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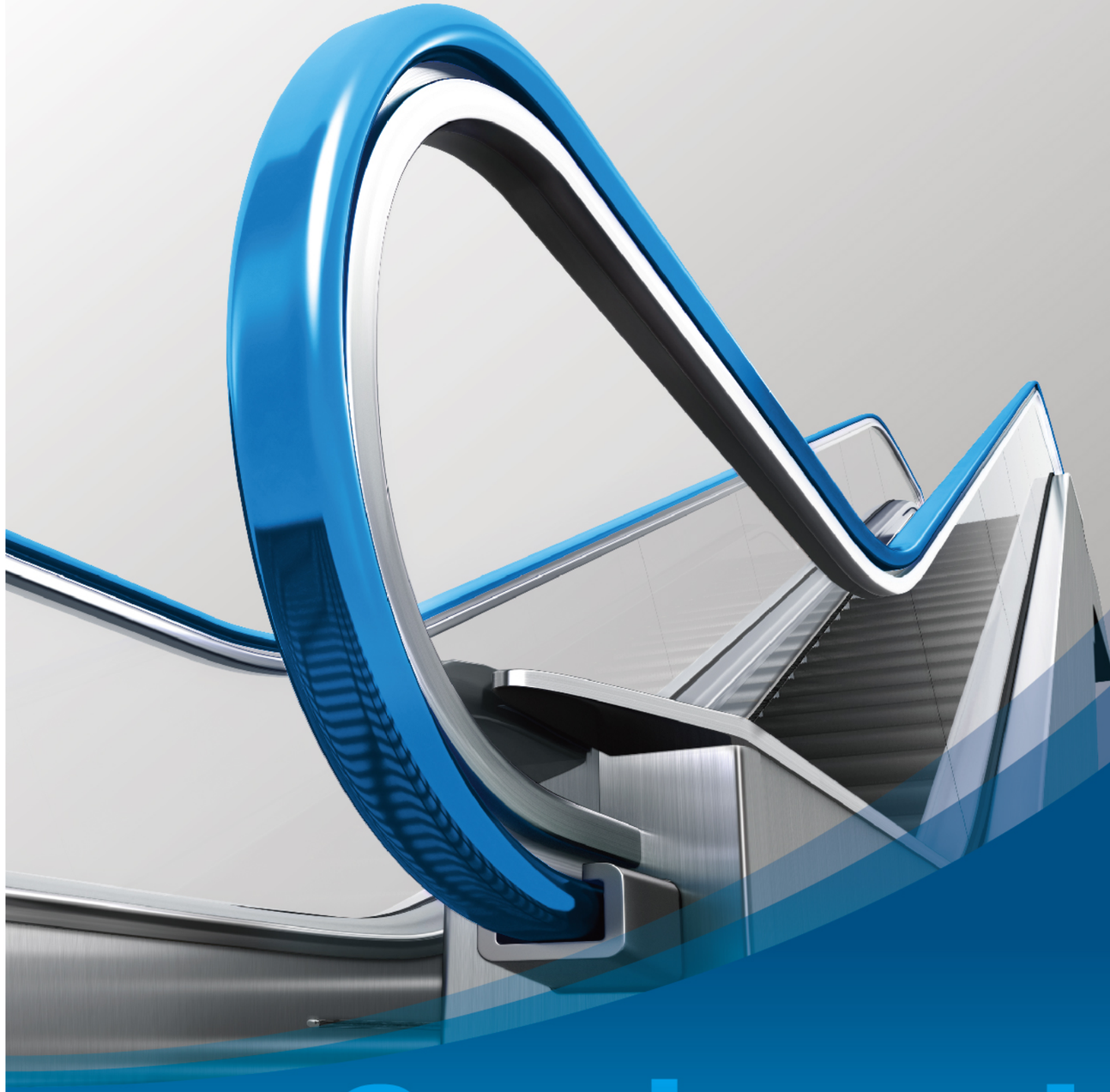
