State-of-the-Art Factories...
For the Environment. For Product Quality.

Mitsubishi Electric and Mitsubishi Electric escalators are currently being implemented in approximately 80 countries around the world, leading a priority on reducing the environmental load of escalator systems.

ISO 9001/14001 certification

Mitsubishi Electric Corporation Kure Works has achieved ISO 9001 certification from the International Organization for Standardization (ISO 9001). The plant has also received environmental management system certification from the International Organization for Standardization (ISO 14001). This demonstrates our commitment to providing products, services and systems that meet customer requirements and are environmentally responsible.

Mitsubishi Electric Corporation has undertaken measures to protect the environment and promote a sustainable future. The company is committed to reducing its environmental impact and contributing to a more sustainable society.

Revised publication, effective Nov. 2021.

Superseding publication of L-170-6-C74881-M Apr. 2021.

Specifications are subject to change without notice.
Our new escalator **Series Z** offers more than just a way to carry passengers.

Aesthetic elegance and flexibility are concepts expected more than ever. Our new escalator Series Z comes in a simple, yet sophisticated design, offering the utmost in flexibility to blend with any building decor. Our years of experience in safety-oriented production, based on a strong belief in the importance of safety, have led to a variety of safety features, as well as a wide range of value-added functions that help you customize your own escalators, creating uniqueness in and incomparable value for your building properties.

The Mitsubishi Electric Series Z Escalator fulfills and indeed exceeds customer expectations, through the collaboration and utmost performance of visual, functional and safety elements.

Feel the elegance, high quality and comfort of the **Series Z** in your building.
The simplest of designs blends with any building decor, adding a quiet, sophisticated air to your architecture.

Dimensions

- **Step width**
  - Type S600: 604mm
  - Type S800: 804mm
  - Type S1000: 1004mm

- **Rise**
  - 30°: max 7000mm*1
  - 35°: max 6000mm

- **Inclination**
  - 30° or 35°

- **Moving Handrail height**
  - 950mm or 1000mm*2

*1: Please refer to the enclosed leaflet for rises exceeding 7000mm.
*2: Please contact your local Mitsubishi Electric sales agent for 1000mm-high Moving Handrails.

Escalators in the graphics are based on the Japan Code, with optional Fluoropolymer Coating on Skirt Guard.

Lighting under the Moving Handrails creates an effect of warm, glowing elegance.

Stainless steel panel that exudes strength and durability.
Our new Escalator Series Z serves passengers naturally and peacefully.

Features that blend with architecture

**Rounded Handrail Inlet Cap**
Our rounded Handrail Inlet Cap streamlines with the Moving Handrails, lending a silent elegance to the boarding and landing areas.

**Screw-free Inner Deck**
Removing screws from the Inner Deck side face not only presents an even softer, more simple look, but also removes the danger of passengers snagging their clothes.

**Clearly-contrasted Floor Plate**
For improved visibility and smoother passenger flows, extended areas from the Moving Handrails feature different pattern with a clear contrast.

**Space Saving**
Shortening the Truss by 205mm* requires less escalator installation space and increases freedom in building layout.

* Compared with the Mitsubishi Electric Series J Escalator (for EN115), except for VVVF control.

Colors available for Moving Handrails (rubber)

Only "No. 0001 Black" is standard. Other colors are optional.

Escalators in the graphics are based on the Japan Code, with optional Fluoropolymer Coating on Skirt Guard.
Escalators in the graphics are based on the Japan Code, with optional Fluoropolymer Coating on Skirt Guard.

Safety-oriented and customer-friendly designs

You’ll truly feel the difference.

Safety and ride comfort are the ultimate goals for Mitsubishi.

Step with Anti-Slip Grooves

Grooves along the corner edge of each step improve anti-slip performance and the visibility of each step for further passenger safety.

Tiered Demarcation Line

Demarcations along both sides of a step are raised from the step surface, thereby preventing passengers from getting too close to the skirt guards and preventing clothes from getting caught between a step and skirt guard.

Comb with Smaller Angle

Mitsubishi recognizes how critical the Comb teeth angle is: even a small gap between the Comb and Step can result in a serious accident. Putting our years of experience and research to full use, we have made the angle the smallest it can be (10° to the horizontal) to keep passengers and items such as baggage from stumbling or getting caught between the Comb and Step.

Brighter Demarcation Color

Attention to the smallest details is the chief theme of Mitsubishi’s safety criteria, and the color of the Demarcation Line is no exception. The yellow Step and Comb Demarcation Line comes as standard and its brightness has been improved to provide better visibility of the Step, Comb and Floor Plate than in our other models.
**Lighting**

**Skirt Guard Lighting**
Lighting can be provided along the entire length of the skirt guard, lighting up the step demarcation for both visual effect and passenger safety.

**Comb Light**
Lighting provided at Comb level increases illumination, which further improves passenger safety around the step as well as visual effect.

