato Research Center for Environmental Science. Testing method: Direct exposure in 1-square-meter test vessel and measurement of virus count. Suppression method: Release of ionized particles. Subject: Airborne virus. Test result: Over 99% suppression after 90 minutes. Kitasato Biogenetic: 20\_0154\_1. Test performed for one type of virus only.

Note: The ionized particles suppress viruses, etc., but they are not guaranteed to prevent infection.  
Note: The ion generator is not available in the following cases:  
(1) When the ceiling is supplied by the customer.  
(2) When the car internal depth is 1,250 mm or less.

Improved riding comfort

Standard

Measures such as control to suppress motor vibration and vibration-absorbing type guide shoes are utilized. These reduce noise and vibration when the elevator is in motion for a smooth and quiet ride.

## Door signal with multi-beam door sensor (Closing door alert)

Option

**The door signal flashes to notify passengers when the door is starting to close.**

The multi-beam door sensor is backed by a door signal that notifies passengers when the door is going to close. The LED on the edge of the door starts to blink about one second before the door starts to close. If the door close button in the elevator car is pressed, the LED starts blinking at the same time as the door starts to close.

Door signal



Note: Illustration shows simulated view of beams.

## Micro-leveling

Standard

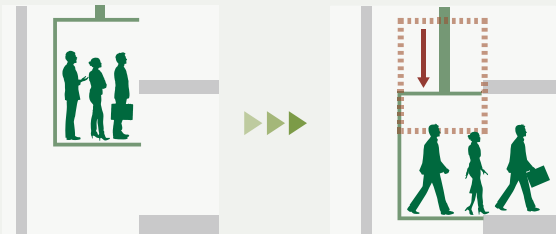
Automatic correction of elevator landing level when there is a level difference between car and floor. This improves safety when getting on and off the elevator.

## Automatic rescue device for power failure

Option

**In a power failure, the elevator switches to battery operation, and moves to the nearest floor.**

When a power failure is detected, the drive power supply switches over to battery power, and the elevator automatically moves to the nearest floor and releases the passengers for safety. This lessens the worry of being trapped in the elevator that has stopped due to a power outage in a building with no private generator equipment.

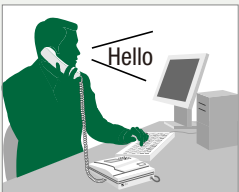


## Induction loop for hearing devices

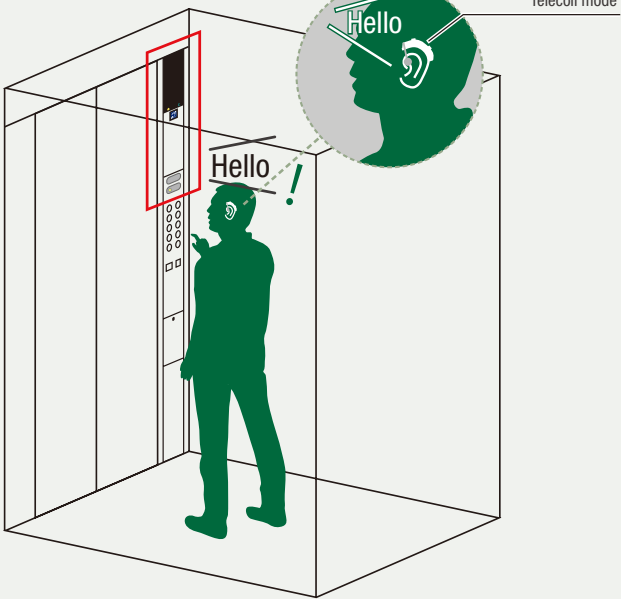
Option

This function allows passengers with impaired hearing to use the elevator with confidence. If it is necessary to use the intercom in the elevator to communicate with people at other locations in an emergency, the passenger can select the “Telecoil mode” on their hearing aid or cochlear implant to have the audio signal from the intercom conveyed to them directly. The induction loop for hearing devices is an auxiliary device of the intercom that outputs audio signals magnetically, separately from the usual audio output. The induction loop for hearing devices covers an effective range of 0.5 meters from the operating panel, between 1.2 to 1.7 meters above the floor. Operating panel equipped with this function bears the “Induction loop” symbol.

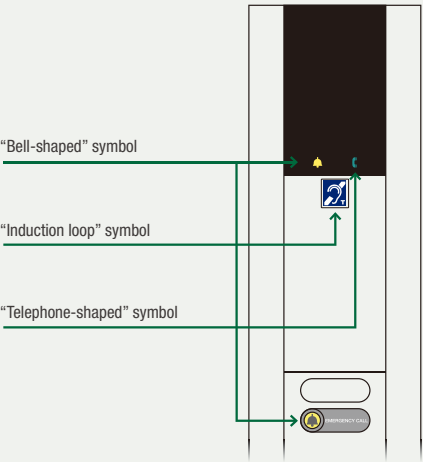
### Induction loop for hearing devices ~ Other locations



Other locations (e.g. Control room etc.)





### Operating panel with induction loop for hearing devices



When this function is applied, the “Induction loop” symbol and the indicator light of the “Bell-shaped” symbol and the “Telephone-shaped” symbol are installed on the operating panel.

 “Induction loop” symbol:  
Not illuminated (Only mark)

 “Bell-shaped” symbol:  
The yellow graphical symbol blinks from the initiation of the alarm until the end of the alarm.

 “Telephone-shaped” symbol:  
The green graphical symbol illuminates during voice communication.

Note: Induction loop for hearing devices is used in combination with EN81-20/50.  
Note: The illustration is an example.

## Ceiling designs (Silkscreen print)

Option

By applying silk screening to the ceilings of SL-11 and DX-101, Hitachi ceiling designs coordinate your elevator with the building decor.

### SL-11<sup>\*1</sup>



SL-11-Oriental mosaic

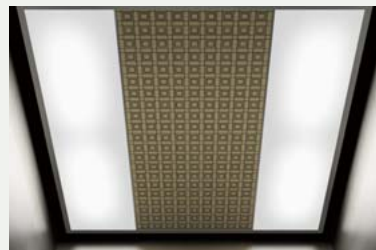


SL-11-Cube



SL-11-Kaleidoscope

### DX-101<sup>\*1</sup>



DX-101-Lattice



DX-101-Geometric star



DX-101-Arabesque

<sup>\*1</sup> These ceilings are not compliant with EN81-20/50 and SS550. In case of EN81-20/50, they can be used if the customer agrees.

## Button designs

A wide range of buttons harmonizes with various building designs.

### High-contrast plastic buttons

Standard

High-contrast and raised characters make numbers more legible. Button surfaces are rounded to make it easier to wipe them clean.



### Stainless steel buttons

Option

Various stainless steel buttons are available.



### Interphone button

Standard

Designed for easy use in an emergency.

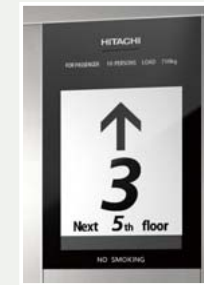


## In-car LCD indicator

Option

### The LCD indicator makes it easy to find necessary information.

An in-car indicator with an 8.4-inch color LCD is available. The LCD with wide angle improves visibility. It displays indications of the operating status, such as earthquake emergency operation, to the user.



Black



Blue

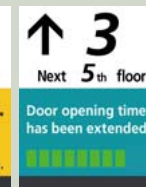
### Normal



Floor indication



Overload

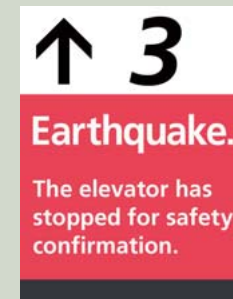


Door prolong<sup>\*1</sup>



When crowded

### Emergency



Earthquake<sup>\*1</sup>



Power failure<sup>\*1</sup>



Fire emergency<sup>\*1</sup>



Emergency stop

<sup>\*1</sup> Display indications regarding operation during earthquakes, etc., require that the corresponding functions be installed.

## Hall LCD indicator

Option

### The hall LCD indicator displays abundant information in the hall.

A hall indicator with a 6.2-inch color LCD is available. Like the in-car LCD indicator, it displays indications of the operating status.



Earthquake<sup>\*2</sup>



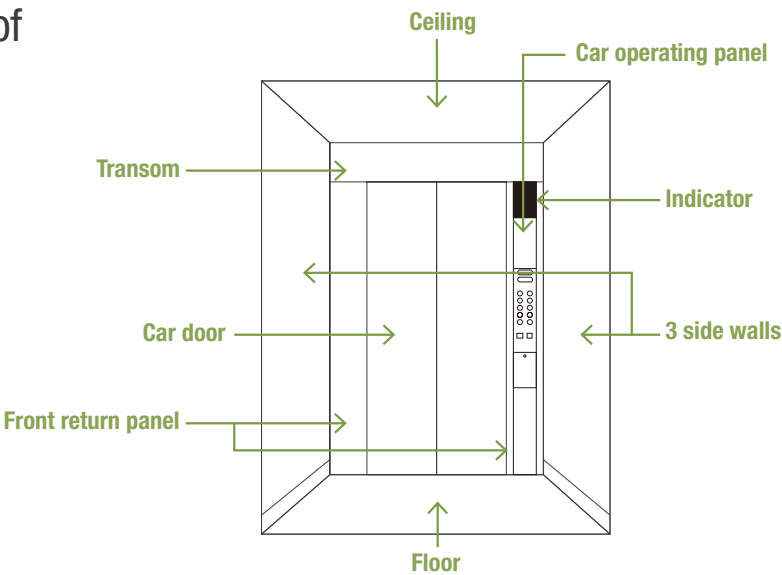
<sup>\*2</sup> Display indications regarding operation during earthquakes, etc., require that the corresponding functions be installed.



# Recommended designs


## Car designs

Choose from a wide range of design options to create an elevator look that matches your building.



## Recommended designs

Samples of designs created by a designer.

Stylish design	Chic design	Luxurious design
<ul style="list-style-type: none"><li>Office</li><li>Commercial building</li></ul>	<ul style="list-style-type: none"><li>Residence</li><li>Hotel</li></ul>	<ul style="list-style-type: none"><li>Commercial building</li><li>Hotel</li></ul>
 <p><b>Ceiling:</b> SL-series (SL-11-Kaleidoscope)*<sup>1</sup> <b>3 side walls:</b> Decorated steel (Minamo white) <b>Car door:</b> Decorated steel (Minamo white)</p>	 <p><b>Ceiling:</b> SL-series (SL-12) <b>3 side walls:</b> Decorated steel (Mocha wood) <b>Car door:</b> Decorated steel (Mocha wood)</p>	 <p><b>Ceiling:</b> EX-series (EX-11)*<sup>1</sup> <b>3 side walls:</b> Decorated steel (Craft wood) <b>Car door:</b> Stainless steel non-directional hairline</p>
 <p><b>Ceiling:</b> DX-series (DX-101-Lattice)*<sup>1</sup> <b>3 side walls:</b> Colored stainless steel hairline <b>Car door:</b> Colored stainless steel hairline</p>	 <p><b>Ceiling:</b> DX-series (DX-11) <b>3 side walls:</b> Laminated plastic sheet (5261NT)*<sup>1</sup> <b>Car door:</b> Colored stainless steel hairline</p>	 <p><b>Ceiling:</b> DX-series (DX-104) <b>3 side walls:</b> Decorated steel (Mocha wood) <b>Car door:</b> Colored stainless steel hairline</p>

\*1 These ceilings and LPS are not compliant with EN81-20/50 and SS550. In case of EN81-20/50, they can be used if the customer agrees.



## Stylish design (for office)

Specifications	
Ceiling	SL-series (SL-11-Kaleidoscope)* <sup>1</sup>
3 side walls	Decorated steel (Minamo white)
Car door	Decorated steel (Minamo white)
Front return panel/Transom	Stainless steel hairline
Floor	Vinyl tile (S 442M)* <sup>2</sup>
Indicator	LCD (8.4-inches)
Car operating panel	Stainless steel hairline

\*1 The ceiling is not compliant with EN81-20/50 and SS550. In case of EN81-20/50, it can be used if the customer agrees.  
\*2 The tile is not compliant with SS550.  
Note: Illustrations show simulated views of elevator interiors. Actual illumination brightness and colors may differ.





Stylish design (for commercial building)

Specifications	
Ceiling	DX-series (DX-101-Lattice)* <sup>1</sup>
3 side walls	Colored stainless steel hairline
Car door	Colored stainless steel hairline
Front return panel/Transom	Stainless steel mirror
Floor	Vinyl tile (S 660M)* <sup>2</sup>
Indicator	LCD (8.4-inches)
Car operating panel	Stainless steel mirror

\*<sup>1</sup> The ceiling is not compliant with EN81-20/50 and SS550. In case of EN81-20/50, it can be used if the customer agrees.  
\*<sup>2</sup> The tile is not compliant with SS550.  
Note: Illustrations show simulated views of elevator interiors. Actual illumination brightness and colors may differ.



Chic design (for residential building)

Specifications	
Ceiling	SL-series (SL-12)
3 side walls	Decorated steel (Mocha wood)
Car door	Decorated steel (Mocha wood)
Front return panel/Transom	Stainless steel hairline
Floor	Vinyl tile (S 673M)* <sup>1</sup>
Indicator	LCD (8.4-inches)
Car operating panel	Stainless steel hairline



Chic design (for hotel)

Specifications	
Ceiling	DX-series (DX-11)
3 side walls	Laminated plastic sheet (5261NT)* <sup>2</sup>
Car door	Colored stainless steel hairline
Front return panel/Transom	Colored stainless steel hairline
Floor	Vinyl tile (S 657M)* <sup>1</sup>
Indicator	LCD (8.4-inches)
Car operating panel	Colored stainless steel hairline

\*<sup>1</sup> The tile is not compliant with SS550.  
\*<sup>2</sup> The LPS is not compliant with EN81-20/50 and SS550. In case of EN81-20/50, it can be used if the customer agrees.  
Note: Illustrations show simulated views of elevator interiors. Actual illumination brightness and colors may differ.





### Luxurious design (for commercial building)

Specifications	
Ceiling	EX-series (EX-11)* <sup>1</sup>
3 side walls	Decorated steel (Craft wood)
Car door	Stainless steel non-directional hairline
Front return panel/Transom	Stainless steel non-directional hairline
Floor	Vinyl tile (S 629M)* <sup>2</sup>
Indicator	LCD (8.4-inches)
Car operating panel	Stainless steel non-directional hairline

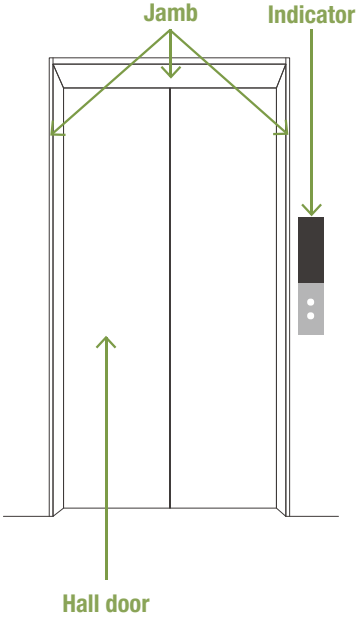


### Luxurious design (for hotel)

Specifications	
Ceiling	DX-series (DX-104)
3 side walls	Decorated steel (Mocha wood)
Car door	Colored stainless steel hairline
Front return panel/Transom	Colored stainless steel hairline
Floor	Vinyl tile (S 444M)* <sup>2</sup>
Indicator	LCD (8.4-inches)
Car operating panel	Colored stainless steel hairline

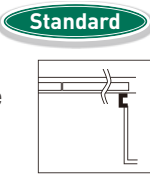
\*<sup>1</sup> The ceiling is not compliant with EN81-20/50 and SS550.  
In case of EN81-20/50, it can be used if the customer agrees.  
\*<sup>2</sup> The tile is not compliant with SS550.  
Note: Illustrations show simulated views of elevator interiors.  
Actual illumination brightness and colors may differ.

## Hall designs



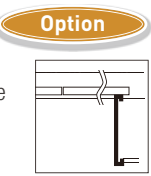
### AS-1X (2PCO)

**Jamb:** Stainless steel hairline  
**Hall door:** Stainless steel hairline  
**Indicator:** Dot-matrix



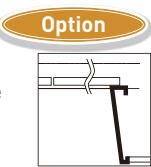
### SS-1X (2PCO)

**Jamb:** Stainless steel hairline  
**Hall door:** Stainless steel hairline  
**Indicator:** Dot-matrix



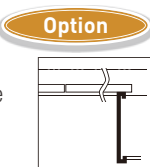
### TS-1X (2PCO)

**Jamb:** Stainless steel hairline  
**Hall door:** Stainless steel hairline etching (SD-1038)  
**Indicator:** LCD



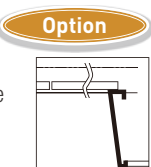
### SL-2X (2PCO)

**Jamb:** Stainless hairline  
**Hall door:** Stainless steel hairline  
**Indicator:** LCD



### TL-2X (2PCO)

**Jamb:** Stainless steel hairline  
**Hall door:** Stainless steel hairline  
**Indicator:** LCD



Note: Illustrations show simulated views of elevator interiors. Actual illumination brightness and colors may differ.

# Ceilings and Handrails

## Ceilings Standard

Standard

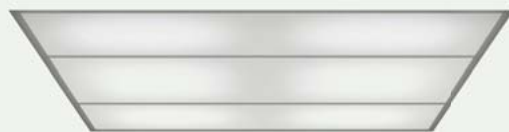
**BS-11**<sup>\*1</sup> **Center:** Milky white acrylic<sup>\*2</sup>  
**Surrounding:** Decorated steel (White)



## Select

Option

**SL-11**<sup>\*1</sup> **Entire surface:** Milky white acrylic  
**Surrounding:** Extruded aluminum



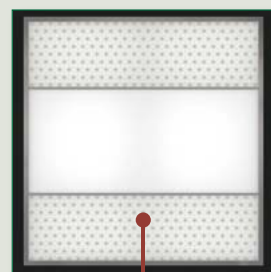
**SL-12** **Entire surface:** Painted steel (White)  
**Illumination slits:** Painted steel (Black)  
**Surrounding:** Extruded aluminum



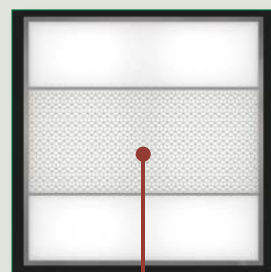
### Variations of SL-11

#### Silkscreen print

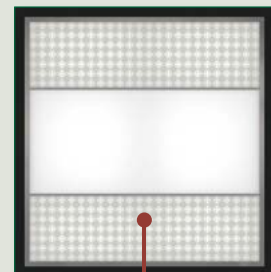
Option



SL-11-Oriental mosaic<sup>\*1</sup>



SL-11-Cube<sup>\*1</sup>



SL-11-Kaleidoscope<sup>\*1</sup>

<sup>\*1</sup> The ceiling is not compliant with EN81-20/50 and SS550. In case of EN81-20/50, it can be used if the customer agrees.  
<sup>\*2</sup> For some car sizes there are two milky white acrylic options.  
Note: It is also possible to use ceiling materials supplied and installed by the customer.  
Note: Depending on applicable regulations, car top emergency trap door may be required.