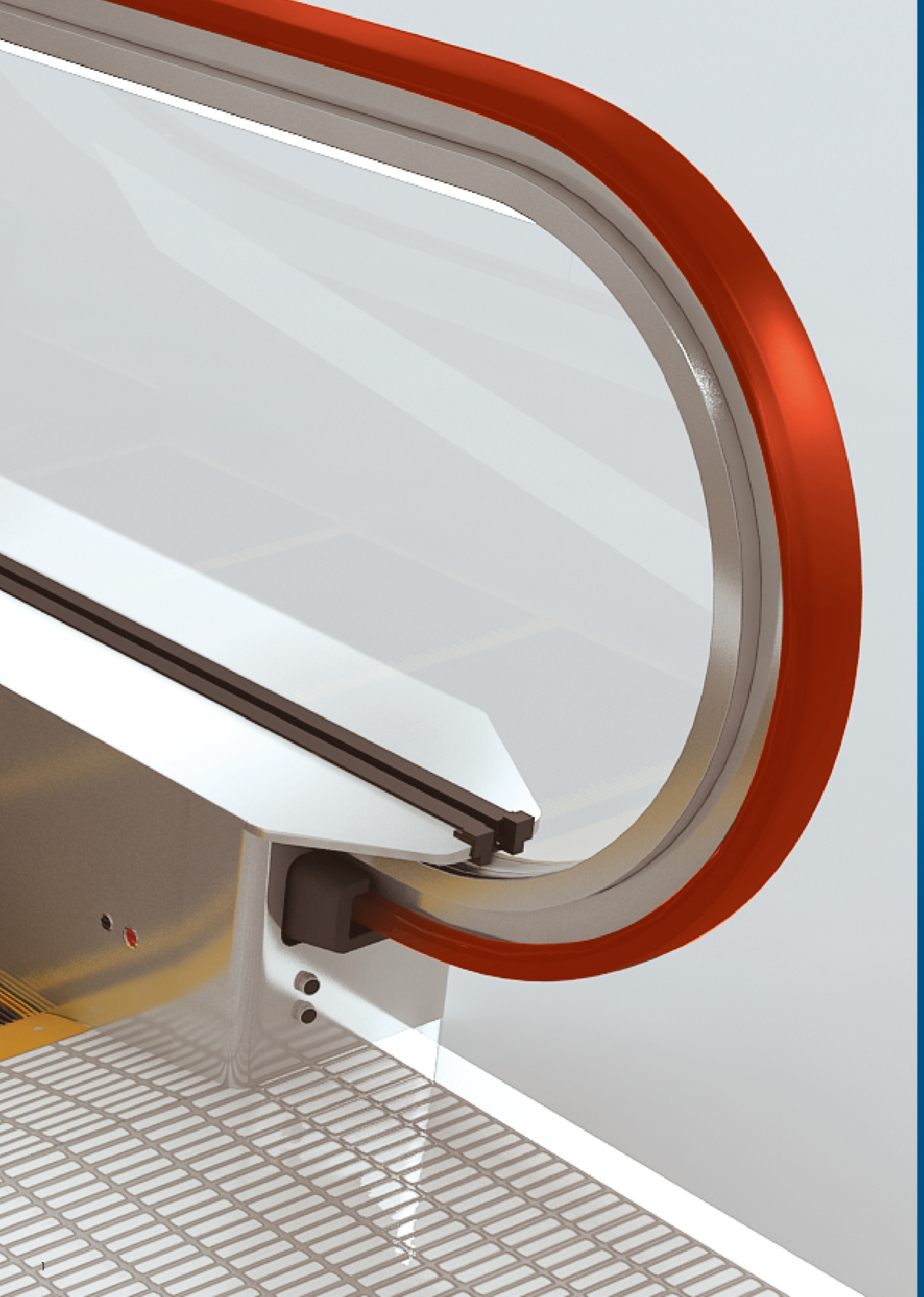
上海三菱电梯
SHANGHAI MITSUBISHI ELEVATOR