**Directional Indicators at boarding and landing areas**

- **Handrail Inlet Cap LED Indicator**
  LED lamps form an arrow to indicate the escalator’s traveling direction for boarding, or a No-Entry sign at the landing areas.

**Warning System**

- **Outer Deck Sensor**
  When a sensor on the Outer Deck detects a passenger leaning outside the Moving Handrail, a buzzer and voice sound to alert the passenger to the potential danger of bumping against an adjacent escalator or wall.

- **Inlet Sensor**
  This sensor keeps any passengers or foreign objects away from the Handrail Inlet, a warning buzzer and voice sounding when a person or object comes close to the Inlet.

**Clean Solutions**

- **Handrail Sterilizer**
The sterilizer continuously emits UV light to remove viruses from the handrails while the escalator is running.

- **Antibacterial Moving Handrail**
  Rubber or polyurethane moving handrails suppress the growth of bacteria by mixing antibacterial agents into the polyurethan layer.

  **[Selectable colors]**
  - Rubber*: Vermilion, Red, Yellow, Green, Blue, Light gray, Brown
  - Polyurethane*: Black, Brown, Mild black, Warm gray

**More Options**

- **Floor Name**
  Floor names can be engraved on each floor plate to help passengers quickly identify which floor they are on.

- **Fluoropolymer Coating on Skirt Guard**
The Skirt Guard can be coated with a friction-reducing resin to reduce the chance of passengers stumbling when their shoes come in contact with the Skirt Guard.

**Polyurethane Moving Handrail**

<table>
<thead>
<tr>
<th>Color</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>No.5001</td>
</tr>
<tr>
<td>Vermilion</td>
<td>No.5002</td>
</tr>
<tr>
<td>Red</td>
<td>No.5003</td>
</tr>
<tr>
<td>Yellow</td>
<td>No.5004</td>
</tr>
<tr>
<td>Green</td>
<td>No.5005</td>
</tr>
<tr>
<td>Blue</td>
<td>No.5006</td>
</tr>
<tr>
<td>Light gray</td>
<td>No.5007</td>
</tr>
<tr>
<td>Brown</td>
<td>No.5008</td>
</tr>
<tr>
<td>Mild black</td>
<td>No.5009</td>
</tr>
<tr>
<td>Warm gray</td>
<td>No.5010</td>
</tr>
</tbody>
</table>

Available as an option. Moving Handrails made of polyurethane are highly resistant to dirt on their surface and create a shiny, brighter look.

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*1: For available combinations of optional features, please refer to the Specifications on the enclosed leaflet.
*2: Not applicable to semi-outdoor and outdoor use.
*3: Not applicable to outdoor use.
*4: Not applicable to model ZP.
*5: Please be sure to contact your local Mitsubishi Electric sales agent if you require Handrail Sterilizer or Antibacterial Moving Handrail.
*6: Not applicable in some countries. Please contact your local Mitsubishi Electric sales agent for details.
*7: Standard feature in countries where EN115 applies.
Inverter-controlled Automatic and Variable-Speed Operations

**VVVF Control (Variable Voltage, Variable Frequency)**

Our newly-developed, innovative escalator inverter enables a unique way of controlling the escalator speed in Automatic and Variable-Speed Operations. In Variable-Speed Operation, the escalator speed can be selected according to the frequency of use, number of passengers, and more. Please contact your local Mitsubishi Electric sales agent for VVVF control.

**Post-Free Automatic Operation**

Sensor Posts are no longer needed, as the sensors embedded in the Handrail Inlet Cap detect passengers and control Automatic Operation. The escalator operates at a low speed in stand-by, and gradually increases speed to the rated speed after detecting a passenger approaching the boarding area.

**Variable-Speed Operation**

Two more speeds*1, not exceeding the rated speed, can be added to your escalator to make it possible to operate at three different speeds. The speeds are selected using a key switch, set at Low or Middle for the added speeds and High for the rated speed, thereby allowing you to select the best speed for each set of traffic conditions.

*1: For escalators stationary in stand-by, Directional Indicators are required in countries where EN115 applies.
A roof must be provided over outdoor escalators. In rainy weather without a roof, passengers are in great danger of having their umbrellas blown away by the wind or falling down on the slippery steps. In hot weather, the Moving Handrails and Deck Boards can easily heat up and become overheated elements. In addition, when not covered by a roof, the life and performance of outdoor escalators seriously deteriorate, leading to shorter product life and higher cost for maintenance.

1. How to define outdoor escalators

Escalators are classified into three categories: outdoor, semi-outdoor, and indoor. Outdoor escalators are defined as escalators exposed to environmental factors such as wind, rain, snow or direct sunlight.