## Deluxe

Option

**DX-101**<sup>\*1</sup>

**Center:** Painted steel (White)  
**Both sides:** Milky white acrylic  
**Surrounding:** Extruded aluminum



**DX-11**

**Center:** Painted steel (White)  
Indirect lighting  
**Both sides:** Painted steel (White)  
Down light  
**Surrounding:** Extruded aluminum



**DX-104**

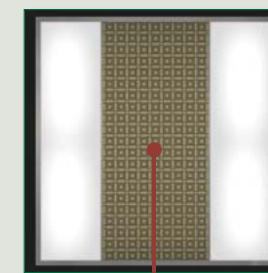
**Entire surface:** Painted steel (Black)  
Down light  
**Trim:** Stainless steel



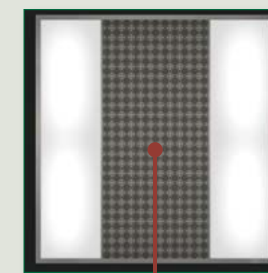
### Variations of DX-101

#### Silkscreen print

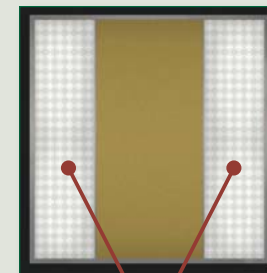
Option



DX-101-Lattice<sup>\*1</sup>



DX-101-Geometric star<sup>\*1</sup>



DX-101-Arabesque<sup>\*1</sup>

## Premium

Option

**EX-11**<sup>\*1</sup> **Entire surface:** Glass fiber cloth



<sup>\*1</sup> The ceiling is not compliant with EN81-20/50 and SS550. In case of EN81-20/50, it can be used if the customer agrees.  
Note: It is also possible to use ceiling materials supplied and installed by the customer.  
Note: Depending on applicable regulations, car top emergency trap door may be required.

## Handrails

Option



Round pipe type  
(stainless steel hairline)  
**Diameter:** 32 mm



Flat type  
(aluminum)  
**Width:** 90 mm



Flat type  
(stainless steel hairline)  
**Width:** 90 mm



Flat type  
(stainless steel hairline)  
**Width:** 50 mm

Note: Illustrations show simulated views of handrail designs. Actual illumination brightness and colors may differ.



# Operating panels and indicators

## Car operating panels

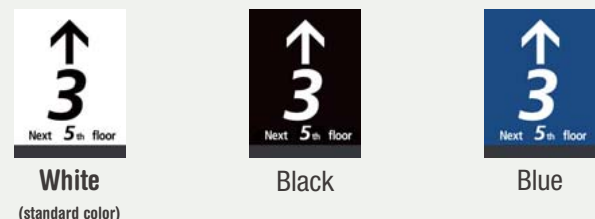
### Stainless steel cover plate

Indicator type  
(Dot-matrix) (LCD)  
Standard Option



### Car position indicators (LCD) Option

In addition to white, you can select black or blue as the background color.



## Horizontal operating panels Option

### Stainless steel cover plate

Without indicator



With indicator



## Car button types

Plastic  
Standard



P14F-UL



Interphone button<sup>\*2</sup>

Stainless steel hairline  
Option



UB15R-1 UB15R-2 UB15R-3 UB15R-4

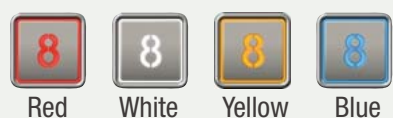


UB15S-1 UB15S-2 UB15S-3 UB15S-4



Interphone button<sup>\*2</sup>

Illumination colors<sup>\*1</sup>



<sup>\*1</sup> Illumination colors are only applicable for stainless steel hairline buttons.

<sup>\*2</sup> Only circular interphone buttons are available. Other specifications (illumination color, Braille, etc.) of the interphone button change according to each floor button. Please consult Hitachi or a local agent if other specifications are required.

## Hall operating panels

### Stainless steel cover plate

Incorporated type  
(Dot-matrix)  
Standard



VIB-14B/D

Incorporated type (LCD)  
Option



VIB-14B/L

Separate type  
Option



HBC

Separate type  
(for wheelchair use)  
Option



## Hall lanterns Option

### Stainless steel cover plate

Square lanterns (LED)



HLC-304<sup>\*2</sup>

Round lanterns (LED)



HLC-303<sup>\*2</sup>

Triangle lanterns (horizontal type) (LED)



HLS-025S2<sup>\*2</sup>

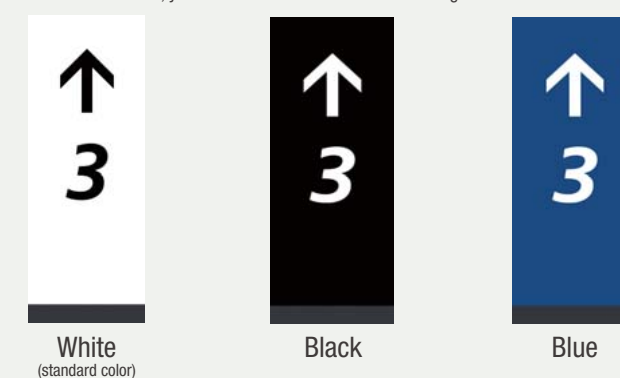
Triangle lanterns with dot-matrix indicator (LED)



HLS-025SD2<sup>\*2</sup>

### Car position indicators (LCD) Option

In addition to white, you can select black or blue as the background color.



## Horizontal indicators Option

### Stainless steel cover plate

Dot-matrix



HF-119

LCD<sup>\*1</sup>



HF-CL11

## Hall button types

Plastic  
Standard



P14F-UL

Stainless steel hairline  
Option



UB15R-1 UB15R-2 UB15R-3 UB15R-4



UB15S-1 UB15S-2 UB15S-3 UB15S-4

Illumination colors<sup>\*3</sup>



<sup>\*1</sup> The LCD backlight can be changed from white to black or blue. (Standard color: White)

<sup>\*2</sup> Stainless steel non-directional hairline cover is available. (Option)

The lantern illumination color can be changed to white. (Standard illumination color: Umber)

<sup>\*3</sup> Illumination colors are only applicable for stainless steel hairline buttons.

# Materials

## Car

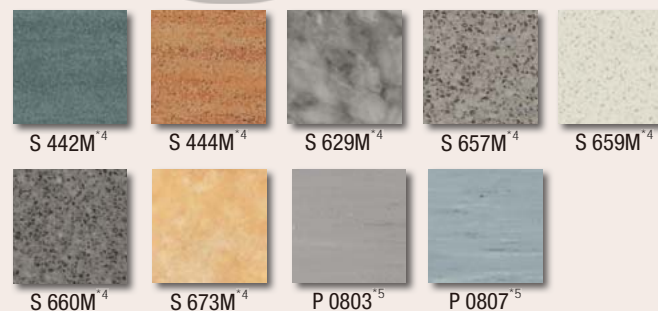


## Hall



## D [Car] Floor

### Vinyl tile<sup>\*3</sup>

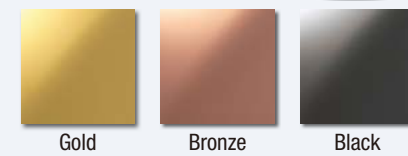


## A [Car] Front wall / Transom

### Stainless steel

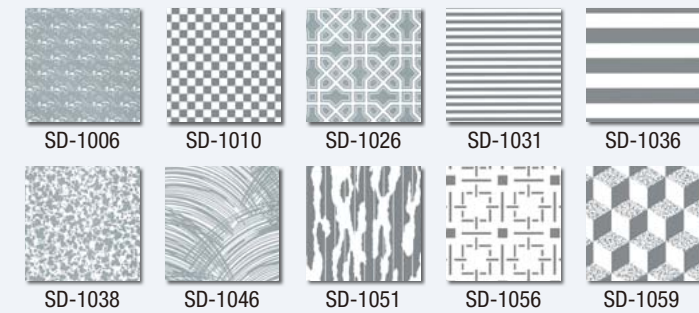


### Colored stainless steel

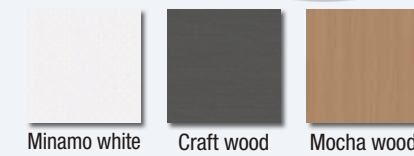


\* Colored stainless steel is available for hairline and mirror options.

### Stainless steel hairline etching and mirror etching



### Decorated steel

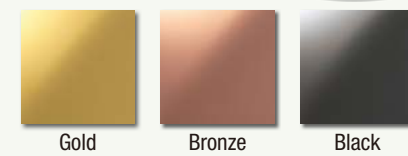


## B [Car] Door / 3 side walls [Hall] Door

### Stainless steel

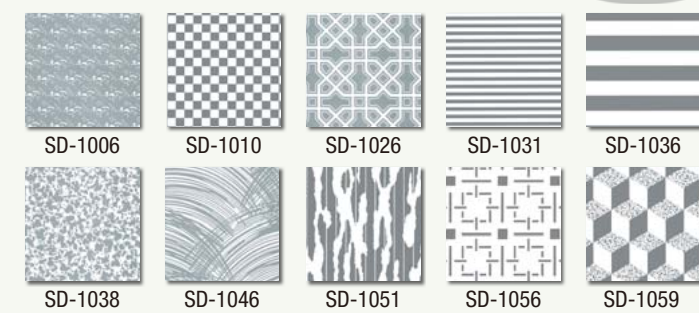


### Colored stainless steel



\* Colored stainless steel is available for hairline and mirror options.

### Stainless steel hairline etching and mirror etching



### Decorated steel



\* Decorated steel cannot be used for the hall door.

### Laminated plastic sheet (LPS)<sup>\*2</sup>

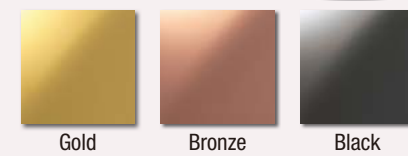


## C [Hall] Jamb / Transom

### Stainless steel

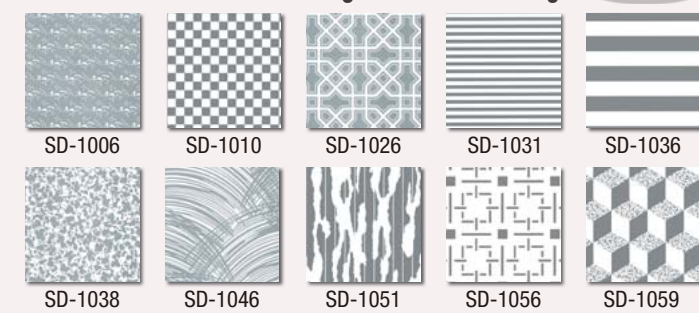


### Colored stainless steel



\* Colored stainless steel is available for hairline and mirror options.

### Stainless steel hairline etching and mirror etching<sup>\*6</sup>



\* Stainless steel hairline etching and mirror etching cannot be used for the hall jamb.

<sup>\*1</sup> SUS430 (Standard), SUS304 (Option)  
<sup>\*2</sup> These LPS are not compliant with EN81-20/50 and SS550. In case of EN81-20/50, they can be used if the customer agrees.  
<sup>\*3</sup> These vinyl tiles are not compliant with SS550.  
<sup>\*4</sup> These vinyl tiles are compliant with EN81-20/50.  
<sup>\*5</sup> These vinyl tiles are not compliant with EN81-20/50, but they can be used if the customer agrees.  
<sup>\*6</sup> Stainless steel hairline etching and mirror etching can only be applied to SL-2X and TL-2X.  
 Note: It is also possible to use floor materials supplied by the customer. The colors printed in the catalog may differ slightly from the actual colors.

# Design variations

## Car design variations

● : Standard / ○ : Option

No.	Item			Finishes/Types	Passenger Service	
1	Ceiling <sup>*1</sup>			Standard (BS-11) <sup>*2</sup>	●	
2				Select (SL-11) <sup>*2</sup> (SL-11-Oriental mosaic) <sup>*2</sup> (SL-11-Cube) <sup>*2</sup> (SL-11-Kaleidoscope) <sup>*2</sup> (SL-12)	○	
3				Deluxe (DX-101) <sup>*2</sup> (DX-101-Lattice) <sup>*2</sup> (DX-101-Geometric star) <sup>*2</sup> (DX-101-Arabesque) <sup>*2</sup> (DX-11) (DX-104)	○	
4				Premium (EX-11) <sup>*2</sup>	○	
5	Car door / 3 side walls			Stainless steel hairline	●	
6				Colored stainless steel hairline (Gold, Bronze, Black)	○	
7				Stainless steel hairline etching	○	
8				Colored stainless steel hairline etching (Gold, Bronze, Black)	○	
9				Stainless steel mirror	○	
10				Colored stainless steel mirror (Gold, Bronze, Black)	○	
11				Stainless steel mirror etching	○	
12				Colored stainless steel mirror etching (Gold, Bronze, Black)	○	
13				Stainless steel non-directional hairline	○	
14				Decorated steel <sup>*3</sup>	○	
15				Laminated plastic sheet <sup>*4*5</sup> (7170UN) (2726NT) (5261NT) (5474UN) (5475SP) (7171UN) (7158UN) (7157UN) (0869NT) (8834NT) (6006UN)	○	
16				Rust proof painted steel	○	
17				Stainless steel hairline	●	
18	Colored stainless steel hairline (Gold, Bronze, Black)	○				
19	Stainless steel hairline etching	○				
20	Colored stainless steel hairline etching (Gold, Bronze, Black)	○				
21	Stainless steel mirror	○				
22	Front wall and transom			Colored stainless steel mirror (Gold, Bronze, Black)	○	
23				Stainless steel mirror etching	○	
24				Colored stainless steel mirror etching (Gold, Bronze, Black)	○	
25				Stainless steel non-directional hairline	○	
26				Decorated steel <sup>*3</sup>	○	
27				Rust proof painted steel	○	
28				Stainless steel hairline	●	
29	Kick plate			Stainless steel non-directional hairline	○	
30				Sill		
31	Stainless steel	○				
32	Floor <sup>*1*6</sup>			Vinyl tile (S 442M) <sup>*7</sup> (S 444M) <sup>*7</sup> (S 629M) <sup>*7</sup> (S 657M) <sup>*7</sup> (S 659M) <sup>*7</sup> (S 660M) <sup>*7</sup> (S 673M) <sup>*7</sup> (P 0803) <sup>*8</sup> (P 0807) <sup>*8</sup>	●	
33	Handrail	Round type	stainless steel hairline	Diameter: 32 mm (one row)	○	
34		Flat type	stainless steel hairline	Width: 50 mm (one row)	○	
35				Width: 90 mm (one row)	○	
36				Width: 90 mm (two rows)	○	
37				Width: 90 mm (one row)	○	
38			aluminum	Width: 90 mm (two rows)	○	
39	Car operating panel		Vertical <sup>*9</sup>		Dot-matrix indicator (OPV/D)	●
40					LCD indicator (OPV/L) (White, Black, Blue)	○
41			Horizontal		Without indicator	○
42					Dot-matrix indicator	○
43					Without indicator	○
44					Dot-matrix indicator	○
45	Car operating panel cover plate			Stainless steel hairline	●	
46				Stainless steel mirror	○	
47				Stainless steel non-directional hairline	○	
48	Button type			Plastic (P14F-UL)	●	
49				Stainless steel hairline <sup>*10</sup> (UB15R-1) (UB15R-2) (UB15R-3) (UB15R-4) (UB15S-1) (UB15S-2) (UB15S-3) (UB15S-4)	○	

<sup>\*1</sup> It is also possible to use materials supplied and installed by the customer.  
<sup>\*2</sup> These ceilings are not compliant with EN81-20/50 and SS550. In case of EN81-20/50, they can be used if the customer agrees.  
<sup>\*3</sup> Decorated steel is available in the following cases:  
(1) Ceiling height (CH) with respect to each ceiling type:  
BS-11, BY OTHERS: CH ≤ 2,300 mm  
SL-11, 12, DX-11, 101: CH ≤ 2,250 mm  
DX-104, EX-11: Not available  
(2) Entrance height (EH) ≤ 2,100 mm  
<sup>\*4</sup> The LPS comes with a stainless steel hairline trim edge.  
<sup>\*5</sup> These LPS are not compliant with EN81-20/50 and SS550. In case of EN81-20/50, they can be used if the customer agrees.  
<sup>\*6</sup> These vinyl tiles are not compliant with SS550.  
<sup>\*7</sup> These vinyl tiles are compliant with EN81-20/50.  
<sup>\*8</sup> These vinyl tiles are not compliant with EN81-20/50, but they can be used if the customer agrees.  
<sup>\*9</sup> Depending on the size of the car, may be mounted on a side wall.  
<sup>\*10</sup> The available button illumination colors are yellow, red, white, and blue.