Perfect combination of technical skill basis and aesthetics.
Benchmarking of escalators for business and transportation.

Series J
Escalator



Cutting-edge Technology Originated from Japan

Pure paternal line of Japan

Perfect combination of technical skill basis and aesthetics

Benchmarking of escalators for business and transportation

Classics of helical bridge

Series J Escalator

Delicacy and Wisdom

Relying on realization and grasp of enjoyment pursuit by human nature, benefited from esteem, Mitsubishi Elevator creates extraordinary humanized technical products.

Easement

The design integrates twenty years protection experience and safety technology of MITSUBISHI elevator and eliminates every hidden danger and misgiving of customer.

Consummate

Noble temperament is reflected in your hand and eye; exquisite guard rail, handrail belt, cover plate, apron panel and illumination reflects people's value everywhere.

Magnificent and Exquisite Design; Elegant Appearance

Series J escalator possesses brief and streamlined appearance, material of first class, various styles for different decoration space. Main parts of the escalator are made of full hairline stainless steel; styles of balustrade panel comprises of various combination of tempered glass, stainless steel, and other material; multiple handrail belts in fashionable colors and colorful glass panels can be optional, and can be merged into any architectural environment.

Pictures of computer painting may slightly differ from the actual.

Delicacy and Wisdom

Relying on realization and grasp of enjoyment pursuit by human nature,
benefited from esteem, Mitsubishi Elevator creates extraordinary humanized technical products.

4 Great Technologies

High Efficiency, Energy Saving, and Tranquil Driving Source

As the core part of escalator, the MITSUBISHI proud high accuracy helical reducer drive system, possessing high accuracy, high efficiency and low noise, can be rated as revolutionary break-through.

The design provides effective buffer for the gear engaging action, more powerful driving force, and greatly reduces noise produced by mechanic transmission. The step chain sprocket adopts noise proof design; chain shaft spacing becomes smaller; step turnover effectively reduces the polygon effect; and step sprocket adopts polyamine silencer thus make operation more quiet.

The design possesses lower energy consumption comparing to traditional worm gear reducer, selects installation of inverter system matching double diffuse reflection induction light spot and avoids idle motion impact, thus reduces energy consumption further. The indexes of operation efficiency, part service lift and energy saving all surge ahead.

VVVF variable voltage and variable frequency system

Able to select proper drive system according to client's actual working condition; when the passenger flow is constantly stable, select direct drive system; when the passenger flow is intermittent, considering energy saving and improvement of escalator life time, select AC VVVF drive system.

AC VVVF drive system can smoothly start and decelerate with certain acceleration and deceleration, which reduces the impact to grid and mechanic system; Adjust operation speed according to passenger flow condition, and enter low-speed mode or stand-by mode in case of no passenger for saving energy; Adopt by-pass frequency conversion method to transform the potential energy of passengers in down moving to electricity directly to the grid.

Comfortable and Relaxed up and down Ride

The MITSUBISHI unique single side positioning high accuracy U type guide rail, possessing smaller spacing between guide rail and sprocket shaft thus prevents running deflection of step; makes operation more smoothly and riding more quiet and steady; make the entire installation realize excellent low noise performance, can be rated as important technical guarantee for MITSUBISHI elevator to gain high end market such as hotel, shopping center and airport.

Double Service Life

Service life of high accuracy helical reducer can reach to 20 years (not including bearings):linear handrail drive has greatly prolonged life of handrail belt; Unloading guide rail setting at upper curve part of escalator step circuit can make the roller not contact guide rail at upper curve part, which reduces wheel pressure and wearing of roller and prolongs life of roller; Auto oiling device as standard configuration can also prolong service life of all types of chains; Decoration components adopt stainless steel, which is durable in use.

Pictures of computer painting may slightly differ from the actual.

Easement

The design integrates twenty years protection experience and safety technology of MITSUBISHI elevator and eliminates every hidden danger and misgiving of customer.