2. Environmental requirements for outdoor escalators

<table>
<thead>
<tr>
<th>Permissible ambient temperature</th>
<th>Minimum</th>
<th>-10°C (special measures are required in cold districts where the ambient temperature can drop below -10°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>For escalator operation</td>
<td>0°C ~ less than 35°C</td>
<td></td>
</tr>
<tr>
<td>Wind pressure</td>
<td>Escalators must not be exposed to direct wind pressure outside the following ranges: 490N/m² or less on the windward side, 245N/m² or less on the leeward side</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>Measures are required for escalators installed within a 2-kilometer radius from a shore to protect them from direct exposure to salty wind</td>
<td></td>
</tr>
</tbody>
</table>

3. Architectural requirements for outdoor escalators

(1) Intermediate support beams must be provided.

(2) The level of the escalator Floor Plate must be higher than the floor finish of the building to minimize the chance of rain or cleaning water running into the escalator truss. Area [A] in the illustrations to the right must be at a slope of at least 10°, and the surface of [B] must be horizontal to minimize the risk of passengers stumbling.

(3) Drainage must be provided in the entire area marked [C] and covered with grating to keep away drain water.

(4) The escalator pit must be waterproofed entirely when a whole truss is installed inside the pit.

(5) If there is a chance of the lower machine room getting flooded, drainage equipment, such as a drain pump, must be provided to discharge any water.

(6) Water in the lower pit will contain lubrication oil, so a grease trap should be provided to separate the lubrication oil from the water.

(7) Water may drip from the exterior panels of the escalator. Take waterproofing measures for equipment or items under the exterior panels if water is likely to cause problems or accidents.

Remote monitoring

Mitsubishi Electric’s MelEye is a sophisticated Web-based elevator and escalator monitoring and control system that allows authorized personnel to respond rapidly to changing traffic patterns and other operational conditions. It improves passenger safety and reliability of your building management.

Work not included in the escalator contract

- Building construction and alterations associated with escalator installation
- Provision of intermediate support beams (if required)
- Provision of truss-supporting beams, including mounting plates
- Floor finishing after escalator installation
- Provision of fire-proofing and fire-prevention measures for escalator exterior materials and around escalator installation
- Provision of fire-prevention shutters (if required by local codes or regulations)
- Wiring for the escalator’s main drive and lighting, from around the middle portion of the truss to the escalator’s Control Unit in the upper truss
- Other wiring and electric conduits
- Provision of convenience outlets in the upper and lower truss
- Exterior panel sheathing of truss
- Provision of inspection doors (lockable doors if installed in an environment where anyone could access and open the doors)
- All items for which procurement by building owners is instructed (with wording such as “by owner”)

Notes on building work

- Tolerance in distance between supporting beams: +30mm to 0 or 13/8” to 0”
- Flooring around the escalator must not be finished until the escalator is installed
- Flooring within 300mm or 12” of the escalator Floor Plate must not be finished until the Floor Plates are in place
- Sprinkler pipes or wiring for softi lights, or any other electric conduits for items other than escalator, must not be laid inside the truss
- No walls or other parts of the building structure must be supported on the truss
- Allowable maximum weight of outer sheathing: 20kg/m² or 0.028 psi

Ordering information

Please submit the following information when ordering or requesting escalator quotations:

- Name and address of the building
- Escalator model (ZS or ZL or ZP)
- Escalator type ($1000 or S800 or S600)
- Rise (floor height) and number of floors
- Number of escalators
- Voltage and frequency of the power source for escalator’s main drive and lighting
- Optional items required
- Whether or not fire-prevention shutters are required

*1: Please note that MelEye is designed for monitoring of escalator operation, not to control the escalators remotely.
*2: Contact your local Mitsubishi Electric sales agent for a brochure or further information.
State-of-the-Art Factories…
For the Environment. For Product Quality.

Mitsubishi Electric elevators and escalators are currently operating in approximately 90 countries around the globe. Built placing priority on safety, our elevators, escalators and building system products are renowned for their excellent efficiency, energy savings and comfort.

The technologies and skills cultivated at the Katsuzawa Works in Japan and 12 global manufacturing factories are utilized in a worldwide network that provides sales, installation and maintenance in support of maintaining and improving product quality.

As a means of contributing to the realization of a sustainable society, we consciously consider the environment in business operations, proactively work to realize a low-carbon, recycling-based society, and promote the preservation of biodiversity.

ISO9001/14001 certification

Mitsubishi Electric Corporation Katsuzawa Works has acquired ISO 9001 certification from the International Organization for Standardization based on a review of quality management. The plant has also acquired environmental management system standard ISO 14001 certification.

Mitsubishi Elevator Asia Co., Ltd. has acquired ISO 9001 certification from the International Organization for Standardization based on a review of quality management. The plant has also acquired environmental management system standard ISO 14001 certification.

Safety Tips: Be sure to read the instruction manual fully before using this product.
Safety devices Specifications

- **Step Chain Safety Device (CRS)**
  A safety device to stop the elevator when a Step has been dislocated on its riser side due to an object caught between the Steps, or between the Skirt Guard and the Step, if an abnormality has been observed in the Step motion.