## Hall design variations

● : Standard / ○ : Option

No.	Item		Finishes/Types	Passenger Service		
1	Jamb type		AS-1X	●		
2			SS-1X	○		
3			TS-1X	○		
4			SL-2X	○		
5			TL-2X	○		
6	Jamb finish		Stainless steel hairline	●		
7			Colored stainless steel hairline	○		
8			Stainless steel mirror	○		
9			Colored stainless steel mirror	○		
10			Stainless steel non-directional hairline	○		
11			Rust proof painted steel	○		
12	Transom finish		Stainless steel hairline	●		
13			Colored stainless steel hairline (Gold, Bronze, Black)	○		
14			Stainless steel hairline etching	○		
15			Colored stainless steel hairline etching (Gold, Bronze, Black)	○		
16			Stainless steel mirror	○		
17			Colored stainless steel mirror (Gold, Bronze, Black)	○		
18			Stainless steel mirror etching	○		
19			Colored stainless steel mirror etching (Gold, Bronze, Black)	○		
20			Stainless steel non-directional hairline	○		
21			Rust proof painted steel	○		
22	Hall door		Stainless steel hairline	●		
23			Colored stainless steel hairline (Gold, Bronze, Black)	○		
24			Stainless steel hairline etching	○		
25			Colored stainless steel hairline etching (Gold, Bronze, Black)	○		
26			Stainless steel mirror	○		
27			Colored stainless steel mirror (Gold, Bronze, Black)	○		
28			Stainless steel mirror etching	○		
29			Colored stainless steel mirror etching (Gold, Bronze, Black)	○		
30			Stainless steel non-directional hairline	○		
31			Laminated plastic sheet*1 (7170UN) (2726NT) (5261NT) (5474UN) (5475SP) (7171UN) (7158UN) (7157UN) (0869NT) (8834NT) (6006UN)	○		
32	Rust proof painted steel	○				
33	Sill		Extruded hard aluminum	●		
34			Stainless steel	○		
35	Hall button cover plate		Stainless steel hairline	●		
36			Incorporated indicator	Stainless steel mirror	○	
37				Stainless steel non-directional hairline	○	
38				Separate indicator	Stainless steel hairline	○
39			Stainless steel mirror		○	
40	Stainless steel non-directional hairline	○				
41	Hall button cover plate for wheelchair use		Stainless steel hairline	○		
42			Incorporated indicator	Stainless steel mirror	○	
43				Stainless steel non-directional hairline	○	
44				Separate indicator	Stainless steel hairline	○
45			Stainless steel mirror		○	
46	Stainless steel non-directional hairline	○				
47	Indicator		Dot-matrix	●		
48			Vertical	LCD (White, Black, Blue)	○	
49				Horizontal	Dot-matrix (HF-119)	○
50					LCD (HF-CL11) (White, Black, Blue)	○
51	Horizontal indicator cover plate		Stainless steel hairline	○		
52			Stainless steel mirror	○		
53			Stainless steel non-directional hairline	○		
54	Button type		Plastic (P14F-UL)	●		
55			Stainless steel hairline*2 (UB15R-1) (UB15R-2) (UB15R-3) (UB15R-4) (UB15S-1) (UB15S-2) (UB15S-3) (UB15S-4)	○		
56	Lantern		Square lanterns (HLC-304) (Orange, White)	○		
57			Vertical	Round lanterns (HLC-303) (Orange, White)	○	
58				Horizontal	Triangle lanterns (HLS-025S2)	○
59					Triangle lanterns with dot-matrix indicator (HLS-025SD2)	○
60	Lantern cover plate		Stainless steel hairline	○		
61			Stainless steel mirror	○		
62			Stainless steel non-directional hairline	○		

<sup>\*1</sup> The LPS comes with a stainless steel hairline trim edge and cannot be used for the hall door when fire rated doors are required.  
<sup>\*2</sup> The available button illumination colors are yellow, red, white, and blue.



# Functions

● : Standard / ○ : Option

No.	Name		Description	Passenger Service
Operating systems				
1	Simplex collective control		This is a fully automatic operation used for a single elevator system. Hall calls in the direction in which the elevator is travelling are responded to sequentially and when all calls in that direction are cleared, calls in the opposite direction are responded to. When there are no more calls, the elevator will stop at the last floor served.	●
2	Duplex collective control		This is a fully automatic operation used for a two-elevator system. Hall calls are responded to by whichever elevator that can serve the hall call faster. When there are no more calls, one of the elevators will stand by at the stand by floor while the other elevator stays at the last floor served.	◎
3	Group control	FIBEE	Allows the passenger to preselect the destination floor on the destination floor panel installed at the landing hall. This reduces button operations to one, improving the operability.	◎
4		FI-10	This is a simplified group control system used to operate three or four elevators. The system provides a ring control to allocate the elevator car closed to the floor where a new hall call is registered.	◎
5		FI-100	This is a group control system used to operate three to six elevators in a medium-sized building. This control system uses "reference-trajectory control", which is based on the theory used in the highest model of the "future reference-trajectory control".	◎
6		FI-600	This is a group control system used to operate three to eight elevators in a large-sized building. This control system consists of three smart systems; "future reference-trajectory control", "learning system" and "intelligent system".	◎
7	Down collective control		For this system, all floors have "down" call buttons only, except for the stand by floor, where there is "up" call button only. The other operations are the same as in selective-collective and duplex selective-collective operations.	◎
Service functions				
1	Automatic return function		After all the calls have been served, the elevator will return to the stand by floor for stand by.	◎*1
2	Attendant operation		For this system, the stop floor is manually set by an attendant, such as in a department store.	◎
3	Independent operation		This operation system is used when there is a need to serve special passengers. Under this operation, all hall calls are disabled for the elevator and it is reserved for exclusive use of the special passengers.	◎
4	Parking operation		The elevator can be parked at the parking floor by a key switch.	◎*2
5	Rush-hour schedule operation		All the elevators will automatically return to the stand by floor, after serving the last call during this preset rush-hour timing.	◎
6	Separated simplex operation		When duplex collective control or group control is used, a selector switch on the control panel is used to switch between parallel operation and independent operation.	◎
7	Interphone system		An interphone system is provided for emergency communication between the elevator and the master unit in the supervisory panel, etc.	●
8	Floor lock-out operation		Specific service floors can be locked-out by activating a switch.	◎
9	Temporary call registration of certain restricted floor		By inputting a pre-programmed code using the car operating board floor buttons, passengers can gain access to certain restricted floors.	◎
10	Door nudging operation		When the door has been open for a certain period of time, a buzzer sounds and the door forcibly closes.	◎

\*1 Included in the standard configuration when duplex collective control or group control is selected.  
\*2 Included in the standard specifications for Thailand, Laos, Myanmar, and Cambodia.

● : Standard / ○ : Option

No.	Name	Description	Passenger Service
Safety functions			
1	Abnormal speed protection function	In the event that the elevator is moving downwards at an abnormally high speed, the brakes will be automatically engaged and the elevator will cease operation.	●
2	Out of door-open zone alarm	In the event that the elevator stops out of the door-open zone of a selected floor, doors will not open, and an alarm will sound in the elevator.	●
3	Rescue operation	When the elevator stops out of the door-open zone, it will move to the nearest floor at slow speed to release passengers.	●
4	Door safety return system	In the event of door overload, such as when passengers get their fingers, hands or personal belongings caught in the door, this system automatically senses this and either re-closes or re-opens the doors to prevent injury.	●
5	Micro-leveling	Automatic correction of elevator landing level when there is a level difference between car and floor.	●
6	Car emergency lighting	In the event of a power failure, an emergency light inside the elevator will be automatically activated.	●
7	Emergency Battery Operated Power Supply (EBOPS/UPS) <sup>*1</sup>	In the event of a power failure, this emergency supply allows the operation of a light and alarm bell, etc.	◎
8	Multi-beam door sensor	In the event that the beam paths are obstructed, this sensor, installed at the edge of the doors, will keep the doors open.	●
9	Door signal with multi-beam door sensor	In addition to the multi-beam door sensor, the safety shoe is equipped with a signal that indicates when the doors are starting to close. (2PCO : Both sides, 2S2P : One side)	◎
10	Door safety edge	Mechanical safety units are installed on both sides (2PCO) or one side (2S2P) of the elevator doors. In the event of passengers coming into contact with the safety edges of closing doors, the doors will immediately reopen.	◎
Accessibility			
1	Car floor button flashing	The registered car destination floor button flashes when the car approaches the floor.	●
2	Braille plate	Braille plates are fixed next to the operation buttons in the car and hall.	◎
3	Sound button	An electronic tone sounds when the buttons are pressed to confirm call registration.	◎
4	Induction loop for hearing devices <sup>*2</sup>	This function allows a passenger to select the “Telecoil mode” on their hearing aid or cochlear implant to communicate with people at other locations via the intercom in an emergency. It conveys the audio signal from the intercom directly to the passenger’s hearing aid or cochlear implant.	◎
Security functions			
1	Intelligent operation security system by card reader (by others)	This function allows controlled access to certain floor by means of ID cards. Note: ID card-reader system is to be provided and installed by others. Interfacing shall be by means of dry (voltage-free) contacts.	◎
2	CCTV (camera by others, coaxial cable by Hitachi)	This system enables the security personnel to monitor inside the elevator car. This will be effective in preventing criminal and mischievous acts inside the elevator car. (CCTV system, including wiring, is to be supplied by others.)	◎
Information functions			
1	IC auto announcement (English / Thai / Malay / Mandarin / Cantonese / Portuguese)	Preset standard messages are announced to the passengers.	◎
2	Public address speaker	A speaker for background music and public announcements for the building can be installed in the elevator. (Music and announcement systems, including wiring, are to be provided by others.)	◎
3	Arrival audio signal	An electrical chime (located at the top and bottom of the elevator) will sound just before the arrival of the elevator.	◎
Energy-saving functions			
1	Regenerative system	When traveling downwards with a heavy car load or upwards with a light car load, the traction machine acts as a power generator to transmit power back to the electrical network in the building.	◎
2	Automatic turn-off of elevator light and fan	In the event that the elevator is not in use, the light and ventilation fan in the elevator are automatically turned off to conserve energy.	●

\*1 EBOPS (UPS) is provided as a standard specification when it is required by regulations.  
\*2 Induction loop for hearing devices is used in combination with EN81-20/50.

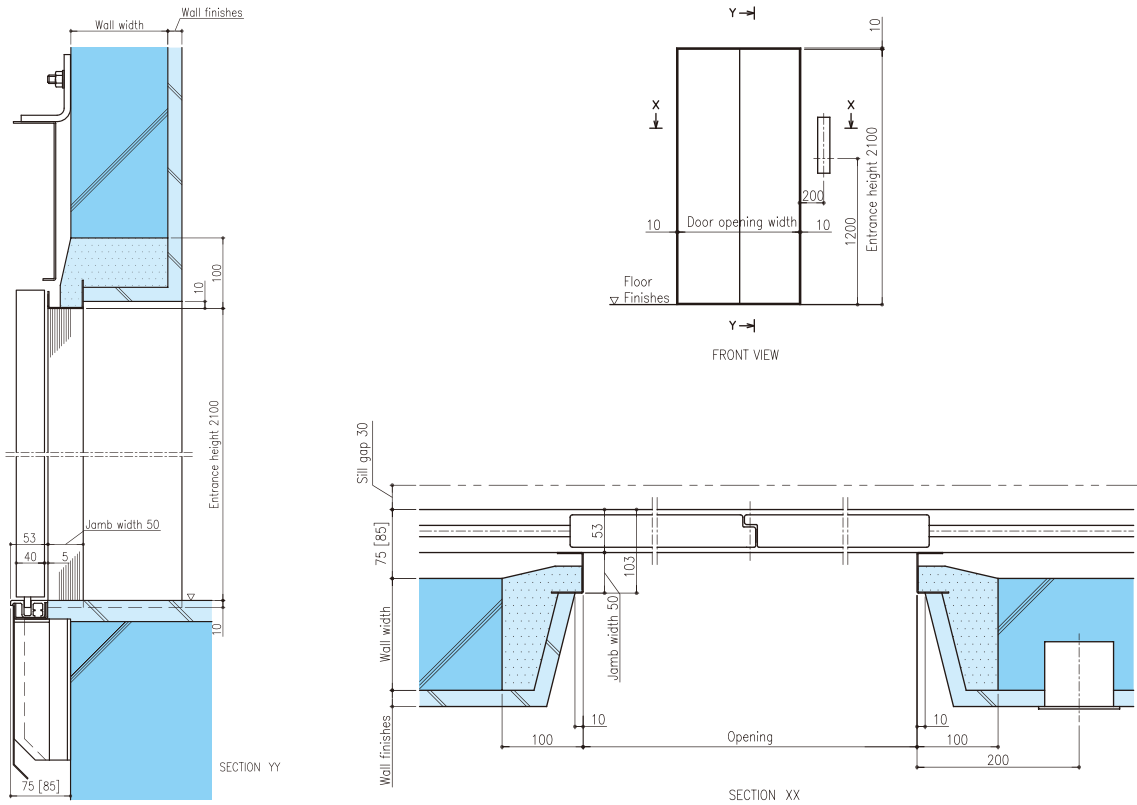
			● : Standard / ○ : Option
No.	Name	Description	Passenger Service
User services			
1	Observation	The walls of the elevator are equipped with windows, giving the elevator interior a more open feel.	○
2	Door open time adjustment	The duration of the door open timing is tailored to usage conditions, substantially improving operational efficiency.	●
3	Door open prolong button	In the event that this button on the car operation board is pressed, the elevator doors remain open for a pre-set period of time.	○
4	Automatic bypass operation	In the event that the elevator is fully loaded, this operation will not respond to any hall calls and will only respond to the car calls.	○
5	Mischievous call cancellation	In the event that a large number of calls is registered by a small number of passengers, the calls are determined to be mischievous and will be automatically cancelled upon responding to the next call. This eliminates unnecessary stops.	●
6	Floor "deselect" function	This function allows passengers to cancel the selection of a floor which is accidentally pressed by pressing the button again. (This eliminates unnecessary stops.)	●
7	Supervisory panel	This panel provides various supervisory operations, including communication and status monitoring.	○
8	Elevator monitoring system (EMS)	This system shows the real time situation of the elevators such as the elevator position, movement direction and abnormal operation on the PC (Personal Computer) display. It is also possible to turn on/off the elevators and change the service floors of the elevators using the PC.	○
9	Ion generator <sup>*1</sup>	A device that generates ionic microparticles enclosed in water is mounted on top of the car to ensure pleasant air quality inside the elevator.	○
10	Air conditioner	An evaporative-type cooling unit eliminates the need for pit drainage. This enhances comfort inside the elevator.	○
Emergency operations			
1	Earthquake emergency operation	In the event that an earthquake is detected, the elevator will stop at the nearest floor.	○
2	Earthquake emergency operation with primary wave sensor	When primary wave of an earthquake is detected, the elevator moves to the nearest floor and stops.	○
3	Fire emergency operation	In the event of fire, the elevator is automatically brought to the designated floor where it remains inoperative for passengers' safety.	○
4	Automatic rescue device for power failure	In the event of power failure, this system automatically switches to battery power to bring the elevator to the nearest floor.	○
5	Emergency operation for power failure	In the event of building power failure, the elevator can be operated by the building standby generator to move the elevator to the designated floor. (Automatic / Automatic and manual)	○
6	Pit flood operation	Elevator operation is paused when pit flooding is detected.	○
7	Fireman operation	In the event that the fireman switch is turned on, the elevator returns to the designated floor and will be ready for firemen's use.	○
Other functions			
1	Counterweight safety	A safety device is installed on the counterweight to maintain the rails and prevent falling.	○
2	Through door	Doors are installed on both sides of the elevator.	○
3	Freight condition of service lift	The elevator floor is reinforced to enable it to accommodate a larger volume of freight at once.	○
4	Over voltage detection device	When an abnormal increase in power supply to the elevator system is detected, the power supply will be cut off to prevent damage to the elevator equipment.	○
5	Maintenance operation	Elevator operates at lower speed during maintenance.	●
6	Overload detection system	In the event of overloading, this system will activate an audio / visual signal to prevent the elevator from moving.	●
7	Nearest landing door operation	In the unlikely event of temporary trouble during operation, the elevator automatically goes to the nearest floor at a low speed and doors will open to prevent passengers from being trapped inside.	●
8	Hook for protection sheet	The 3 side walls are equipped with hooks to facilitate mounting of protective mats.	○
9	Checker plate	A steel plate is affixed to the floor of the elevator.	○
10	Protection plate (stainless steel hairline) (H=300mm)	Protective stainless steel plates are installed to protect the area extending upward 300 mm from the bottom edge of three-side walls in car.	○
11	Protection plate (stainless steel hairline) (H=1200mm)	Protective stainless steel plates are installed to protect the area extending upward 1,200 mm from the bottom edge of three-side walls in car.	○
12	Sub-operating panel	Additional floor selection and door open/close buttons are located on the side opposite the main operating panel.	○
13	Keypad sub car-operating board	In order to comply with the barrier-free code, especially for high-rise buildings, individual car call buttons can be replaced by a keypad system.	○
14	Fire rated door	2 hours fire rated landing doors are available where required.	○
15	Emergency landing door	If there is a long distance between floors, doors are installed in a location where the elevator can stop automatically in an emergency.	○
16	Switch for emergency exit	A switch stops the elevator when the emergency exit door is opened.	○
17	Switch for door-machine inspection opening	A switch stops the elevator when the door of the door-machine inspection opening is opened.	○
18	Painted equipment inside hoistway	Equipment in the hoistway is painted black.	○
19	Electromagnetic compatibility (EMC)	Electromagnetic compatibility function in response to EN81-20/50 regulation, etc.	○
20	Interfacing to building management system	This interfacing shall be done by means of electrical dry contact with the building management system for their monitoring.	○

<sup>\*1</sup> The ion generator is not available in the following cases:  
(1) When the ceiling is supplied by the customer.  
(2) When the car internal depth is 1,250 mm or less.