Strict and Thorough Safety Protection; Convenient Maintenance

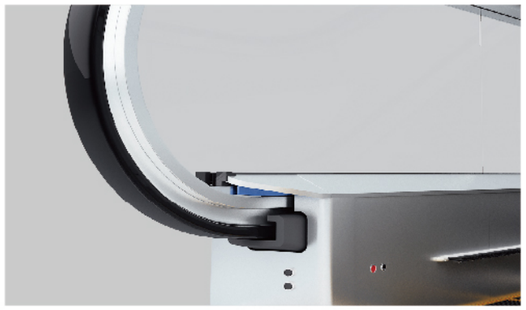
High Quality and Carefree, Multiple Safety Protection System

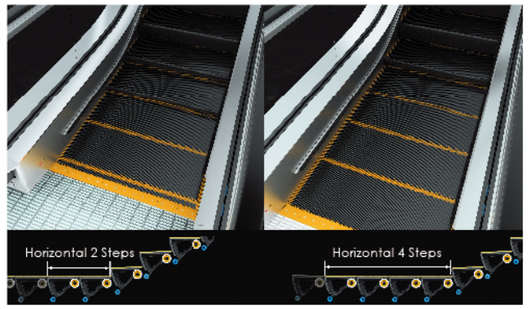
Series J escalator reflects care for passengers everywhere: design of handrail belt inlet provides safer protection; different horizontal steps provide customer various buffer space options; yellow demountable resin filler makes the safe riding region more eye-catching; design of step structure enables flexibly dismount or installation of steps on step circuit, and makes maintenance and rescue more convenient. The adopted truss made of angle iron possesses advantages of good rigidity, rust proof, and more sturdy. The unique disc type brake provides sufficient braking section area.

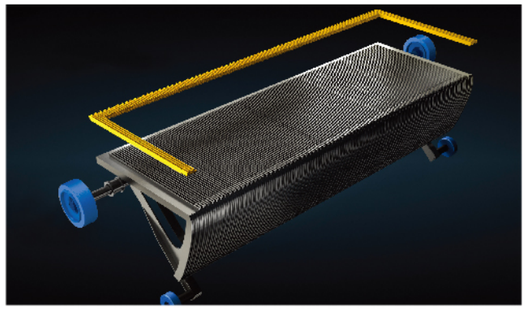
Simple and Time-saving Maintenance, Comprehensive and Innovative Plan

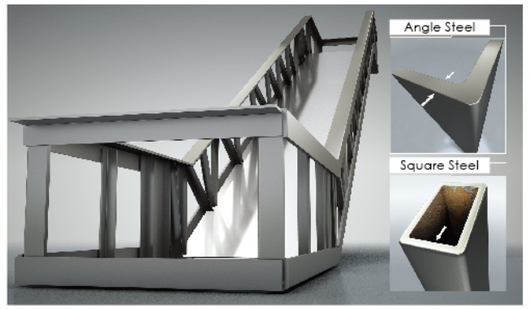
Fully consider the maintenance space for customer.

Vertical type arrangement of drive device, comparing to horizontal type, possesses advantages of more maintenance space, easier operation, flexible assembly/disassembly of steps, convenient installation and maintenance, auto oiling device, man-hour saving, and continuous regular operation of system.









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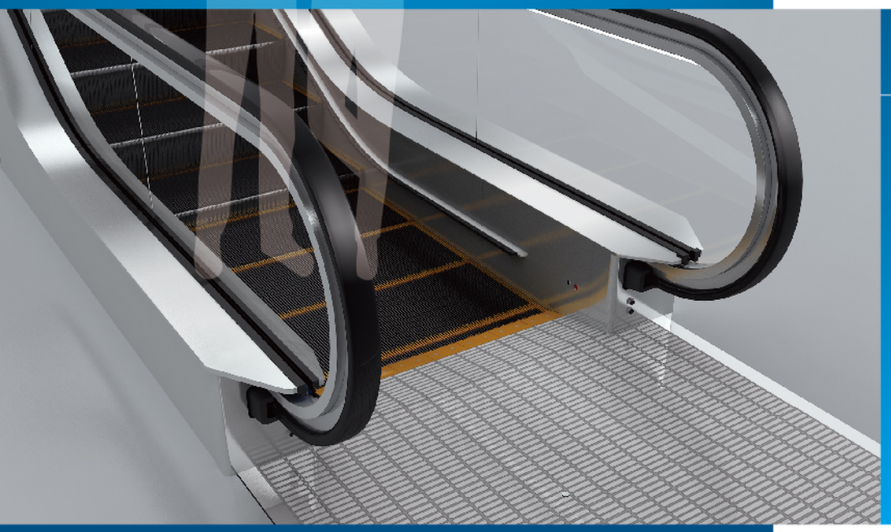
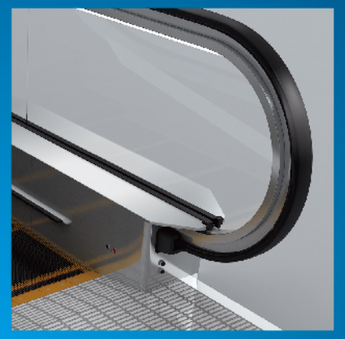
Consummate