- **Overload Detection Device**
  A safety device that stops the elevator if overload has been detected by abnormal current or temperature of the drive motor.

- **Drive Chain Safety Device (DCS)**
  A safety device that stops the elevator if the Drive Chain breaks or stretches beyond an allowable limit.

- **Speed Governor (GOV)**
  A safety device that stops the elevator if the speed significantly decreases or increases to 120% of the rated speed.

- **Electromagnetic Brake**
  A safety device that stops the elevator in the case of power failure, or if any safety device or the Emergency Stop Button has been activated.

- **Emergency Stop Button (E-STOP)**
  A button to immediately stop the elevator in emergency situations.

- **Handrail Speed Safety Device (HSS)**
  A safety device that stops the elevator if a foreign object becomes trapped in the gap between the Step and the Handrail, or if an abnormality has been observed in the Handrail motion.

- **Skirt Guard Safety Device (SSS)**
  A safety device to stop the escalator when a Step or other object is caught between the Skirt Guard and the Step.

- **Step Level Device (SRS)**
  A safety device that stops the elevator if the horizontal level of a Step has dropped.

- **Handrail Guard Safety Device (HGS)**
  A safety device that stops the elevator if a foreign object becomes trapped in the gap between the Step and Comb.

- **Comb-Step Safety Switch (CSS)**
  A safety device that stops the elevator if a foreign object becomes trapped in the gap between the Step and Comb.

- **Handrail Guard Safety Device (HGS)**

1) Inlet Guard
   A guard made of soft rubber, which fits over the outside of the Moving Handrail where it enters the Balustrade to keep fingers, hands or foreign objects away from the Moving Handrail opening.

2) Inlet Guard Switch
   A safety device that stops the elevator when physical contact is made with the Inlet.

- **Step Chain Safety Device (SCS)**
  A safety device that stops the elevator if the Step Chain breaks or stretches beyond an allowable limit.
**Indoor**

**Standard dimensions**

<table>
<thead>
<tr>
<th>Type</th>
<th>S600</th>
<th>S800</th>
<th>S1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>W1 (Escalator Walls)</td>
<td>1150</td>
<td>1350</td>
<td>1550</td>
</tr>
<tr>
<td>W2 (Between Moving Handrails)</td>
<td>840</td>
<td>1040</td>
<td>1240</td>
</tr>
<tr>
<td>W3 (Between Skirt Panels)</td>
<td>570</td>
<td>810</td>
<td>1010</td>
</tr>
</tbody>
</table>

**Horizontal Shapes**

- LF: 850, 1100, 1350, 1600
- LF: 1100, 1350, 1600
- NK: 1385, 1605
- NJ: 1695, 1955
- 3 Steps: 1440, 1725, 1975, 2250

**Without intermediate support beam**

- a: 6220, 8220, 10220
- β: 30°, 35°, 40°

**With intermediate support beam**

- a: 12420, 16420, 20420
- β: 30°, 35°, 40°

**Reaction force factors**

<table>
<thead>
<tr>
<th>Type</th>
<th>a (N/mm)</th>
<th>Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5 Steps/Nominal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>♦ S1000</td>
<td>3.50</td>
<td>13500-16000</td>
</tr>
<tr>
<td>♦ S800</td>
<td>3.66</td>
<td>15500-16000</td>
</tr>
<tr>
<td>♦ S600</td>
<td>3.66</td>
<td>16000-16500</td>
</tr>
</tbody>
</table>

**Reaction force on beam (N)**

**For Japan Code**

- Maximum 11000 for S1000, S800
- Maximum 11700 for S600

**Reaction force on beam (N) (Horizontal Steps)**

- a: 4220-LL(10+X1)+12000(TJ-X2)
- β: 30°, 35°, 40°

**Intermediate support beam is required when TG exceeds 15000mm for Type S800 or 19000mm for Type S1000.**

**For VVF control, T2 may increase from that shown. Please contact your local Mitsubishi Electric sales agent for details.**

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**Japan 30°**

**Layout**

**Recommended Recommended**

- Standard dimensions
- Reaction force factors
- Reaction force on beam (N)

**For Japan Code**

- Maximum 11000 for S1000, S800
- Maximum 11700 for S600

**Reaction force on beam (N) (Horizontal Steps)**

- a: 4220-LL(10+X1)+12000(TJ-X2)
- β: 30°, 35°, 40°

**Intermediate support beam is required when TG exceeds 15000mm for Type S800 or 19000mm for Type S1000.**

**For VVF control, T2 may increase from that shown. Please contact your local Mitsubishi Electric sales agent for details.**

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**Japan 35°**

**Layout**

**Recommended Recommended**

- Standard dimensions
- Reaction force factors
- Reaction force on beam (N)