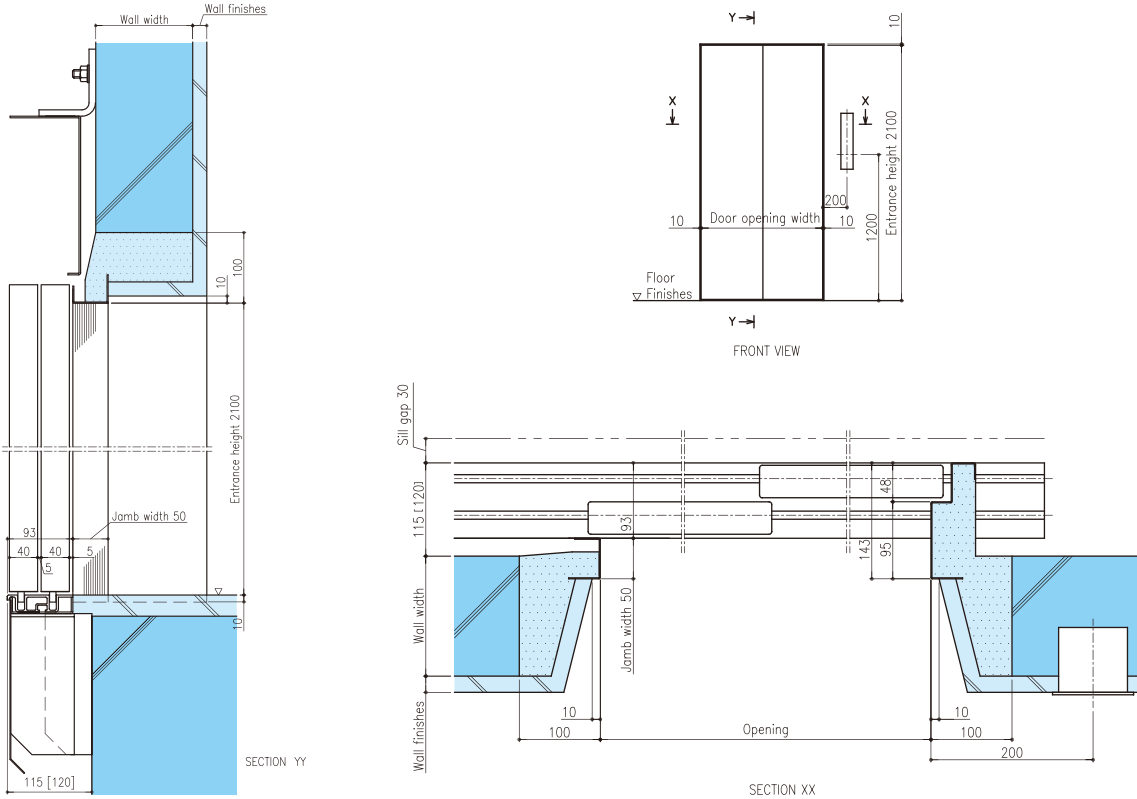
Dimensions

- Building structure (by other contractors)
- Wall and floor finishing (by other contractors)
- Grouting (by other contractors)

AS-1X (2PCO) Standard



AS-1X (2S2P) Standard



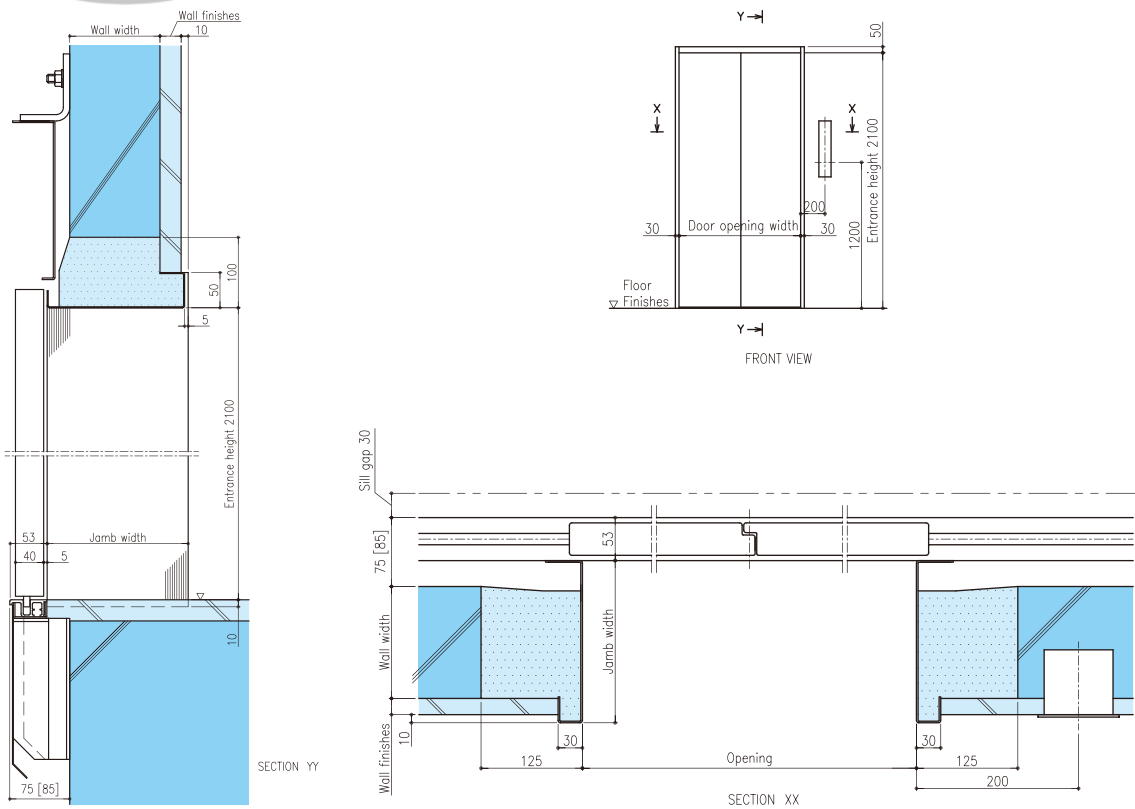
Note: [ ] : With fire rated door

Dimensions

- Building structure (by other contractors)
- Wall and floor finishing (by other contractors)
- Grouting (by other contractors)

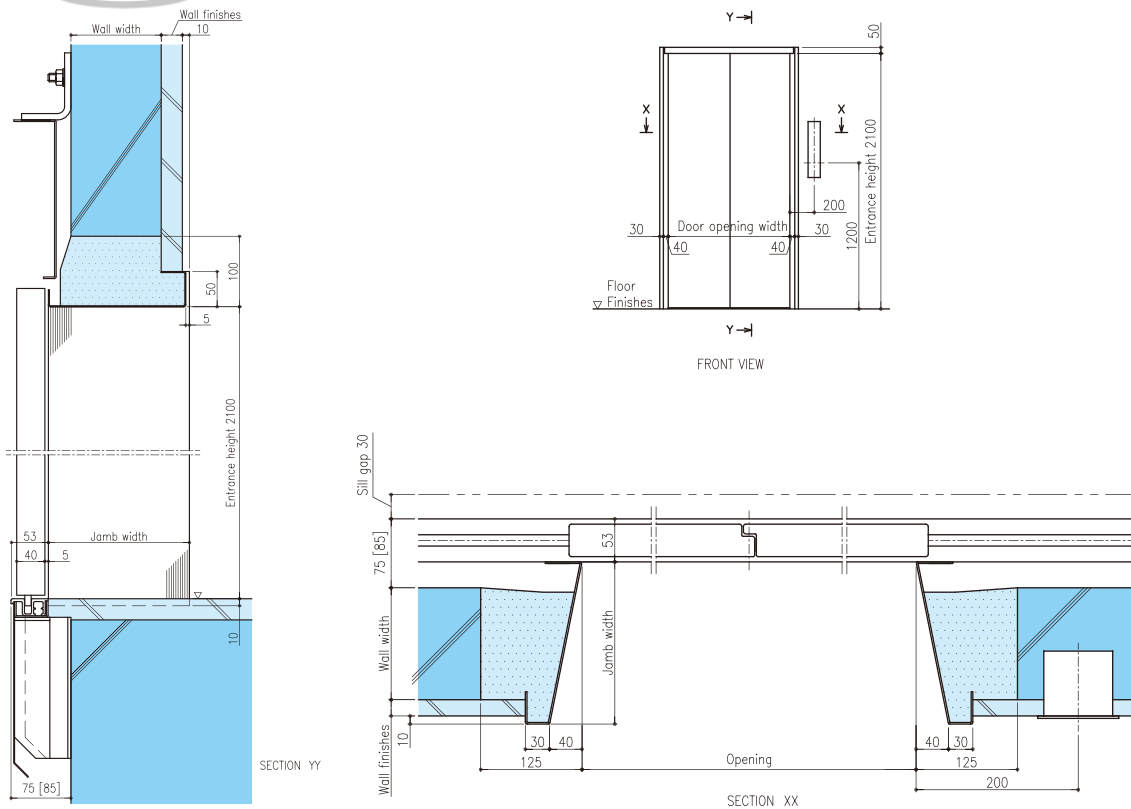
SS-1X (2PC0) Option

(unit: mm)

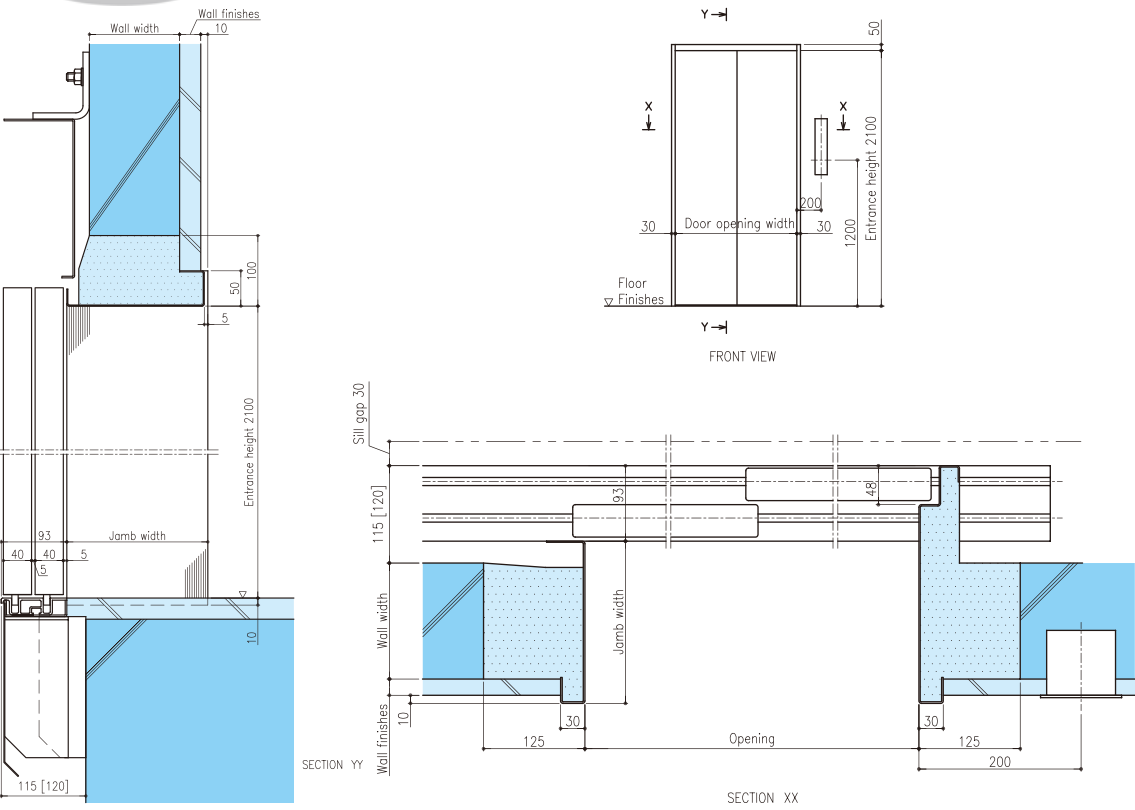


TS-1X (2PC0) Option

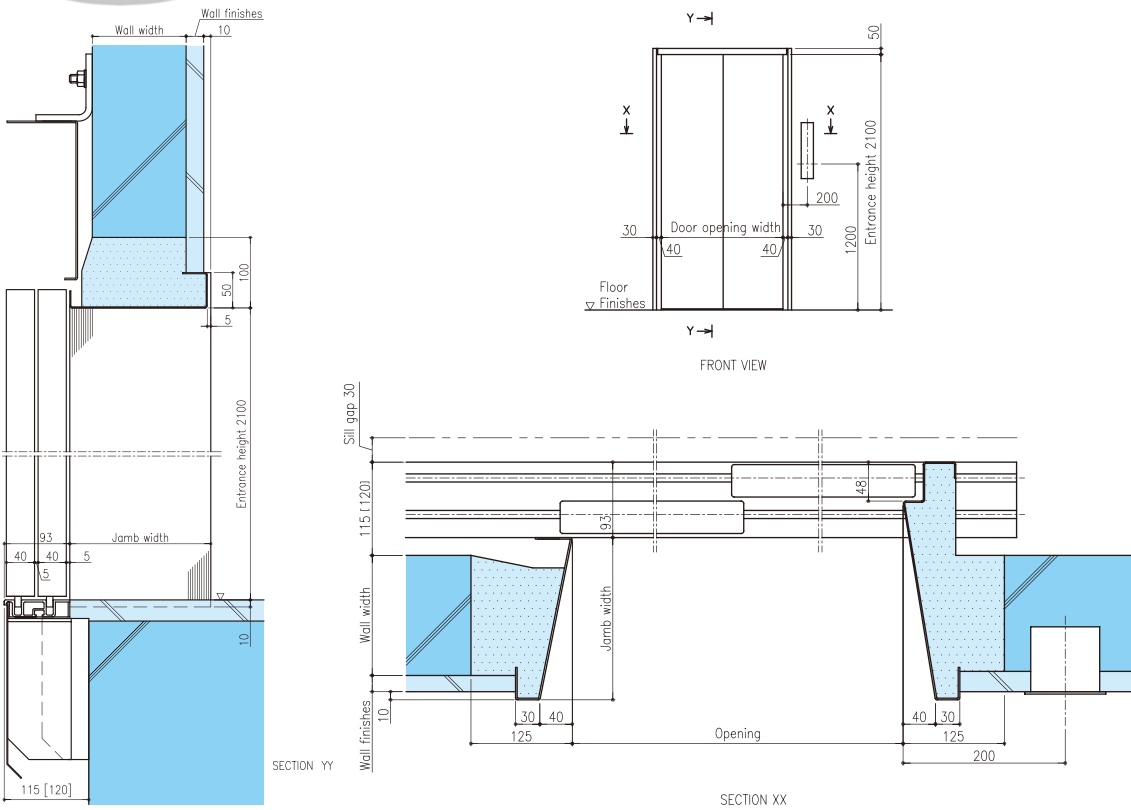
(unit: mm)



SS-1X (2S2P) Option



TS-1X (2S2P) Option



Note: [ ] : With fire rated door

Note: [ ] : With fire rated door

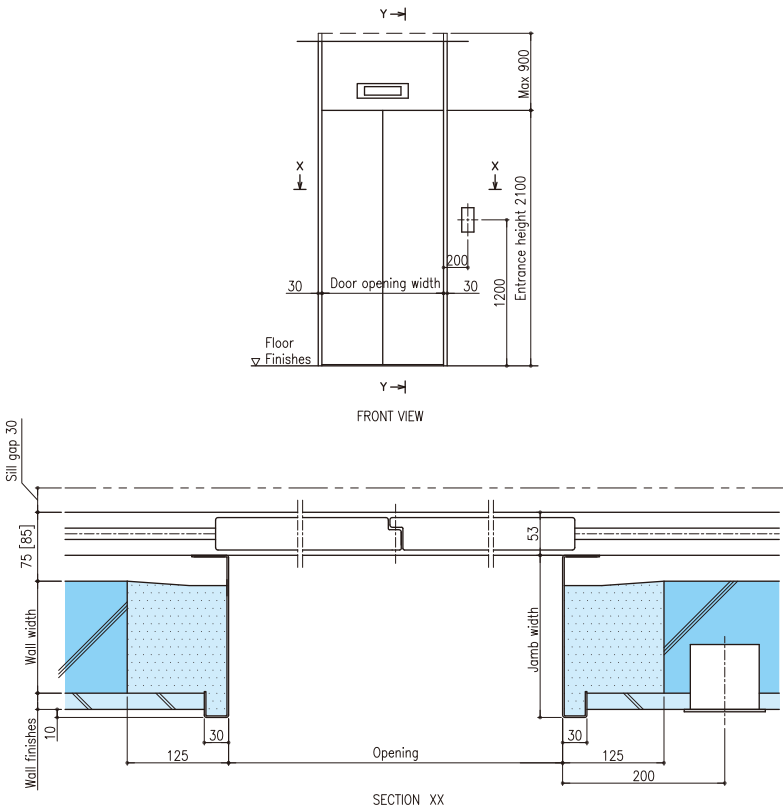
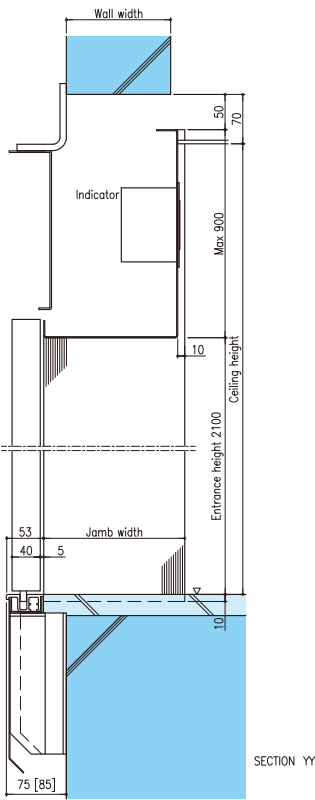


Dimensions

- Building structure (by other contractors)
- Wall and floor finishing (by other contractors)
- Grouting (by other contractors)

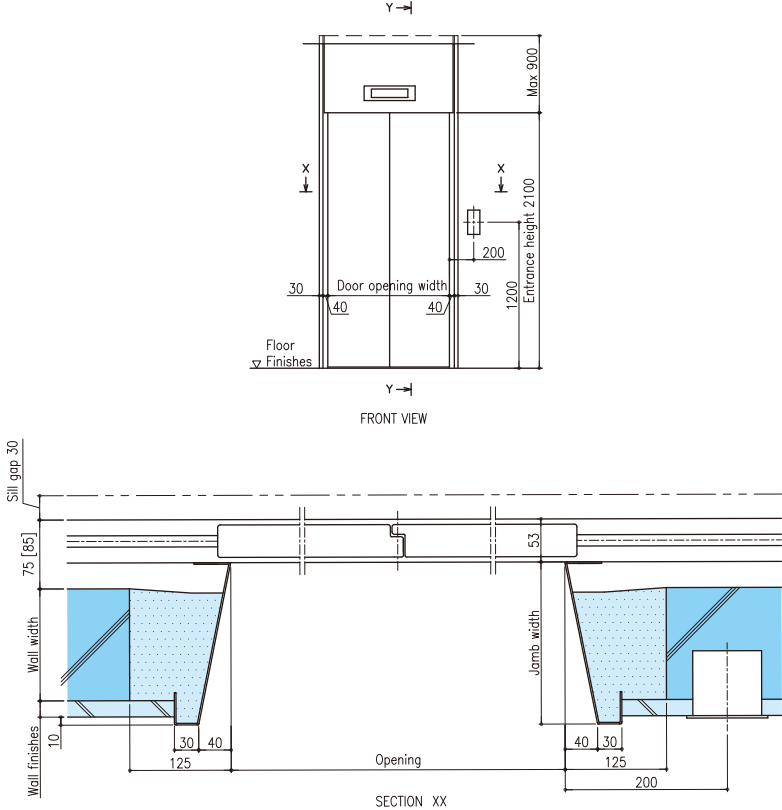
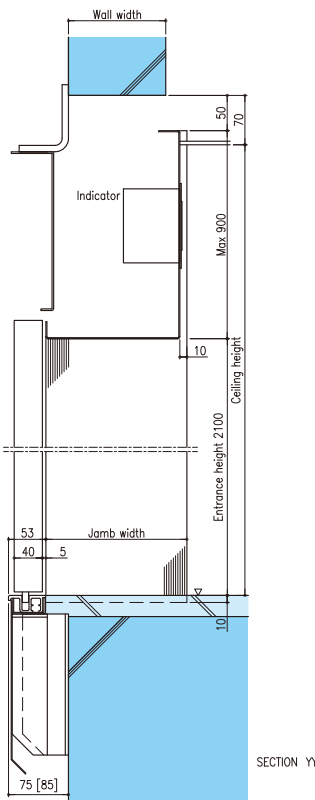
SL-2X (2PC0) Option