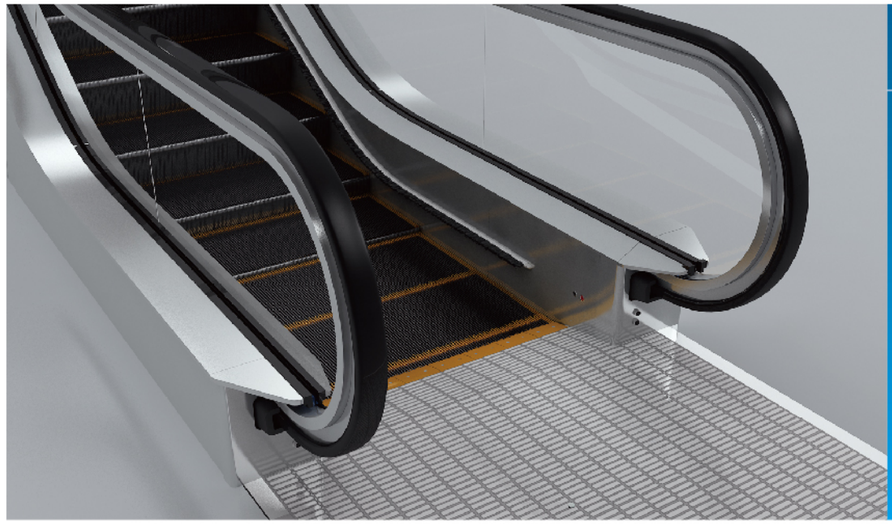
Series J escalator possesses brief and streamlined appearance, material of first class, various styles for different decoration space. Main parts of the escalator are made of full hairline stainless steel; styles of balustrade panel comprises of various combination of tempered glass, stainless steel, andother material; multiple handrail belts in fashionable colors and colorful glass panels can be optional, and can be merged into any architectural environment.