**For Japan Code**

- Maximum 11000 for S1000, S800
- Maximum 11700 for S600

**Reaction force on beam (N) (Horizontal Steps)**

- a: 4220-LL(10+X1)+12000(TJ-X2)
- β: 30°, 35°, 40°

**Intermediate support beam is required when TG exceeds 15000mm for Type S800 or 19000mm for Type S1000.**

**For VVF control, T2 may increase from that shown. Please contact your local Mitsubishi Electric sales agent for details.**

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*Please contact your local Mitsubishi Electric sales agent for the actual number of steps.*
Safety devices

For EN115 Code

Step Motion Safety Device (CRS)
A safety device to stop the escalator when a Step has been dislocated on its riser side due to an object caught between the Steps, or between the Skirt Guard and the Step, or if an abnormality has been observed in the Step motion.

Emergency Stop Button (E-STOP)
A button to immediately stop the escalator in emergency situations.

Door Open Switch (DOS)
A safety switch that stops the escalator when the manhole cover is opened.

Overload Detection Device
A safety device that stops the escalator if overload has been detected by abnormal current or temperature of the drive motor.

Drive Chain Safety Device (DCS)
A safety device that stops the escalator if the Drive Chain breaks or stretches beyond an allowable limit.

Speed Governor (GOV)
A safety device that stops the escalator if the speed significantly decreases or increases to 120% of the rated speed.

Electromagnetic Brake
A safety device that stops the escalator in the case of power failure, or if any safety device or the Emergency Stop Button has been activated.

Step Level Device (SRS)
A safety device that stops the escalator if the horizontal level of a Step has dropped.

Skirt Guard Safety Device (SSS)
A safety device to stop the escalator if a shoe or other item becomes trapped in the gap between the Step and Skirt Guard.

Comb-Step Safety Switch (CSS)
A safety device that stops the escalator if a foreign object becomes trapped in the gap between the Step and Comb.

Handrail Guard Safety Device (HGS)
A safety device that stops the escalator if the Handrail becomes trapped in the gap between the Step and Comb.

Handrail Speed Safety Device (HSS)
A safety device that stops the escalator if the Moving Handrails fail to synchronize with the Steps due to slippage, loosening or breaking of the Moving Handrails.

Handrail Guard Safety Device (HGS)
1) Inlet Guard
A guard made of soft rubber, which fits over the outside of the Moving Handrail where it enters the Balustrade to keep fingers, hands or foreign objects away from the Moving Handrail opening.
2) Inlet Guard Switch
A safety device that stops escalator when physical contact is made with the inlet.

Missing Step Device (SMS)
A safety device that stops the escalator if it detects a missing step(s) before it is visible to passengers.

Auxiliary brake
A safety device that stops the escalator if the speed exceeds the rated speed, or before the Steps’ traveling direction changes due to an abnormality such as breakage of the Drive Chain.

For EN115 Code

<table>
<thead>
<tr>
<th>Division</th>
<th>Indoor</th>
<th>Semi-outdoor</th>
<th>Outdoor</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>N/A</td>
</tr>
<tr>
<td>Control system</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>N/A</td>
</tr>
<tr>
<td>Safety features</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>N/A</td>
</tr>
<tr>
<td>Finish and decorative components</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>N/A</td>
</tr>
<tr>
<td>Others</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>N/A</td>
</tr>
</tbody>
</table>

1) Please contact your local Mitsubishi Electric sales agent for semi-outdoor and outdoor use.
2) Please contact your local Mitsubishi Electric sales agent for VVVF control.
3) A standard feature for cases exceeding 6000mm or rated speeds exceeding 0.5m/sec.
4) Not applicable to outdoor use.
5) Installed only on the right-side Handrail Inlet Cap (when viewed from the boarding and landing areas).
6) Not applicable to semi-outdoor and outdoor use.
7) Please be sure to contact your local Mitsubishi Electric sales agent if you require Handrail Sterilizer or Antibacterial Moving Handrail.
8) Not applicable in some countries. Please contact your local Mitsubishi Electric sales agent for details.

Moving Handrail
Balustrade
Skirt Guard
Operating Panel
The Series Z escalator is equipped with various safety devices that provide for safety and reliability.

Safety devices

- **Emergency Stop Button (E-STOP)**
  A button to immediately stop the escalator in emergency situations.

- **Step Motion Safety Device (CRS)**
  A safety device to stop the escalator when a Step has been dislocated on its riser side due to an object caught between the Steps, or between the Skirt Guard and the Step, or if an abnormality has been observed in the Step motion.

- **Overload Detection Device**
  A safety device that stops the escalator if overload has been detected by abnormal current or temperature of the drive motor.

- **Drive Chain Safety Device (DCS)**
  A safety device that stops the escalator if the Drive Chain breaks or stretches beyond an allowable limit.