(unit: mm)

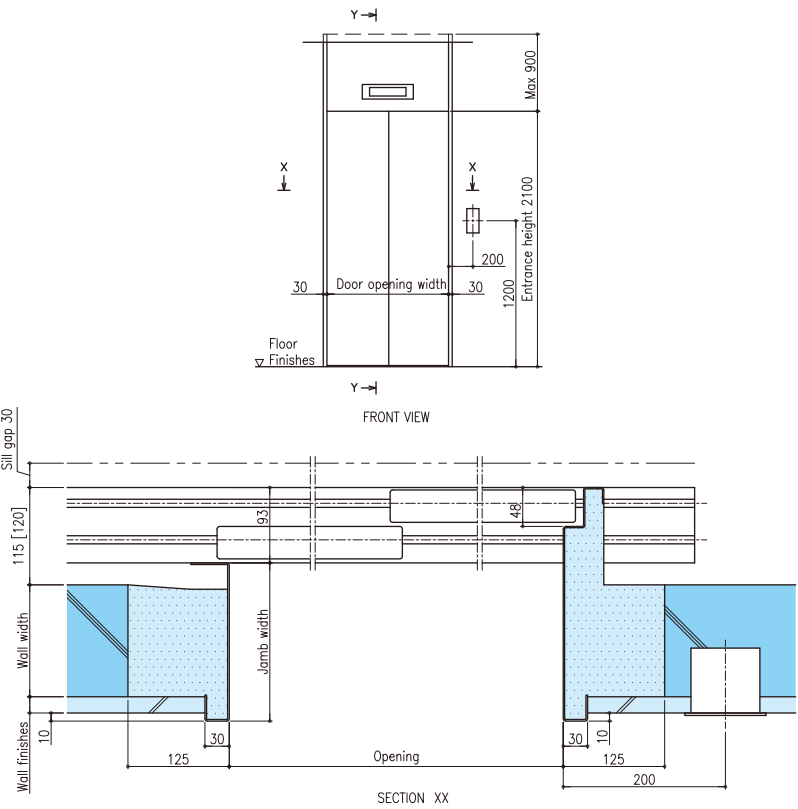
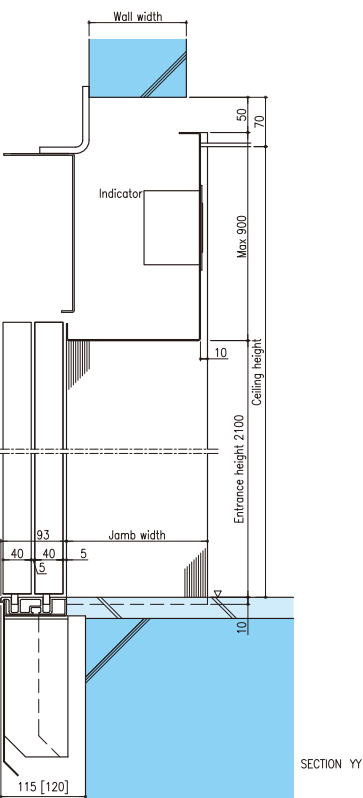


TL-2X (2PC0) Option

(unit: mm)

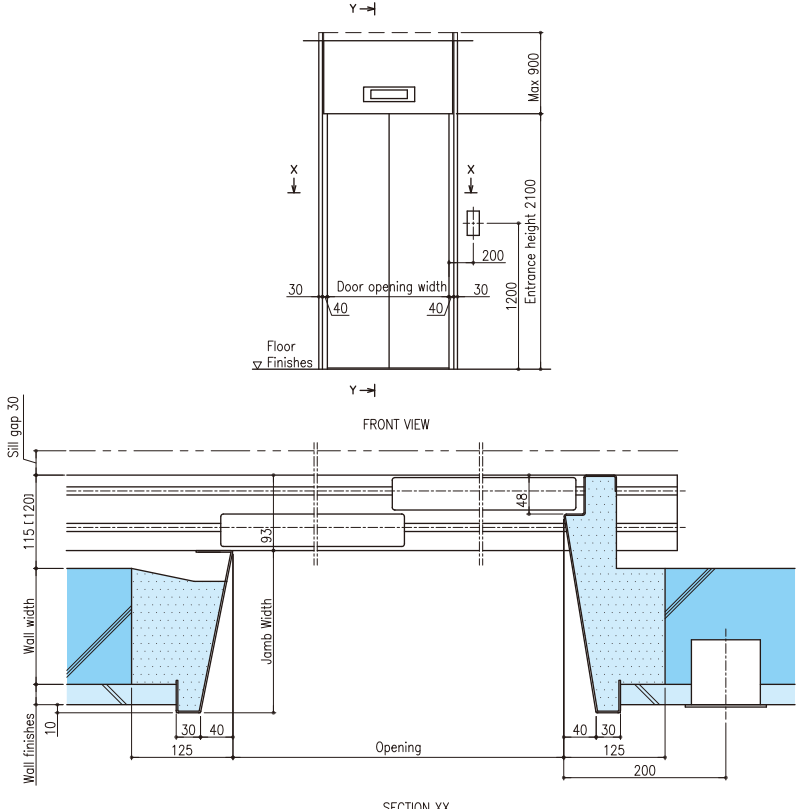
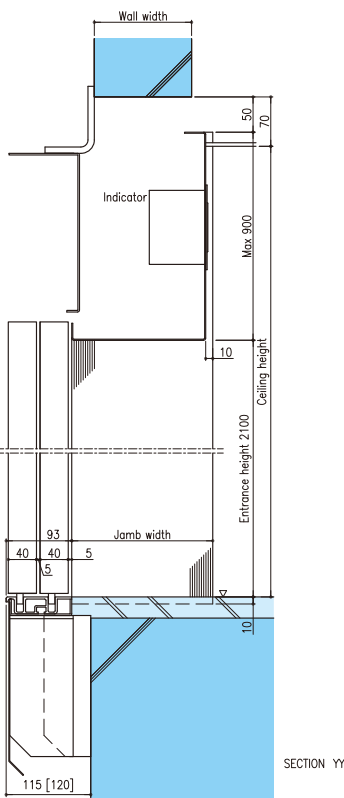


SL-2X (2S2P) Option



Note: [ ] : With fire rated door

TL-2X (2S2P) Option



Note: [ ] : With fire rated door

# Work to be done by building contractors

The preparatory work for elevator installation outlined in the table below should be undertaken by building contractors in accordance with Hitachi drawings and in compliance with local or relevant codes and regulations.

No.	ITEMS
1	Prepare hoistway with proper framing and enclosure, suitable pit of proper depth with drains and water-proofing if required, and properly lit and ventilated hoistway of adequate size with concrete floors, access doors, ladders and guards as required.
2	Provide and/or cut all necessary holes, chases, openings and finishes after equipment installation.
3	Supply and secure all supports, reinforced concrete slabs, etc., necessary for installation of the machinery, doors, buffers, etc.
4	Furnish all necessary cement and/or concrete for grouting of brackets, bolts, machine beams, etc.
5	Prepare and erect suitable scaffolding and protective measures during work in progress.
6	Furnish mains for three-phase electric power and single-phase lighting supply for car lighting and lift pit and power outlet to the hoistway, following the instructions of the elevator contractor on outlet position and wire size.
7	Provide, free of charge, a suitable theft-proof storage area for materials and tools during erection work.
8	Supply electric power for lighting of work area, installation work, elevator testing and spray painting.
9	Hoisting hook at top of the hoistway.
10	Hoistway ventilation to be provided to maintain the hoistway temperature at below 40°C.
11	Manufacture and installation of separating beam (if necessary).

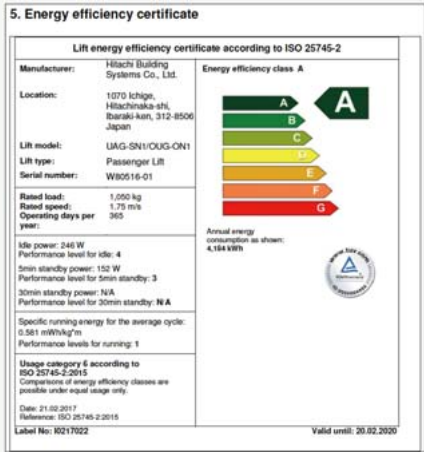
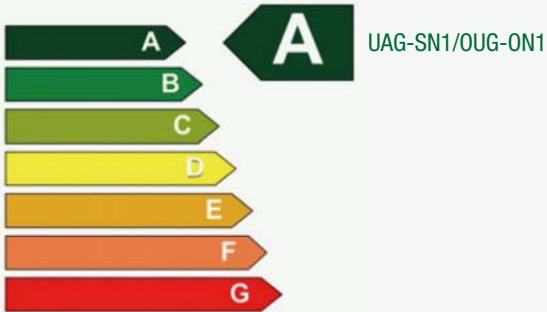
# Hitachi Eco-Achievement

## Hitachi's elevators achieved the highest energy efficiency class rating.

ISO 25745 is an international standard for evaluating the energy consumption and classifying the energy efficiency of elevators and escalators. ISO 25745-2 applies to the energy efficiency of elevators. It establishes seven classes, from A to G, with class A representing the highest level of energy efficiency.

Hitachi's UAG-SN1 and OUG-ON1 have achieved the highest rating.

### Energy efficiency class A



Model	UAG-SN1/OUN-ON1	UAG-SN1/OUN-ON1
Location	Japan	Japan
Rated load	1,050 kg	1,635 kg
Rated speed	1.75 m/s	1.75 m/s
No. of stops	4	4
Travel	19.5 m	19.5 m
Operating days per year	365	365
Annual energy consumption	4,184 kWh	4,633 kWh
Usage category	6	5
Classification of lift [A-G]	A	A

Note: The measured class differs depending on the usage conditions.

# Environmental activities

The Hitachi Group is engaged in environmental initiatives at its factories and offices. Siam Hitachi Elevator Co., Ltd. (Thailand) is working to combat global warming by reducing energy consumption. Lighting in their production facilities areas has been switched to LED lighting, and they have reduced electricity consumption of lighting by approximately 70%.\*

\* Assuming the lighting fixtures (approximately 250 fixtures) are used under the same conditions.



# Our achievement and future



## The ultra-high-speed elevators

Hitachi's ultra-high-speed elevator reached a speed of 1,260 m/min. (21 m/sec.), which was recorded during a test of the elevator under installation in Guangzhou CTF Finance Centre, a skyscraper complex building in China. The speed of 1,260 m/min is the world's fastest\* among all elevators operating today. The elevators feature technologies that support safe and comfortable operation, in addition to the drive and control technologies needed to attain the ultra-high-speeds. Hitachi will utilize this achievement for future product development, and strive to offer elevators with higher running quality as well as safety and comfort.

\* By Hitachi research as of June, 2017

### Drive and control technologies to attain ultra-high-speed of 1,260 m/min.

Hitachi has developed a permanent magnet synchronous motor that achieves both a thin profile and the high output needed to attain a speed of 1,260 m/min.

### Safety features supporting ultra-high-speed elevator operation

Hitachi developed brake equipment using braking materials with outstanding heat resistance to safely stop the elevator car in the unlikely event that a malfunction is detected during ultra-high-speed operation.

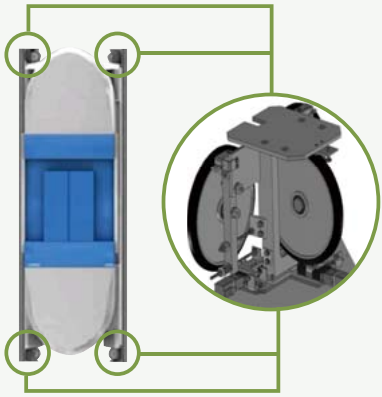


Traction mechanism for 1,260 m/min.

### Elevators can be used comfortably with safety even over long travel.

Active guide rollers that detect minute warping in the guide rails and lateral vibration due to wind pressure are installed in the four corners (top and bottom, left and right) of the elevator car. This gives passengers a comfortable ride even during high-speed operation.

The sensation of ear blockage is reduced by Hitachi's proprietary air pressure adjustment technology, which reduces the changes in air pressure inside the elevator car that would otherwise be caused by vertical movement through long travel.



Active guide rollers (3D model)



# Research and development

Modern manufacturing plants in Thailand and Singapore supply valuable products to customers. Equipment is made to the highest standards of quality and reliability on cutting-edge production lines.



Siam Hitachi Elevator Co., Ltd. (Thailand)



Hitachi Elevator Asia Pte. Ltd. (Singapore)

## Excellence and flexibility in design at manufacturing plants in Thailand and Singapore

The modern manufacturing plant in Thailand and Singapore boasts a complete team of local and Japanese engineers and is geared towards providing maximum flexibility in design and manufacturing to suit customer requirements.

High accuracy and efficiency in planning of equipment layout is made possible by the most advanced CAD systems.

Equipment is made to the highest standards of quality and reliability with modern CNC machinery.



Mito Works, Hitachi, Ltd. (Japan)

## An integrated engineering system from development to design and production

### Head office, research centers, and plants work closely together to develop new technologies.

Staff throughout the company work together as one team to conduct research and develop technologies.

### High performance simulator enhances overall elevator system efficiency.

A high-performance simulator is utilized for all stages of elevator development, from planning through system design. Planning, research and development are carried out according to the results of this statistical analysis.

### Cutting-edge CAD/CAM systems

The latest in CAD/CAM systems help us carry out elevator layout and various other design and production steps more quickly and efficiently.



Hitachi provides a wide array of products and services – from home appliances to societal infrastructure. We integrate the capabilities of our entire group at a high level, taking on the challenge of innovation to build a better future without losing sight of the perspective of our customers. Our development of superior, innovative technology and products support a safe, secure, comfortable lifestyle and a fair society for all. This is the conviction that infuses Hitachi's craftsmanship.

- Information and telecommunication systems
- Power systems
- Social infrastructure and industrial systems
- Electronic systems and equipment
- Construction machinery
- Highly functional materials and components
- Automotive systems
- Smart life and eco-friendly systems

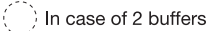




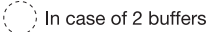
## Dimension of Hoistway and Pit Reaction Loading

## Dimension and reaction loading of hoistway

■ Based on Hitachi standard and EN81-20/50 regulations



■ **2S2P**



■Based on Hitachi standard and EN81-20/50 regulations

No.	Load [kg]	Persons	Rated speed [m/s] (m/min)	Door type	Door OP width W [mm]	Car internal size A × B [mm]	Hoistway X × Y [mm]	Location [mm]								Pit reaction loading *3&4&5 [kN]					
																Car side			Counterweight side		
								X3	X4 *1	C *2	D	E	F	RGC	RGW	RC1	RC2	RC3	RW1	RW2	RW3
57			1.0(60)																		
58			1.5(90)																		
59			1.75(105)																		
60			2.0(120)																		
61			2.5(150)																		
62			1.0(60)																		
63			1.5(90)																		
64	1200		1.75(105)	2PCO																	
65			2.0(120)																		
66			2.5(150)																		
67			1.0(60)																		
68			1.5(90)																		
69			1.75(105)																		
70			2.0(120)																		
71			2.5(150)																		
72			1.0(60)																		
73			1.5(90)																		
74	1250		1.75(105)	2S2P																	
75			2.0(120)																		
76			2.5(150)																		
77			1.0(60)																		
78			1.5(90)																		
79			1.75(105)																		
80			2.0(120)																		
81			2.5(150)																		
82			1.0(60)																		
83			1.5(90)																		
84			1.75(105)																		
85			2.0(120)																		
86			2.5(150)																		
87	1350		1.0(60)	2PCO																	
88			1.5(90)																		
89			1.75(105)																		
90			2.0(120)																		
91			2.5(150)																		
92			1.0(60)																		
93			1.5(90)																		
94			1.75(105)																		
95			2.0(120)																		
96			2.5(150)																		
97			1.0(60)																		
98			1.5(90)																		
99			1.75(105)	2S2P																	
100			2.0(120)																		
101			2.5(150)																		
102			1.0(60)																		
103			1.5(90)																		
104			1.75(105)																		
105			2.0(120)																		
106			2.5(150)																		
107			1.0(60)	2PCO																	
108			1.5(90)																		
109	1500		1.75(105)																		
110			2.0(120)																		
111			2.5(150)																		

- \*1 ( ) : Travel distance > 60m
- \*2 ( ) : With fire rated door
- \*3 ( ) : EN81-20/50 regulations
- \*4 Rated speed 1.0m/s : Travel distance ≤ 60m  
 Rated speed 1.5 , 1.75m/s : Travel distance ≤ 80m  
 Rated speed 2.0 , 2.5m/s : Travel distance ≤ 120m
- \*5 The pit reaction loading differs depending on the specifications and design, please consult Hitachi or local agent.

Note: Above tables shows the dimensions on the following conditions  
(1) Single elevator in hoistway (2) Without counterweight safety  
Please consult Hitachi or local agent if other specifications are required.