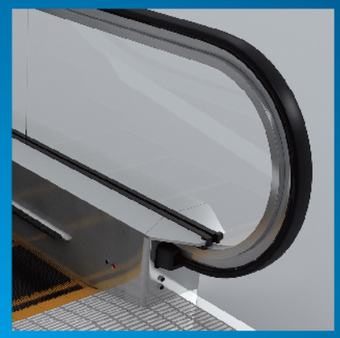
Type JS-LB / JS-LBF

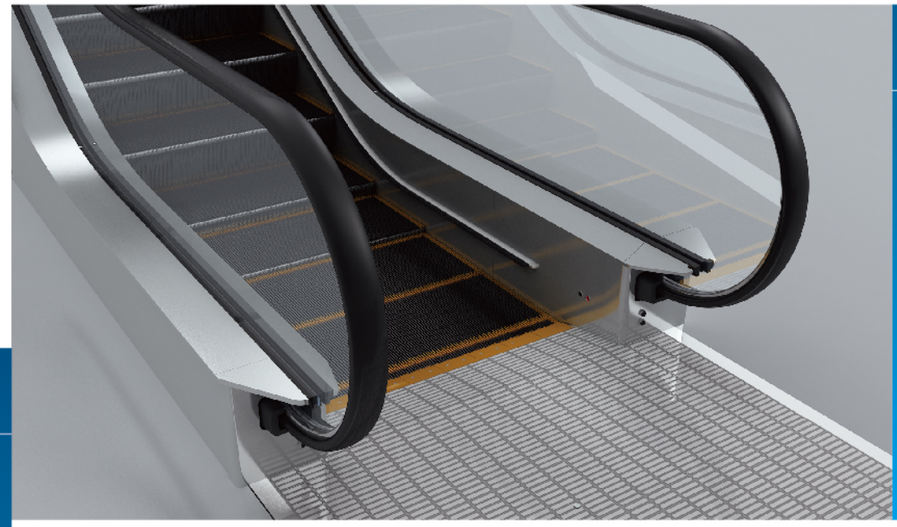
With lighting under handrail



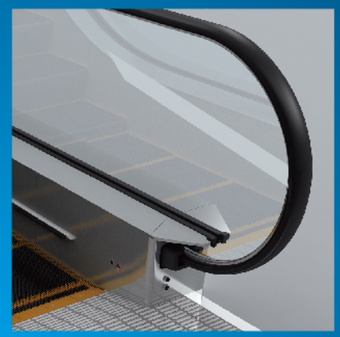


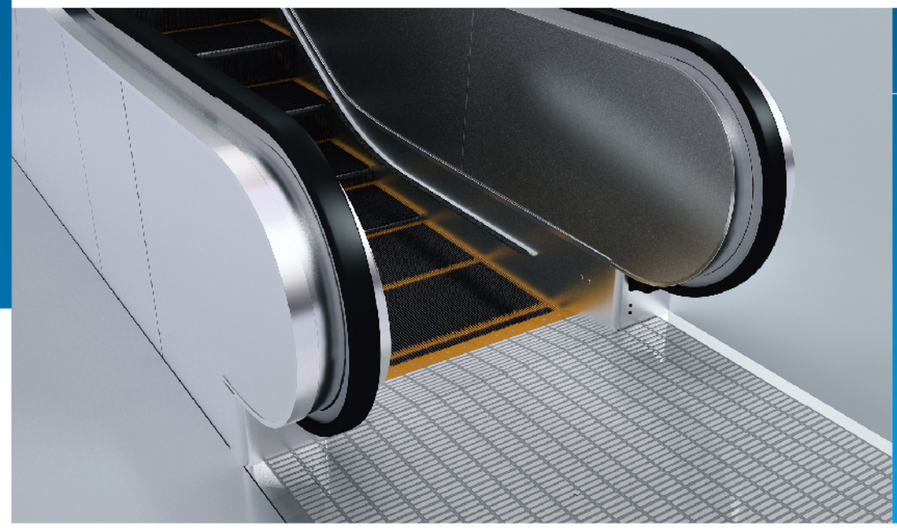
Type JS-B / JS-BF



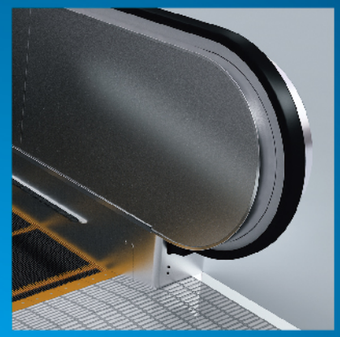


Type JS-SB / JS-SBF





Type JP-B / JP-BF



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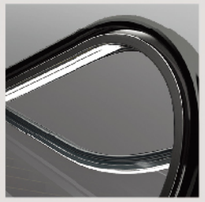
Decoration Configuration

Noble temperament is reflected in your hand and eye; exquisite guard rail, handrail belt, cover plate, apron panel and illumination reflects people's value everywhere.

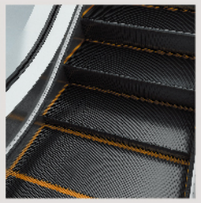


Lighting

Standard

Under Step Lighting

Handrail Lighting
(JS-LB / JS-LBF)



Step

Standard

Stainless Steel Step with Black Painting

Optional

Integrated aluminum alloy casting step with Black Painting

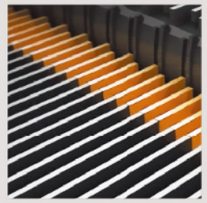
Handrail Guide Rail

Standard

Hairline stainless steel

Anti-creeping Device

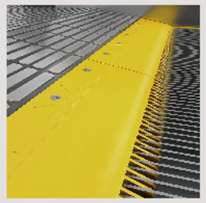
If there is a risk of passengers falling from the escalator, anti-creeping device could be installed onto the external cover plate so that nobody could climb onto the handrail.