- **Speed Governor (GOV)**
  A safety device that stops the escalator if the speed significantly decreases or increases to 120% of the rated speed.

- **Electromagnetic Brake**
  A safety device that stops the escalator in the case of power failure, or if any safety device or the Emergency Stop Button has been activated.

- **Handrail Speed Safety Device (HSS)**
  A safety device that stops the escalator if the Moving Handrails fail to synchronize with the Steps due to slippage, loosening or breakage of the Moving Handrails.

- **Step Level Device (SRS)**
  A safety device that stops the escalator if the horizontal level of a Step has dropped.

- **Skirt Guard Safety Device (SSS)**
  A safety device to stop the escalator if a shoe or other item becomes trapped in the gap between the Step and Skirt Guard.

- **Comb-Step Safety Switch (CSS)**
  A safety device that stops the escalator if a foreign object becomes trapped in the gap between the Step and Comb.

- **Handrail Guard Safety Device (HGS)**
  1) **Inlet Guard**
     A guard made of soft rubber, which fits over the outside of the Moving Handrail where it enters the Balustrade to keep fingers, hands or foreign objects away from the Moving Handrail opening.
  2) **Inlet Guard Switch**
     A safety device that stops escalator when physical contact is made with the inlet.

- **Step Link Safety Device (SLS)**
  A safety device that stops the escalator if the Step Link breaks or stretches beyond an allowable limit.

Basic specifications

<table>
<thead>
<tr>
<th>Item</th>
<th>S600</th>
<th>S1000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Models</strong></td>
<td>ZS / ZL / ZP</td>
<td>Japan code</td>
</tr>
<tr>
<td><strong>Rise (mm)</strong></td>
<td>7001 - 13000</td>
<td></td>
</tr>
<tr>
<td><strong>Step width (mm)</strong></td>
<td>604</td>
<td>1004</td>
</tr>
<tr>
<td><strong>Escalator width (mm)</strong></td>
<td>1150</td>
<td>1550</td>
</tr>
<tr>
<td><strong>Between Moving Handrails (mm)</strong></td>
<td>840</td>
<td>1240</td>
</tr>
<tr>
<td><strong>Between Skirt Guards (mm)</strong></td>
<td>610</td>
<td>1010</td>
</tr>
<tr>
<td><strong>Truss width (mm)</strong></td>
<td>1100</td>
<td>1500</td>
</tr>
<tr>
<td><strong>Floor opening (mm)</strong></td>
<td>1250</td>
<td>1650</td>
</tr>
</tbody>
</table>

1. Transport capacity varies depending on actual traffic conditions, so some dimensions and the motor capacity may have to be changed. Please consult your local Mitsubishi Electric sales agent for details if the number of passengers during peak time may equal or exceed the following numbers:
   - S600: 500 persons per 10 minutes
   - S1000: 1000 persons per 10 minutes

2. Please contact your local Mitsubishi Electric sales agent for semi-outdoor and outdoor use.
   For outdoor use, please refer to "Cautions for outdoor use" on page 13.

3. Please contact your local Mitsubishi Electric sales agent for rise ranging from 7239mm to 9000mm.

Dimensions

- **Step width**
  Type S600: 604mm
  Type S1000: 1004mm

- **Rise**
  Models ZS/ZP: max 13000mm
  Model ZL: max 9000mm

- **Inclination**
  30°

- **Moving Handrail height**
  950mm or 1000mm (Option)
### Specifications

<table>
<thead>
<tr>
<th>Division</th>
<th>Specification</th>
<th>ZS</th>
<th>ZL</th>
<th>ZP</th>
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<td>AC1 Inverter (VVVF)</td>
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<td>Automatic Operation with Posts (Stationary in stand-by, AC1)</td>
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<td>Automatic Operation with Posts (Operation in stand-by, Inverter)</td>
<td>Yes</td>
<td>Yes</td>
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<td>Post-Free Automatic Operation (Operation in stand-by, Inverter)</td>
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<td>Yes</td>
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<td>Safety features</td>
<td>Stop-Buzzer Key Switch</td>
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<td>Yes</td>
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<td>Anti-Slip Floor Plate</td>
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<td>Set with Anti-Slip Grooves</td>
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<td>Step Demarcation Lighting</td>
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<td>Warning System on Moving Handrail Inlet (Inlet Sensor)</td>
<td>Yes</td>
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<td></td>
<td>Warning System on Outer Deck (Outer Deck Sensor)</td>
<td>Yes</td>
<td>Yes</td>
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<td>Direction Indicator on Handrail Inlet Cap (Handrail Inlet Cap LED Indicator)</td>
<td>Yes</td>
<td>Yes</td>
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<td>Finish and decorative components</td>
<td>Balustrade (See page 12 for sections)</td>
<td>Transparent tempered glass panel</td>
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<td>Stainless steel hairline panel</td>
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<td>Stainless steel hairline</td>
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<td>Floor Plate</td>
<td>Decorative Panel (Embossed stainless steel)</td>
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<td>Floor Name</td>
<td>Yes</td>
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<td>Yes</td>
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<td></td>
<td>Comb</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td></td>
<td>Extension of Floor Plate</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<td>Connection of adjacent Floor Plates</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Moving Handrail</td>
<td>Rubber No. 0501 (Black)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<td>No. 0502 to 0508 (See page 5 for colors)</td>
<td>Yes</td>
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<td>Yes</td>
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<td>Polyester No. 0501 to 0508 (See page 5 for colors)</td>
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<td>Rubber艹 Black, Brown, Mild black, Warm gray</td>
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<td>Yes</td>
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<td>Antimicrobial Moving Handrail 5%</td>
<td>Yes</td>
<td>Yes</td>
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<td>Others</td>
<td>Handrail Sterilizer 5%</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td></td>
<td>Anti-Eye</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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</tbody>
</table>