## Dimension of Hoistway and Pit Reaction Loading

## Dimension and reaction loading of hoistway

■ Based on Hitachi standard and EN81-20/50 regulations

No.	Load [kg]	Persons	Rated speed [m/s] (m/min)	Door type	Door OP width W [mm]	Car internal size A × B [mm]	Hoistway X × Y [mm]	Location [mm]										Pit reaction loading *3*4*5 [kN]										
																		Car side			Counterweight side							
								X3	X4	C *2	D	E	F	RGC	RGW	RC1	RC2	RC3	RW1	RW2	RW3							
112	1600	21	1.0(60)	2S2P	1200	1400×2400	2300×2850	1355	945	1257 [1262]	640	1055	95	1630	900	71.5x2sets	63.5(390.5)	51.0(377.5)	113.5	25.5(341.5)	44.0(371.0)							
113			1.5(90)													72.5x2sets	69.5(494.0)	56.0(481.0)	115.5	29.5(442.5)	49.0(473.5)							
114			1.75(105)													145.0												
115			2.0(120)													162.0	85.0(710.0)	70.5(695.5)	129.5	40.0(650.0)	64.5(687.5)							
116			2.5(150)																									
117		1.0(60)	2PCO	1100	2000×1750	2850×2150	1535	1315	855 [865]	1310		—	2140	75.75x2sets		66.5(398.0)	53.0(385.0)	119.5	26.5(346.5)	45.5(377.5)								
118		1.5(90)												71.5(501.0)		58.0(487.0)	30.0(448.0)		50.0(479.5)									
119		1.75(105)												151.5														
120		2.0(120)												162.0		85.0(710.0)	70.5(695.5)	129.5	40.0(650.0)	64.5(687.5)								
121		2.5(150)																										
122	1800	23	1.0(60)	2S2P	1200	1500×1700	3000×2100	1660	1340	830 [840]	640	1385	—	2240	900	84.75x2sets	65.5(397.5)	57.5(389.5)	135.5	34.5(353.0)	51.0(383.0)							
123			1.5(90)													70.5(499.5)	62.5(492.0)	39.0(454.0)		55.5(485.0)								
124			1.75(105)													169.5												
125		1.0(60)	24	2S2P	1200	1500×2500	2500×2950	1555	945	1307 [1312]		1130	145	1730		84.75x2sets	65.5(397.5)	57.5(389.5)	133.5	34.5(353.0)	51.0(383.0)							
126		1.5(90)														70.5(499.5)	62.5(492.0)	39.0(454.0)		55.5(485.0)								
127		1.75(105)														169.5												
128		1.0(60)										2PCO	1100	2000×1800		2900×2200	1610	1290	880 [890]	1335	—	2140	84.75x2sets	65.5(397.5)	57.5(389.5)	135.5	34.5(353.0)	51.0(383.0)
129		1.5(90)																					70.5(499.5)	62.5(492.0)	39.0(454.0)		55.5(485.0)	
130		1.75(105)	169.5																									
131		2000	26	1.0(60)	2S2P	1300	1500×2700	2500×3150	1505	995		1407 [1412]	640	1130		95	1730	900	89.75x2sets	68.0(400.0)	60.0(392.0)	139.5	35.5(353.0)	52.5(384.5)				
132	1.5(90)			73.0(502.5)							65.0(494.0)				39.5(454.5)				57.0(486.5)									
133	1.75(105)			179.5																								
134	1.0(60)			2PCO							1100				2000×2000				2900×2400	1610	1290		980 [990]	89.75x2sets	68.0(400.0)	60.0(392.0)	35.5(353.0)	52.5(384.5)
135	1.5(90)																							73.0(502.5)	65.0(494.0)	39.5(454.5)	57.0(486.5)	
136	1.75(105)		179.5																									
137	1.0(60)		2PCO	1100	2000×2100	2900×2500	1610	1290	1030 [1040]	90.75x2sets	68.5(400.5)	60.5(392.5)		141.5	36.0(353.5)	53.0(385.0)												
138	1.5(90)									73.5(503.0)	65.5(494.5)	40.0(454.5)			57.5(487.0)													
139	1.75(105)									181.5																		

\*1 ( ) : Travel distance > 60m  
 \*2 ( ) : With fire rated door  
 \*3 ( ) : EN81-20/50 regulations  
 \*4 Rated speed 1.0m/s : Travel distance ≤ 60m  
     Rated speed 1.5 , 1.75m/s : Travel distance ≤ 80m  
     Rated speed 2.0 , 2.5m/s : Travel distance ≤ 120m  
 \*5 The pit reaction loading differs depending on the specifications and design, please consult Hitachi or local agent.

Note: Above tables shows the dimensions on the following conditions  
 (1) Single elevator in hoistway (2) Without counterweight safety  
 Please consult Hitachi or local agent if other specifications are required.

■ **Based on Malaysian regulations**

No.	Load [kg]	Persons	Rated speed [m/s] (m/min)	Door type	Door OP width W [mm]	Car internal size A × B [mm]	Hoistway X × Y [mm]	Location [mm]										Pit reaction loading *3*4 [kN]																												
																		Car side			Counterweight side																									
								X3	X4	C *2	D	E	F	RGC	RGW	RC1	RC2	RC3	RW1	RW2	RW3																									
1	615	9	1.0(60)	2PCO	800	1150×1400	1950×1800	1050	900	680 [690]	530	870	1380	800	74.0	225.0	218.0	61.5	201.5	215.5																										
2			1.5(90)													284.0	277.0		259.5	274.0																										
3			1.75(105)													227.0	219.5		201.5	216.0																										
4	750	11	1.0(60)			1350×1400	2150×1800	1150	1000	970	1580	79.5		227.0	219.5	64.0	201.5	216.0																												
5			1.5(90)											286.0	278.5		259.5	274.5																												
6			1.75(105)											900	97.5		689.5	679.0	81.5	651.0	677.0																									
7			2.0(120)				1640	800	90.5	230.5		222.5		72.5	201.5	218.0																														
8			2.5(150)							289.5		281.0			259.5	276.5																														
9	885	13	1.0(60)	900	1500×1450	1175				1025	705 [715]	530	1000		900	108.5	693.0	682.0	90.0	651.0	679.0																									
10			1.5(90)				800	91.5	228.0					219.5								73.5	198.5	215.5																						
11			1.75(105)																						1740	900	110.5	693.5	682.5	92.0	651.0	679.5														
12			2.0(120)																																											
13			2.5(150)																																											
14			1.0(60)		2350×2000	1285	1065	640	1060																																					
15			1.5(90)							2350×1750 (2400×1750)	1315	1035 (1085)	655 [665]	530	1105																															
16			1.75(105)													1600×1350	1335	1115	705 [715]	640	1110																									
17	2.0(120)																																													
18	2.5(150)																																													
19	955	14	1.0(60)	2S2P	1000	1100×2100	1900×2550 (1950×2550)	1115	785 (835)	1107 [1112]	530	845	45	1330	800							96.0	77.0	198.5	216.0																					
20			1.5(90)													2000×2550	1155	845	640	905	900					113.0	694.5	683.0	93.5	651.0	680.0															
21			1.75(105)																													1600×1450	2300×1850	1225	1075	705 [715]	530	1050	800	95.0	232.0	223.5	76.0	201.5	219.0	
22			2.0(120)																																											2450×2000
23			2.5(150)			1600×1550	2300×1950	1225	1075	755 [765]	530	1050		800	98.0							229.5	221.5	77.5	198.5																					
24			1.0(60)													2450×2050	1335	1115	1110	116.0	695.0					683.5	95.0	651.0	680.5																	
25			1.5(90)																											1200×2300	2100×2750	1210	890	1207 [1212]	955	45	1430	119.0	388.0	377.0	95.5	347.0	372.0			
26			1.75(105)																																									1600×1700	2400×2100	1295
27	2.0(120)	1800×1500	2600×2000	1390	1210	730 [740]	1210	1940	117.0	387.5	376.5	93.5	346.5	371.5																																
28	2.5(150)														2650×2000	1435	1215	127.0	699.0	686.5	103.5	650.5	683.0																							
29	1.0(60)																							1290	910	1207 [1212]	1005	95	1530	128.5	391.0	379.0	102.5	347.0	373.5											
30	1.5(90)																																			1305	895	128.5	493.5	481.5	112.0	650.5	685.0			
31	1.75(105)	138.5	702.5	689.5	112.0	650.5	685.0																																							
32	2.0(120)							138.5	702.5	689.5	112.0	650.5	685.0																																	
33	2.5(150)													138.5	702.5	689.5	112.0	650.5	685.0																											

\*1 [ ] : Travel distance > 60m  
 \*2 [ ] : With fire rated door  
 \*3 Rated speed 1.0m/s : Travel distance ≤ 60m  
     Rated speed 1.5 , 1.75m/s : Travel distance ≤ 80m  
     Rated speed 2.0 , 2.5m/s : Travel distance ≤ 120m  
 \*4 The pit reaction loading differs depending on the specifications and design, please consult Hitachi or local agent.

Note: Above tables shows the dimensions on the following conditions  
 (1) Single elevator in hoistway (2) Without counterweight safety  
 Please consult Hitachi or local agent if other specifications are required.



## Dimension and reaction loading of hoistway

■ **Based on Malaysian regulations**

No.	Load [kg]	Persons	Rated speed [m/s] (m/min)	Door type	Door OP width W [mm]	Car internal size A × B [mm]	Hoistway X × Y [mm]	Location [mm]								Pit reaction loading *3*4 [kN]									
								X3	X4 *1	C *2	D	E	F	RGC	RGW	Car side			Counterweight side						
															RC1	RC2	RC3	RW1	RW2	RW3					
54	1365	20	1.0(60)	2PCO	1000	1800×1750	2600×2150	1395	1205	855 [865]	1210	—	1940		66.5x2sets	392.5	380.5	105.5	346.5	374.0					
55			1.5(90)													495.0	482.5		448.0	476.0					
56			1.75(105)																						
57			2.0(120)				2650×2150	1435	1215	141.0		703.5			690.0	113.5	650.5	685.5							
58			2.5(150)																						
59			1.0(60)																						
60			1.5(90)				1100	2000×1550	2800×2050	1495		1305			755 [765]	1310	—	2140	66.5x2sets	387.0	375.0	105.5	341.5	369.0	
61			1.75(105)																	487.5	477.0		443.0	471.5	
62			2.0(120)																						
63	2.5(150)	2850×2050	1535	1315	141.0	703.5			690.0	113.5	650.5	685.5													
64	1.0(60)																								
65	1.5(90)																								
66	1500	22	1.75(105)	2S2P	1200	1400×2400			2300×2850	1355	945	1257 [1262]	1055	95	1630				71.5x2sets	390.5	377.5	341.5	371.0		
67																			2.0(120)	72.5x2sets	494.0	481.0	115.5	442.5	473.5
68																			2.5(150)	145.0	494.0	481.0	115.5	442.5	473.5
69							1.0(60)	75.0x2sets								398.0		384.5	118.5	347.0	377.5				
70	1.5(90)																								
71	1.75(105)	500.5	487.0	448.0	479.0																				
72	2.0(120)																								
73	2.5(150)	2PCO	1100	2000×1750	2800×2150	1495	1305	855 [865]	640	1310	—	2140	900	160.5	709.5	695.0	129.0	650.5	689.0						
74	1.0(60)																								
75	1.5(90)																								
76	1.75(105)																								
77	1635	24	2.0(120)	2000×1800	2800×2200	1495	1305	880 [890]	1310	—	2140	900	77.75x2sets	399.5	386.0	122.5	347.0	378.0							
78														2.5(150)	502.0		488.0	448.0	480.0						
79														1.0(60)	165.5		711.0	696.0	132.5	650.5	690.0				
80														1.5(90)											
81	1.75(105)																								
82	1835	27	1.0(60)	2PCO	1100	2000×2000	2900×2400	1610	1290	980 [990]	1335	—	2140	86.5x2sets	398.0	390.5	136.5	353.0	383.5						
83															1.5(90)	500.5		492.5	454.5	485.5					
84															1.75(105)										
85	1905	28	1.0(60)	2S2P	1300	1500×2700	2500×3150	1505	995	1407 [1412]	1130	95	1730	88.0x2sets	399.0	391.0	137.5	353.0	384.0						
86															1.5(90)	501.5		493.5	454.5	486.0					
87															1.75(105)										
88	1975	29	1.0(60)	2PCO	1100	2000×2100	2900×2500	1610	1290	1030 [1040]	1335	—	2140	90.25x2sets	400.5	392.0	141.0	353.5	384.5						
89															1.5(90)	502.5		494.5	454.5	486.5					
90															1.75(105)										

\*1 [ ] : Travel distance > 60m  
 \*2 [ ] : With fire rated door  
 \*3 Rated speed 1.0m/s : Travel distance ≤ 60m  
     Rated speed 1.5 , 1.75m/s : Travel distance ≤ 80m  
     Rated speed 2.0 , 2.5m/s : Travel distance ≤ 120m  
 \*4 The pit reaction loading differs depending on the specifications and design, please consult Hitachi or local agent.

Note: Above tables shows the dimensions on the following conditions  
 (1) Single elevator in hoistway (2) Without counterweight safety  
 Please consult Hitachi or local agent if other specifications are required.

■ Based on Hitachi standard for India

No.	Load [kg]	Persons	Rated speed [m/s] (m/min)	Door type	Door OP width W [mm]	Car internal size A × B [mm]	Hoistway X × Y [mm]	Location [mm]										Pit reaction loading *3×4 [kN]																								
																		Car side			Counterweight side																					
								X3	X4 *1	C *2	D	E	F	RGC	RGW	RC1	RC2	RC3	RW1	RW2	RW3																					
1	612	9	1.0(60)	2PCO	800	1100×1400	1900×1800	1000	900	680 [690]		845		1330	800	71.5	34.0	28.0	59.5	16.0	25.0																					
2			1.5(90)														37.5	31.0		18.5	28.0																					
3			1.75(105)																																							
4			1.0(60)			1400×1100	2050×1700 (2100×1700)	1105	945 (995)	635 [645]	530	950	1540	71.0	34.0	27.5	59.0	15.5	25.0																							
5			1.5(90)												37.5	31.0		18.5	27.5																							
6			1.75(105)																																							
7	748	11	1.0(60)	2PCO	800	1350×1400	2150×1800	1150	1000	680 [690]		970	—	1580	900	97.0	41.0	33.5	64.0	16.5	27.0																					
8			1.5(90)																	41.0	33.5	19.0	29.5																			
9			1.75(105)																																							
10			2.0(120)														1100×2000	1900×2400	1010	890	980 [990]	530	845	800	90.5	41.0	33.0	72.5	17.0	28.5												
11			2.5(150)																												2050×2400	1130	920	640	905	900	110.5	69.0	57.5	92.0	36.0	55.0
12			1.0(60)																																							
13	1.5(90)	2S2P	900	1100×2450	1110	790	1057 [1062]	530	845	95	800	90.5	44.5	36.0	72.5	19.5	31.5																									
14	1.75(105)																	2000×2450	1205	795	640	905	900	110.5	69.0	57.5	92.0	36.0	55.0													
15	2.0(120)																																									
16	2.5(150)												1500×1450	2200×1850	1175	1025	705 [715]	530	1000	1640	800	90.5	44.5	36.0	72.5	19.5	31.5															
17	1.0(60)																											2350×2000	1285	1065	640	1060	900	108.5	68.0	57.0	90.0	36.0	54.5			
18	1.5(90)																																									
19	1.75(105)	1600×1350	2350×1750 (2400×1750)	1315	1035 (1085)	655 [665]	530	1105	—	1740	800	91.5											44.5	36.5	73.5	19.5	32.0															
20	2.0(120)																											2450×2000	1335	1115	705 [715]	640	1110	900	110.5	69.0	57.5	92.0	36.0	55.0		
21	2.5(150)																																									
22	1.0(60)												1100×2100	1900×2550 (1950×2550)	1115	785 (835)	1107 [1112]	530	845	45	1330	800	94.5	42.5	34.0	76.0	17.5	29.5														
23	1.5(90)																												2000×2550	1155	845	640	905	900	113.0	69.5	58.5	93.5	36.5	55.0		
24	1.75(105)																																									
25	2.0(120)	1600×1400	2300×1800	1225	1075	680 [690]	530	1050	—	1740	800	94.0												42.0	34.0	75.0	17.5	29.5														
26	2.5(150)																												2450×2000	1335	1115	705 [715]	640	1110	900	113.0	69.5	58.5	93.5	36.5	55.0	
27	1.0(60)																																									
28	1.5(90)												1000×2400	1800×2850	1015	785	1257 [1262]	530	795	45	1230	800	99.5	47.5	38.5	79.0	17.5	30.5														
29	1.75(105)																												1900×2850	1105	795	640	855	900	121.5	72.5	60.5	100.5	37.0	57.0		
30	2.0(120)																																									
31	2.5(150)	1600×1500	2300×1900	1225	1075	730 [740]	530	1050	—	1740	800	97.5												46.5	38.0	77.0	20.0	33.0														
32	1.0(60)																												2450×2000	1335	1115	640	1110	900	121.5	72.5	60.5	100.5	37.0	57.0		
33	1.5(90)																																									
34	1.75(105)																																									
35	2.0(120)																																									
36	2.5(150)																																									
37	1.0(60)																																									
38	1.5(90)																																									
39	1.75(105)																																									
40	2.0(120)																																									
41	2.5(150)																																									
42	1.0(60)																																									
43	1.5(90)																																									
44	1.75(105)																																									
45	2.0(120)																																									
46	2.5(150)																																									
47	1.0(60)	1020	15	2S2P	900	1000×2400	1800×2850	1015	785	1257 [1262]	530	795	45	1230	800	99.5	44.0	35.5	79.0	17.5	30.5																					
48	1.5(90)																47.5	38.5		20.0	33.5																					
49	1.75(105)																																									
50	2.0(120)					1600×1500	2300×1900	1225	1075	730 [740]	530	1050	—	1740	800	97.5	43.0	35.0	77.0	17.5	30.0																					
51	2.5(150)																					2450×2000	1335	1115	640	1110	900	121.5	72.5	60.5	100.5	37.0	57.0									
52	1.0(60)																																									
53	1.5(90)																																									
54	1.75(105)																																									
55	2.0(120)																																									
56	2.5(150)																																									

\*1 [ ] : Travel distance > 60m  
 \*2 [ ] : With fire rated door  
 \*3 Rated speed 1.0m/s : Travel distance ≤ 60m  
 Rated speed 1.5 , 1.75m/s : Travel distance ≤ 80m  
 Rated speed 2.0 , 2.5m/s : Travel distance ≤ 120m  
 \*4 The pit reaction loading differs depending on the specifications and design, please consult Hitachi or local agent.

Note: Above tables shows the dimensions on the following conditions  
 (1) Single elevator in hoistway (2) Without counterweight safety  
 Please consult Hitachi or local agent if other specifications are required.