Step Demarcation Cleat

Standard

Yellow molded resin on front, left and right side of step reminds passengers of being careful when traveling by escalator.



Comb

Standard

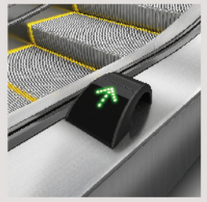
Aluminum Alloy

Optional

Yellow or Black molded resin

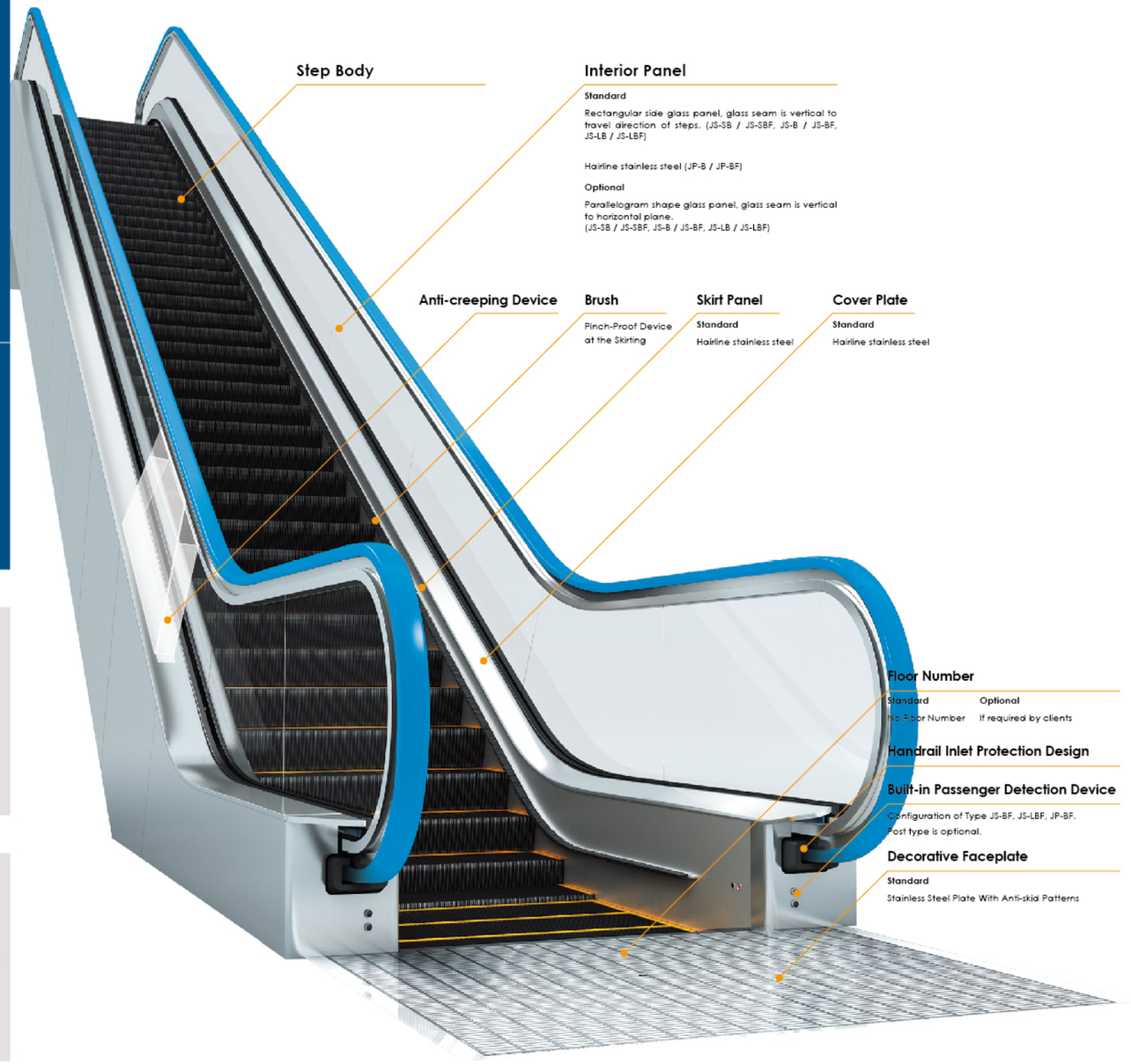
Post Type with Operation Indicator

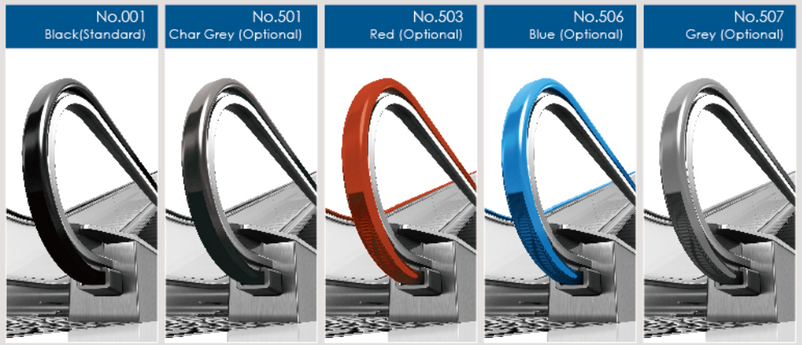