*1: Please contact your local Mitsubishi Electric sales agent for VVVF control.
*2: Not applicable in some countries. Please contact your local Mitsubishi Electric sales agent for the actual number of steps.

### Layout

#### For Japan Code

| Standard dimensions |
|---------------------|-----------------|-----------------|-----------------|
| Type                | 5000            | 31000           |
| WF (Escalator Width) | 1150            | 1550            |
| WD (Between Moving Handrails) | 940 | 1240 |
| WD (Between Skirt Guards) | 610 | 1010 |

*Please contact your local Mitsubishi Electric sales agent for the actual number of steps.*
The Series Z escalator is equipped with various safety devices that provide for safety and reliability.

### Safety devices

- **Emergency Stop Button (E-STOP)**
  - A button to immediately stop the escalator in emergency situations.
- **Step Motion Safety Device (CRS)**
  - A safety device to stop the escalator when a Step has been dislocated on its riser side due to an object caught between the Steps, or between the Skirt Guard and the Step, or if an abnormality has been observed in the Step motion.
- **Overload Detection Device**
  - A safety device that stops the escalator if overload has been detected by abnormal current or temperature of the drive motor.
- **Drive Chain Safety Device (DCS)**
  - A safety device that stops the escalator if the Drive Chain breaks or stretches beyond an allowable limit.
- **Speed Governor (GOV)**
  - A safety device that stops the escalator if the speed significantly decreases or increases to 120% of the rated speed.
- **Electromagnetic Brake**
  - A safety device that stops the escalator in the case of power failure, or if any safety device or the Emergency Stop Button has been activated.
- **Auxiliary brake**
  - A safety device that stops the escalator if the speed exceeds the rated speed, or before the Steps’ traveling direction changes due to an abnormality such as breakage of the Drive Chain.
- **Step Level Device (SRS)**
  - A safety device that stops the escalator if a shoe or other item becomes trapped in the gap between the Step and Skirt Guard.
- **Comb-Step Safety Switch (CSS)**
  - A safety device that stops the escalator if a foreign object becomes trapped in the gap between the Step and Comb.
- **Handrail Guard Safety Device (HSS)**
  - A safety device that stops the escalator if the Moving Handrails fail to synchronize with the Steps due to slippage, bowing or breakage of the Moving Handrails.
- **Inlet Guard Switch**
  - A safety device that stops escalator when physical contact is made with the inlet.
- **Step Link Safety Device (SLS)**
  - A safety device that stops the escalator if the Step Link breaks or stretches beyond an allowable limit.

### Basic specifications

<table>
<thead>
<tr>
<th>Item</th>
<th>S600</th>
<th>S1000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Codes</strong></td>
<td>ZS / ZL / ZP</td>
<td>EN15 code</td>
</tr>
<tr>
<td><strong>Power supply</strong></td>
<td>AC 3-phase, 50 or 60Hz</td>
<td>AC single-phase, 50 or 60Hz</td>
</tr>
<tr>
<td><strong>Rated speed</strong></td>
<td>0.5m/sec</td>
<td>0.5m/sec</td>
</tr>
<tr>
<td><strong>Control system</strong></td>
<td>AC1</td>
<td>VVVF</td>
</tr>
<tr>
<td><strong>Transport capacity</strong></td>
<td>4500</td>
<td>9000</td>
</tr>
<tr>
<td><strong>Inclination</strong></td>
<td>30°</td>
<td>30°</td>
</tr>
<tr>
<td><strong>Environment</strong></td>
<td>Indoor</td>
<td>Semi-outdoor / Outdoor</td>
</tr>
<tr>
<td><strong>Automatic oiler</strong></td>
<td>Standard: None</td>
<td>Option: Available</td>
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<tr>
<td><strong>Min. rise (mm)</strong></td>
<td>7001</td>
<td>7001</td>
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<tr>
<td><strong>Max. rise (mm)</strong></td>
<td>ZS / ZP: 13000</td>
<td>ZL: 9000*3</td>
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<td><strong>Step width (mm)</strong></td>
<td>604</td>
<td>1004</td>
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<tr>
<td><strong>Escalator width (mm)</strong></td>
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<td>1550</td>
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<tr>
<td><strong>Between Moving Handrails (mm)</strong></td>
<td>840</td>
<td>1240</td>
</tr>
<tr>
<td><strong>Between Skirt Guards (mm)</strong></td>
<td>610</td>
<td>1010</td>
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<td><strong>Truss width (mm)</strong></td>
<td>1100</td>
<td>1500</td>
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<tr>
<td><strong>Floor opening (mm)</strong></td>
<td>1250</td>
<td>1650</td>
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</table>