Dimension of Hoistway and Pit Reaction Loading

Dimension and reaction loading of hoistway

Based on Hitachi standard for India

No.	Load [kg]	Persons	Rated speed [m/s] (m/min)	Door type	Door OP width W [mm]	Car internal size A × B [mm]	Hoistway X × Y [mm]	Location [mm]								Pit reaction loading *3*4 [kN]								
																Car side			Counterweight side					
								X3	X4 *1	C *2	D	E	F	RGC	RGW	RC1	RC2	RC3	RW1	RW2	RW3			
57	1156	17	1.0(60)	2PCO	1000	1600×1700	2400×2100	1295	1105	830 [840]		1110		1740		117.0	55.5	44.5	93.5	24.0	39.5			
58			1.5(90)														60.5	49.0		28.0	44.0			
59			1.75(105)																					
60			2.0(120)																					
61			2.5(150)			2450×2100	1330	1120				127.0	74.5	62.0		103.5	37.5	58.0						
62			1.0(60)			1800×1500						117.0	54.5	44.0		94.5	23.5	39.0						
63			1.5(90)									121.0	61.5	50.0		98.5	28.0	44.5						
64			1.75(105)									127.0	74.5	62.0		103.5	37.5	58.0						
65			2.0(120)																					
66			2.5(150)				2650×2000	1435	1215															
67	1224	18	1.0(60)	2S2P	1100		1200×2300	2100×2750	1210	890	1207 [1212]		955	45	1430		121.5	57.0	45.5	97.0	24.5	40.5		
68			1.5(90)							62.0								50.5	28.0		44.5			
69			1.75(105)																					
70			2.0(120)																					
71			2.5(150)			2150×2750	1235	915				135.5	77.0	64.0	110.5		38.0	60.0						
72			1.0(60)			2000×1400								57.5	46.0		98.5	24.5	40.5					
73			1.5(90)										123.5	62.5	51.0			28.5	45.0					
74			1.75(105)																					
75			2.0(120)										135.5	77.0	64.0		110.5	38.0	60.0					
76			2.5(150)				2850×2000	1535	1315	705 [715]														
77	1292	19	1.0(60)	2PCO	1000			2250×2700	1170	1080	1130 [1140]						128.5	59.0	47.5	102.5	25.0	41.5		
78			1.5(90)																		64.0	52.0	28.5	46.0
79			1.75(105)																					
80			2.0(120)																					
81			2.5(150)			2350×2700	1230	1120				138.0	78.0	64.5	112.0		38.0	60.0						
82			1.0(60)			1300×2300								59.0	47.5		102.5	25.0	41.5					
83			1.5(90)										128.5	64.0	52.0			28.5	46.0					
84			1.75(105)				2200×2750			1207 [1212]	640	95	900											
85			2.0(120)																					
86			2.5(150)																					
87	1.0(60)	2000×1500												59.0	47.5	102.5	25.0	41.5						
88	1.5(90)								128.5	64.0	52.0	28.5	46.0											
89	1.75(105)																							
90	2.0(120)								138.0	78.0	64.5	112.0	38.0	60.0										
91	2.5(150)		2850×2000	1535	1315																			
92	1360		20	1.0(60)	2PCO	1000	1800×1700	2600×2100	1395	1205	830 [840]		1210		1940		65.5x2sets	60.0	48.0	103.5	25.0	42.0		
93		1.5(90)								65.0								52.5	29.0		46.5			
94		1.75(105)																						
95		2.0(120)																						
96		2.5(150)		2650×2100			1435	1215				141.0	78.5	65.5	113.5		38.5	60.5						
97		1.0(60)		2000×1550										60.0	48.0		105.0	24.5	42.0					
98		1.5(90)											66.25x2sets	65.0	53.5			28.5	46.0					
99		1.75(105)											132.5											
100		2.0(120)											141.0	78.5	65.5		113.5	38.5	60.5					
101		2.5(150)					2850×2050	1535	1315															
102	1428	21	1.0(60)			1000	1800×1750	2600×2150	1395	1205	855 [865]		1210		1940		67.75x2sets	61.0	49.0	106.5	25.0	42.5		
103			1.5(90)							66.5								54.0	29.0		47.0			
104			1.75(105)																					
105			2.0(120)																					
106	2.5(150)	2650×2150	1435	1215				151.5	82.0	68.0	122.5	39.0	63.0											
107	1496	22	1.0(60)		1100	1400×2400	2500×2800			1180 [1190]		1055	1630		71.5x2sets		63.5	50.5	113.5	25.5	44.0			
108			1.5(90)															72.5x2sets		69.5	56.0	115.5	29.5	49.0
109			1.75(105)																					
110			2.0(120)																					
111			2.5(150)																	154.0	82.5	68.5	124.0	39.5

Dimension of Hoistway and Pit Reaction Loading

Dimension and reaction loading of hoistway

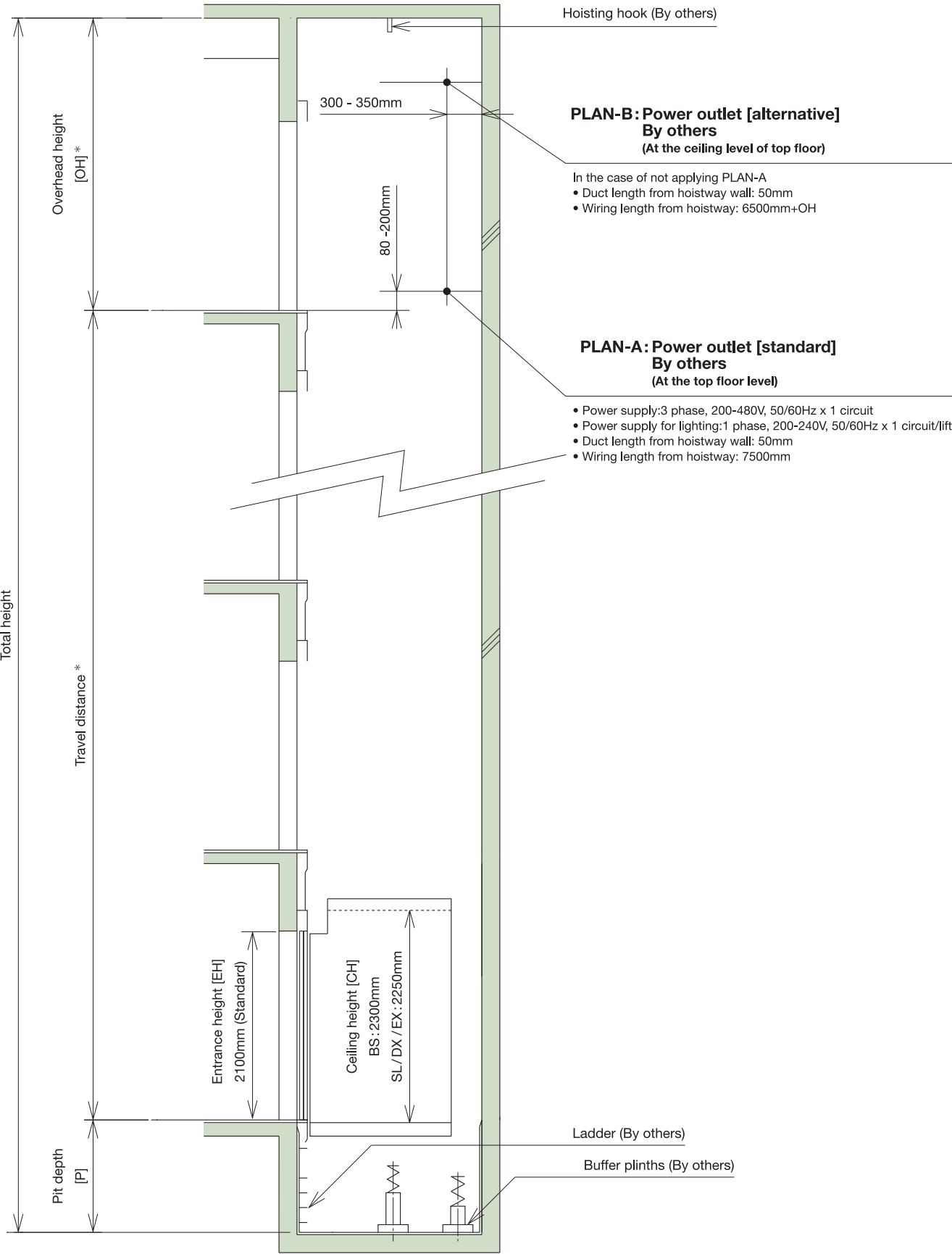
Based on SS550

No.	Load [kg]	Persons	Rated speed [m/s] (m/min)	Door type	Door OP width W [mm]	Car internal size A × B [mm]	Hoistway X × Y [mm]	Location [mm]								Pit reaction loading *3*4 [kN]																
																Car side			Counterweight side													
								X3	X4 *1	C *2	D	E	F	RGC	RGW	RC1	RC2	RC3	RW1	RW2	RW3											
1	600	8	1.0(60)	2PCO	800	1100×1400	1950×1850	1035	915	680 [690]	845			1330	800	71.5	35.0	28.0	59.0	16.0	25.5											
2			1.5(90)														38.5	31.5		18.5	28.5											
3			1.75(105)														35.0	28.0		16.0	25.5											
4			1.0(60)			1400×1100	2150×1750	1150	1000	635 [645]	530	950		1540				38.5	31.5	63.0	18.5	28.5										
5			1.5(90)																													
6			1.75(105)																													
7	750	11	1.0(60)	2PCO	900	1350×1400	2200×1850	1175	1025	680 [690]	970			1580	900	78.0	37.0	30.0	63.0	16.5	26.5											
8			1.5(90)														40.5	33.0		19.0	29.5											
9			1.75(105)																													
10			2.0(120)			2300×2050		1260	1040		640	1030		1640	900	101.0	66.0	55.5	85.5	35.5	53.0											
11			2.5(150)																													
12			1.0(60)			1500×1450	2250×1900	1200	1050	705 [715]	530	1000		800	90.5	90.5	41.0	33.0	72.5	17.0	28.5											
13	1.5(90)	44.5	36.0														19.5	31.5														
14	1.75(105)																															
15	2.0(120)	2400×2050	1310				1090		640	1060		900	108.5	108.5	68.0	57.0	90.0	36.0	54.5													
16	2.5(150)																															
17	1.0(60)	1600×1350	2450×1800			1355	1095	655 [665]	530	1105		1740	800	91.5	38.0	33.5	73.5	21.0	28.5													
18	1.5(90)														41.0	36.5		24.0	31.5													
19	1.75(105)																															
20	2.0(120)		2500×2050			1360	1140	705 [715]	640	1110		900	108.5	108.5	68.0	57.0	90.0	36.0	54.5													
21	2.5(150)																															
22	900	13	1.0(60)	2S2P	1000	1100×2000	1950×2500	1135	815	1057 [1062]	530	845	95	1330	800	91.0	41.0	33.0	73.0	17.0	29.0											
23			1.5(90)														44.5	36.5		20.0	32.0											
24			1.75(105)																													
25			2.0(120)			2050×2500	1230	820		640	905		900	111.0	111.0	69.0	58.0	92.5	36.0	55.0												
26			2.5(150)																													
27			1.0(60)			1600×1400	2350×1850	1250	1100	680 [690]	530	1050	—	1740	800	92.0	41.5	33.5	74.0	17.0	29.0											
28	1.5(90)	2PCO															45.0	36.5		20.0	32.0											
29	1.75(105)																															
30	2.0(120)	2500×2050	1360				1140	705 [715]	640	1110		900	111.0	111.0	69.0	58.0	92.5	36.0	55.0													
31	2.5(150)																															
32	1.0(60)	1100×2100	2000×2600			1140	860	1107 [1112]	530	845	45	1330	800	93.0	42.0	33.5	75.0	17.5	29.5													
33	1.5(90)														2S2P													45.5	37.0	20.0	32.0	
34	1.75(105)																															
35	2.0(120)		2050×2600			1180	870		640	905		900	113.0	113.0	69.5	58.5	93.5	36.5	55.0													
36	2.5(150)																															
37	1.0(60)	1600×1550	2350×2000	1250		1100	755 [765]	530	1050	—	1740	800	99.5	44.0	35.5	79.0	17.5	30.5														
38	1.5(90)													2PCO													47.5	38.5	20.0	33.5		
39	1.75(105)																															
40	2.0(120)		2500×2100	1360		1140		1110						115.5	70.5	59.0	95.0	36.5	55.5													
41	2.5(150)																															
42	1.0(60)	1200×2300	2150×2800	1235		915	1207 [1212]	955	45	1430			118.5	56.0	45.0	95.5	24.0	40.0														
43	1.5(90)													2S2P													61.0	49.5	28.0	44.5		
44	1.75(105)																															
45	2.0(120)		2200×2800	1260		940								126.5	74.0	62.0	103.5	37.5	58.0													
46	2.5(150)																															
47	1.0(60)	1600×1700	2450×2150	1320		1130	830 [840]	640	1110		900		116.5	55.5	44.5	93.5	24.0	39.5														
48	1.5(90)													2PCO													60.5	49.0	28.0	44.0		
49	1.75(105)																															
50	2.0(120)		2500×2150																													
51	2.5(150)	1800×1500	2650×2050	1420	1230	730 [740]	1210			1940		116.0	55.0	44.0	92.5	24.0	39.5															
52	1.0(60)																															
53	1.5(90)																															
54	1.75(105)	2700×2050		1460	1240							126.5	60.0	49.0	103.5	28.0	43.5															
55	2.0(120)																															
56	2.5(150)																															



Overhead Height and Pit Depth

Hoistway section



\* If total number of floors is 2, please consult Hitachi or local agent about minimum travel distance and overhead height.

■Dimensions for overhead height, pit depth and other specifications

Standard overhead height : OH \*1 \*2 \*3 [mm]

No.	Rated speed [m/s] (m/min)	Hitachi standard Hitachi standard for India			EN81-20/50			Malaysian regulations		
		Load ≤ 1050kg	Load ≥ 1150kg	Load > 1600kg	Load ≤ 1050kg	Load ≥ 1150kg	Load > 1600kg	Load ≤ 1050kg	Load ≥ 1150kg	Load > 1635kg
1	1.0(60)	3750 (3870)	4150 (4270)	4300 (4420)	4150 (4270)	4250 (4370)	4300 (4420)	4200 (4320)	4300 (4420)	4350 (4470)
2	1.5(90)									
3	1.75(105)	4050(4170)	4350(4470)	4350(4470)	4350(4470)	4350(4470)	4350(4470)	4400(4520)	4400(4520)	4400(4520)
4	2.0(120)	4600(4600)	4600(4600)	—	4600(4600)	4600(4600)	—	4650(4650)	4650(4650)	—
5	2.5(150)	4700(4700)	4700(4700)		4700(4700)	4700(4700)		4750(4750)	4750(4750)	

No.	Rated speed [m/s] (m/min)	SS550		
		Load ≤ 1050kg	Load ≥ 1150kg	Load > 1630kg
1	1.0(60)	3950(4070)	4150(4270)	4300(4420)
2	1.5(90)	4150(4270)	4400(4520)	4400(4520)
3	1.75(105)	4300(4420)	4500(4620)	4500(4620)
4	2.0(120)	5500(5620)	5500(5620)	—
5	2.5(150)	5650(5770)	5650(5770)	

Minimum pit depth : P \*4 [mm]

No.	Rated speed [m/s] (m/min)	Hitachi standard Hitachi standard for India EN81-20/50			Malaysian regulations			SS550		
		Load ≤ 1050kg	Load ≥ 1150kg	Load > 1600kg	Load ≤ 1050kg	Load ≥ 1150kg	Load > 1635kg	Load ≤ 1050kg	Load ≥ 1150kg	Load > 1630kg
1	1.0(60)	1350	1600	1650	1500	1750	1750	1500	1750	1900
2	1.5(90)							1600	1900	2050
3	1.75(105)	1450	1700	1800	1600	1850	1900	1650	2100	2250
4	2.0(120)	2000	2300	—	2050	2350	—	2050(2000)	2300	—
5	2.5(150)	2050	2350		2100	2400		2200(2050)	2350	

Others

No.	Rated speed [m/s] (m/min)	Maximum number of stops	Maximum travel distance [m]
1	1.0(60)	24	60
2	1.5(90)	32	80
3	1.75(105)		
4	2.0(120)	36	120
5	2.5(150)		

■Rated Speed 1.75m/s or less

\*1 ( ): SL/DX/EX series ceiling  
\*2 Travel distance ≤ 30m  
30m < Travel distance ≤ 60m : Above overhead height + 50mm  
60m < Travel distance ≤ 80m : Above overhead height + 100mm  
\*3 Overhead height will be increased accordingly if either EH or CH increases.  
\*4 Travel distance ≤ 45m  
LOAD ≤ 1050kg 45m < Travel distance ≤ 60m : Above pit depth + 50mm  
60m < Travel distance : Above pit depth + 200mm  
LOAD ≥ 1150kg 45m < Travel distance : Above pit depth + 50mm

■Rated Speed 2.0m/s or 2.5m/s

\*1 ( ): SL/DX/EX series ceiling  
\*2 30m ≤ Travel distance ≤ 45m  
45m < Travel distance ≤ 80m : Above overhead height + 50mm  
80m < Travel distance ≤ 120m : Above overhead height + 100mm  
\*3 Overhead height will be increased accordingly if either EH or CH increases.  
\*4 For SS550, ( ): Travel distance ≤ 60m

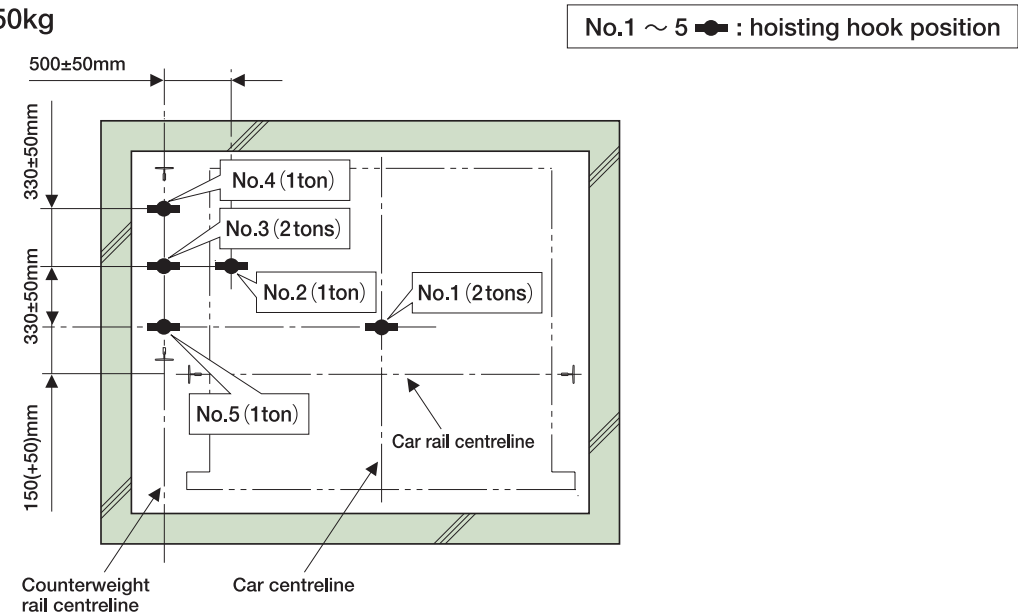
Note: Above tables shows the dimensions based on standard specifications.  
Please consult Hitachi or local agent if other specifications are required.

# Location of hoisting hook and hoisting beam

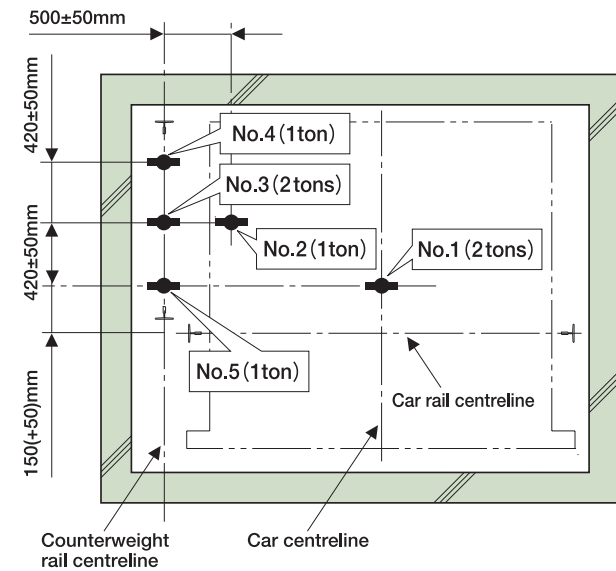
If the hoistway is made of reinforced concrete, hoisting hooks (installed by other contractors) are required at the top of the hoistway. If the hoistway is a steel structure, hoisting beams (installed by other contractors) are required at the top of the hoistway. The details of the hoisting hook and hoisting beam mounting position are as follows:

## ① Hoisting hooks

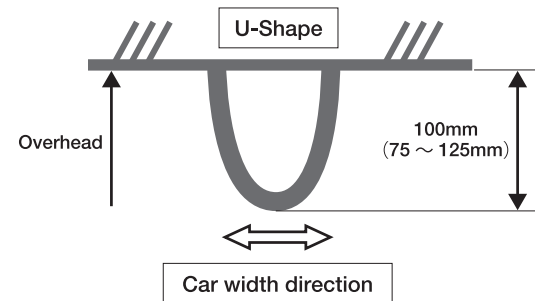
1. Rated Load ≤ 1050kg



2. Rated Load > 1050kg



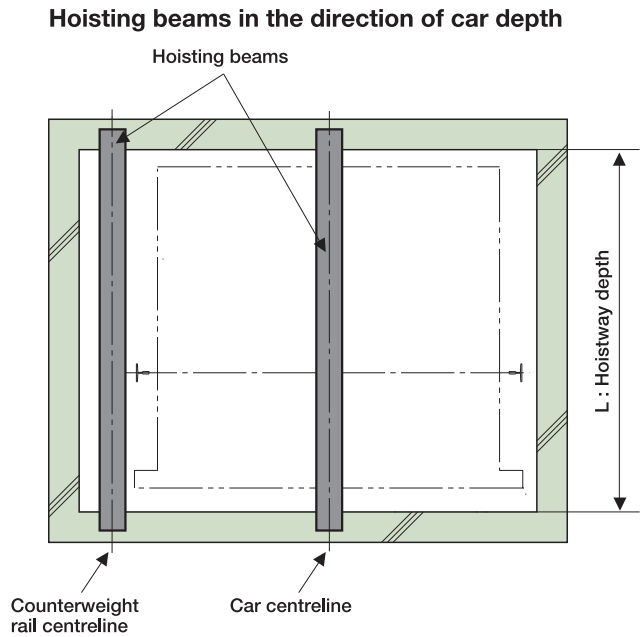
## 3. Orientation and size of Hoisting Hooks



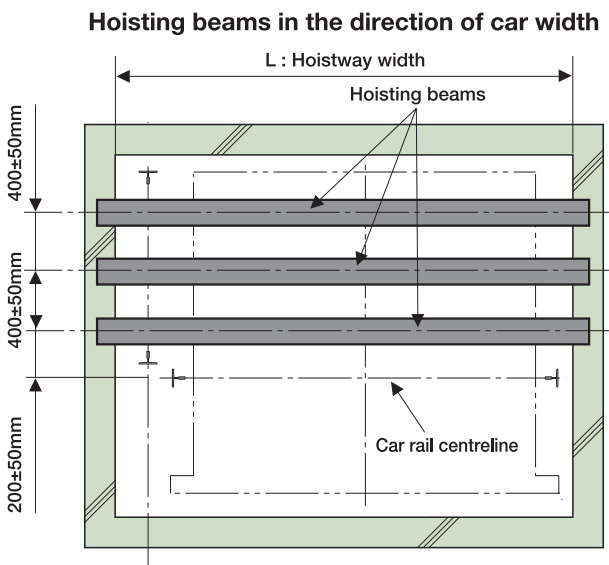
Note : 1. The hoisting hooks should be orientated such that the U-shape is facing the hoistway landing entrance.  
2. This hoisting hook size is required to ensure that the hoisting equipment can fit in.

## ② Hoisting beams

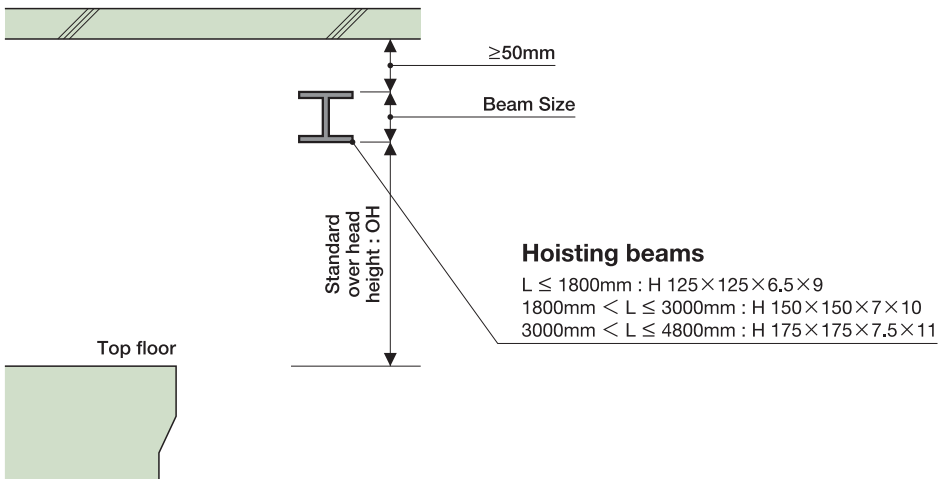
1. Hoisting beams layout (Standard)



2. Hoisting beams layout (Alternative)



3. Height of Hoisting beams



Electrical information

Required capacity of circuit breaker, transformer & starting power at building side

■Electrical Data

No.	Load [kg]	Rated speed [m/s] (m/min)	Motor capacity [kW]	Supply voltage [V]	Breaker capacity [A]			Transformer capacity [kVA]			Starting power [kVA]	Lead-in wire for drive [mm <sup>2</sup> ]			Earth wire [mm <sup>2</sup> ]	Calorific value [kcal/hr]			
					1 unit	2 units	3 units	1 unit	2 units	3 units		1 unit	2 units	3 units					
1	451 ~ 630	1.0(60)	3.9	220-230	100	125	150	5	9	12	15	22.0	38	60	3.5	830			
2				380-415	20	30	30					5.5	14	14	2.0				
3				440-480	50	75	100					5.5	8		2.0				
4		1.5(90)	5.8	220-230	100	125	150	6	11	15	20	22.0	60	60	3.5	1250			
5				380-415	30	30	40					8.0	14	22	2.0				
6				440-480	50	75	100					5.5		14					
7		1.75(105)	6.8	220-230	100	125	150	7	12	17	23	38.0	60	100	3.5	1460			
8				380-415	30	40	50					8.0	14	22	2.0				
9				440-480	50	75	100							14					
10	631 ~ 750	1.0(60)	4.6	220-230	100	125	150	5	9	12	16	22.0	38	60	3.5	990			
11				380-415	20	30	40					5.5	14	14	2.0				
12				440-480	50	75	100						8						
13		1.5(90)	6.9	220-230	100	125	150	7	12	17	23	38.0	60	100	3.5	1490			
14				380-415	30	40	50	6	11	15		8.0	14	22	2.0				
15				440-480	50	75	100	14											
16		1.75(105)	8.1	220-230	100	125	150	7	12	17	26	38.0	60	100	3.5	1730			
17				380-415	40	40	50					14.0	22	22					
18				440-480	50	75	100					8.0	14						
19	748 ~ 750	2.0(120)	11.0	220-230	175	200	250	14	26	36	44	60.0	150	150(114m)*1	5.5	1980			
20				380-415	40	50	75					22.0	38	60	3.5				
21				440-480	100	100	150					14.0	22	38					
22		2.5(150)	13.0	220-230	175	200	250	16	30	41	50	100.0	150(138m)*1	150(98m)*1	5.5	2470			
23				380-415	50	60	100					22.0	38	60	3.5				
24				440-480	100	100	150					14.0		38					
25		751 ~ 900	1.0(60)	5.6	220-230	100	125	150	6	11	15	19	22.0	14	60	2.0	1190		
26					380-415	30	30	40					8.0		22				
27					440-480	50	75	100					5.5		14				
28	1.5(90)		8.3	220-230	100	125	150	8	14	19	27	38.0	60	100	3.5	1780			
29				380-415	40	40	50	7	12	17		14.0	22	38					
30				440-480	50	75	100	8	14	19		8.0	14	22					
31	1.75(105)		9.7	220-230	100	125	150	10	17	24	30	38.0	100	150	5.5	2080			
32				380-415	40	40	60	9	16	22		14.0	22	38	3.5				
33				440-480	50	75	100	10	17	24		8.0	14	22					
34	901 ~ 1050	2.0(120)	12.0	220-230	175	200	250	15	28	39	47	100.0	150(148m)*1	150(106m)*1	5.5	2380			
35				380-415	50	60	75					22.0	38	60	3.5				
36				440-480	100	100	150					14.0		38					
37		2.5(150)	15.0	220-230	175	200	250	18	33	46	57	100.0	150(121m)*1	150(86m)*1	5.5	2970			
38				380-415	50	75	100					22.0	60	60	3.5				
39				440-480	100	100	150						38	100					
40		1051 ~ 1150	1.0(60)	6.5	220-230	100	125	150	7	12	17	22	38.0	60	100	2.0	1390		
41					380-415	30	40	40					8.0	14	22				
42					440-480	50	75	100					5.5		14				
43	1.5(90)		9.7	220-230	100	125	150	9	16	22	30	38.0	100	150	5.5	2080			
44				380-415	40	40	60	8	14	19		14.0	22	38	3.5				
45				440-480	50	75	100	9	16	22		8.0	14	22					
46	1.75(105)		11.7	220-230	100	125	150	10	17	24	36	60.0	100	150	5.5	2430			
47				380-415	40	50	75					14.0	38	38	3.5				
48				440-480	50	75	100						22						
49	2.0(120)	13.0	220-230	175	200	250	16	30	41	50	100.0	150(138m)*1	150(98m)*1	5.5	2770				
50			380-415	50	60	100					22.0	38	60	3.5					
51			440-480	100	100	150					14.0		38						
52	2.5(150)	17.0	220-230	175	200	250	20	37	51	64	100.0	150(108m)*1	150(77m)*1	5.5	3460				
53			380-415	60	75	100					38.0	60	100						
54			440-480	100	100	150					22.0	38	60						
55	1051 ~ 1150	1.0(60)	7.1	220-230	100	125	150	7	12	17	23	38.0	60	100	3.5	1520			
56				380-415								40	40	50	8.0		14	22	2.0
57				440-480								50	75	100					
58	1051 ~ 1150	1.5(90)	11.0	220-230	100	125	150	10	17	24	34	60.0	100	150	5.5	2280			
59				380-415	40	50	75	9	16	22		14.0	22	38	3.5				
60				440-480	50	75	100	10	17	24									

Note: Maximum length of lead-in wire is 150m, maximum lead-in wire size is 150mm<sup>2</sup>.  
\*1 ( ) :Maximum length of lead-in wire with 150mm<sup>2</sup>.  
\*2 Please consult Hitachi or local agent about maximum size and maximum length of lead-in wire.

■Electrical Data

No.	Load [kg]	Rated speed [m/s] (m/min)	Motor capacity [kW]	Supply voltage [V]	Breaker capacity [A]			Transformer capacity [kVA]			Starting power [kVA]	Lead-in wire for drive [mm <sup>2</sup> ]			Earth wire [mm <sup>2</sup> ]	Calorific value [kcal/hr]				
					1 unit	2 units	3 units	1 unit	2 units	3 units		1 unit	2 units	3 units						
61	1051 ~ 1150	1.75(105)	13	220-230	100	125	150	11	19	26	40	60	100	150(146m) <sup>*1</sup>	5.5	2660				
62				380-415	50	60	75					14	38	38	3.5					
63				440-480		75	100					22								
64		2.0(120)	15	220-230	175	200	250	18	33	46	57	100	150(121m) <sup>*1</sup>	150(86m) <sup>*1</sup>	5.5	3030				
65				380-415	50	75	100					22	60	60	3.5					
66				440-480	100	100	150					38								
67		2.5(150)	18	220-230	175	200	250	21	39	54	68	150	150(102m) <sup>*1</sup>	150(73m) <sup>*1</sup>	5.5	3790				
68				380-415	60	75	125					38	60	100						
69				440-480	100	100	150					22	38	60	3.5		1780			
70				220-230		125						38	60	100						
71	1.0(60)	8.3	380-415	40	40	50	7	12	17	27	14	22	38	3.5	1780					
72			440-480	50	75	100	8	14	19		8	14	22							
73			2.0(120)	13	220-230	100	125	150	11		19	26	40			60	100	150(146m) <sup>*1</sup>	5.5	2670
74					380-415	50	60	75								14	38	38	3.5	
75	440-480	75			100		14	22												
76	1151 ~ 1350	1.75(105)	15	220-230	100	125	150	12	21	29	45	60	150	150(128m) <sup>*1</sup>	5.5	3120				
77				380-415	50	60	100					22	38	60	3.5					
78				440-480		75						14	22	38						
79		2.0(120)	17	220-230	175	200	250	20	37	51	64	100	150(108m) <sup>*1</sup>	150(77m) <sup>*1</sup>	5.5	3560				
80				380-415	60	75	100					38	60	100	3.5					
81				440-480	100	100	150					22	38	60						
82		2.5(150)	21	220-230	175	200	250	25	46	64	78	150	150(88m) <sup>*1</sup>	150(63m) <sup>*1</sup>	5.5	4450				
83				380-415	60	100	125	24	44	62		38	60	100						
84				440-480	150		25	46	64	22										
85		1351 ~ 1635	1.0(60)	10	220-230	100	125	150	9	16	22	31	38	100	150	3.5	2150			
86	380-415				40		50						60	14	22			38		
87	440-480				50	75	100	8					14	22						
88	1.5(90)		15	220-230	100	125	150	12	21	29	45	60	150	150(128m) <sup>*1</sup>	5.5	3230				
89				380-415	50	60	100					22	38	60	3.5					
90				440-480		75						14	22	38						
91	1.75(105)		18	220-230	100	125	150	15	26	36	53	100	150	150(109m) <sup>*1</sup>	5.5	3770				
92				380-415	60	75	100	14	24	33		22	38	60						
93				440-480	50			15	26	36		14					38			
94	2.0(120)		20	220-230	175	200	250	25	46	64	78	150	150(88m) <sup>*1</sup>	150(63m) <sup>*1</sup>	5.5	4310				
95		380-415		60	100	125	24	44	62	38		60	100							
96		440-480		100		150	25	46	64	22										
97	2.5(150)	25	220-230	175	200	250	30	55	77	95	150(131m) <sup>*1</sup>	150(72m) <sup>*1</sup>	*2	8.0	5390					
98			380-415	75	125	150					38	100	150	5.5						
99			440-480	100	100						60	100								
100	1636 ~ 1800	1.0(60)	12	220-230	175	200	250	10	17	24	38	60	150	144(63m) <sup>*1</sup>	3.5	2380				
101				380-415	50	50	75					14	38	38						
102				440-480	100	100	150					22								
103		1.5(90)	17	220-230	175	200	250	14	24	33	51	100	150(144m) <sup>*1</sup>	150(105m) <sup>*1</sup>	5.5	3560				
104				380-415	60	75	100					22	38	60						
105				440-480	100	100	150					14			38					
106		1.75(105)	20	220-230	175	200	250	16	28	38	60	100	150(124m) <sup>*1</sup>	150(90m) <sup>*1</sup>	5.5	4150				
107				380-415	60	100	125					22	60	60						
108				440-480	100		150					38	38							
109		1801 ~ 2000	1.0(60)	13	220-230	175	200	250	11	19	26	40	60	150	150(134m) <sup>*1</sup>	3.5	2640			
110	380-415				50	60	75	14					38	38						
111	440-480				100	100	150	22					22							
112	1.5(90)		19	220-230	175	200	250	15	26	36	57	100	150(130m) <sup>*1</sup>	150(94m) <sup>*1</sup>	5.5	3960				
113				380-415	60	75	100					22	38	60						
114				440-480	100	100	150					38			38					
115	1.75(105)		22	220-230	175	200	250	18	31	43	65	150	150(113m) <sup>*1</sup>	150(82m) <sup>*1</sup>	5.5	4620				
116				380-415	75	100	125					38	100	60						
117		440-480		100	150		22					60								



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