1: Transport capacity varies depending on actual traffic conditions, so some dimensions and the motor capacity may have to be changed. Please consult your local Mitsubishi Electric sales agent for details if the number of passengers during peak time may equal or exceed the following numbers:

- S600: 500 persons per 10 minutes
- S1000: 1000 persons per 10 minutes

2: Please contact your local Mitsubishi Electric sales agent for semi-outdoor and outdoor use.

For outdoor use, refer to “Cautions for outdoor use” on page 13.

3: Please contact your local Mitsubishi Electric sales agent for rise ranging from 7239mm to 9000mm.

### Dimensions

**Step width**
- Type S600: 604mm
- Type S1000: 1004mm

**Rise**
- Models ZS/ZP: max 13000mm
- Model ZL: max 9000mm*3

**Inclination**
- 30°

**Moving Handrail height**
- 950mm or 1000mm (Option)
Specifications

For High Rise

For EN115 Code

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<thead>
<tr>
<th>Division</th>
<th>Specification</th>
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<td>Semi-outdoor</td>
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<td>Outdoor</td>
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<tr>
<td>Control system</td>
<td>AC1 Firefree (VVVF)</td>
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<td>Automatic Operation with Posts (Stationary in stand-by, AC1)</td>
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<td>Automatic Operation with Posts (Slow operation in stand-by, Inverter)</td>
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<td>Post-Free Automatic Operation (Slow operation in stand-by, Inverter)</td>
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<tr>
<td>Safety features</td>
<td>Stop-Buzzer Key Switch</td>
<td>●</td>
<td></td>
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<tr>
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<td>Anti-Slip Floor Plate</td>
<td>●</td>
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<td>Step with Anti-Slip Grooves</td>
<td>●</td>
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<td>Demarcation Line</td>
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<td>Tiered Demarcation Line</td>
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<td>Stop Demarcation Lighting</td>
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<td>Three Horizontal Steps</td>
<td>●</td>
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<td>Warning System on Moving Handrail Inlet (Inlet Sensor)</td>
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<td></td>
<td>Warning System on Outer Deck (Outer Deck Sensor)</td>
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<td>Directional Indicator on Handrail Inlet Cap (Handrail Inlet Cap LED Indicator)</td>
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<td>Finish and decorative components</td>
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<td>●</td>
<td>N/A</td>
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<td>Transparent tempered glass panel</td>
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<td>Skirt Guard Flupolymer Coating</td>
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<td>Deck Board Stainless Steel Hairline</td>
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<td>Step Aluminum alloy Step Tread</td>
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<td>Aluminum alloy Cleat Riser</td>
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<td>Yellow Demarcation Line</td>
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<td>Connection of adjacent Floor Plates</td>
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<td>Moving Handrail</td>
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<td>Vermilion, Red, Yellow, Green, Blue, Light gray, Brown</td>
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<td>Others</td>
<td>MelEye Automatic door</td>
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1. Please contact your local Mitsubishi Electric sales agent for VVVF control.
2. Not applicable to outdoor use.
3. Installed only on the right-side Handrail Inlet Cap (when viewed from the boarding and landing area).
4. Not applicable to semi-outdoor and outdoor use.
5. Please be sure to contact your local Mitsubishi Electric sales agent for Handrail Sterilizer or Antibacterial Moving Handrail.
6. Not applicable in some countries. Please contact your local Mitsubishi Electric sales agent for details.

Please contact your local Mitsubishi Electric sales agent for:
- VVVF control (Please note that TJ may increase from that shown.)
- Reaction forces, RA, RB, RC etc.

<table>
<thead>
<tr>
<th>Type</th>
<th>S6000</th>
<th>S1000</th>
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<tr>
<td>W1 (Escalator Width)</td>
<td>1150</td>
<td>1550</td>
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<tr>
<td>W2 (Between Moving Handrails)</td>
<td>840</td>
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<td>W3 (Before Adjacent Guard)</td>
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<td>1010</td>
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<tr>
<th>Horizontal Steps</th>
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<th>LF</th>
<th>HF</th>
<th>NJ</th>
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<td>1975</td>
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