Hairline stainless steel



Operation Indicator

Configuration of Type JS-BF/JS-LBF/JS-SBF/JP-BF





Handrail Color

Standard

Black(No.001)

Optional

Char Grey(501)
Red(503)
Blue(506)
Grey(507)

Interior Panel Color

Standard

Transparent

Optional

Bronze
Blue
Grey

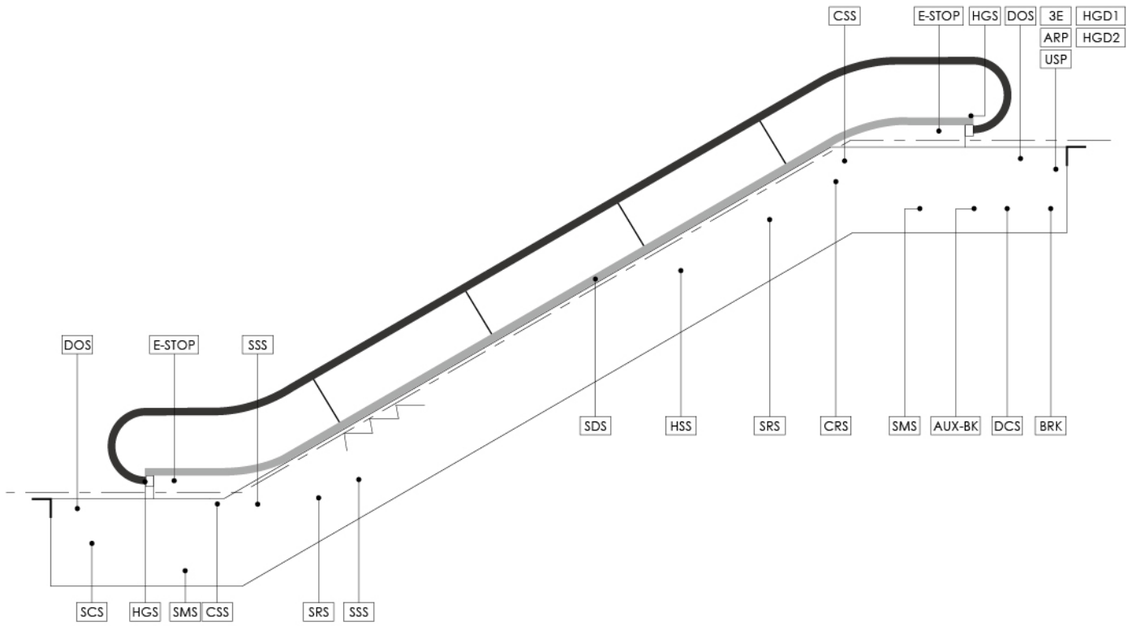
Can select handrail belt (Model code: 7841FSC) from EHC company.

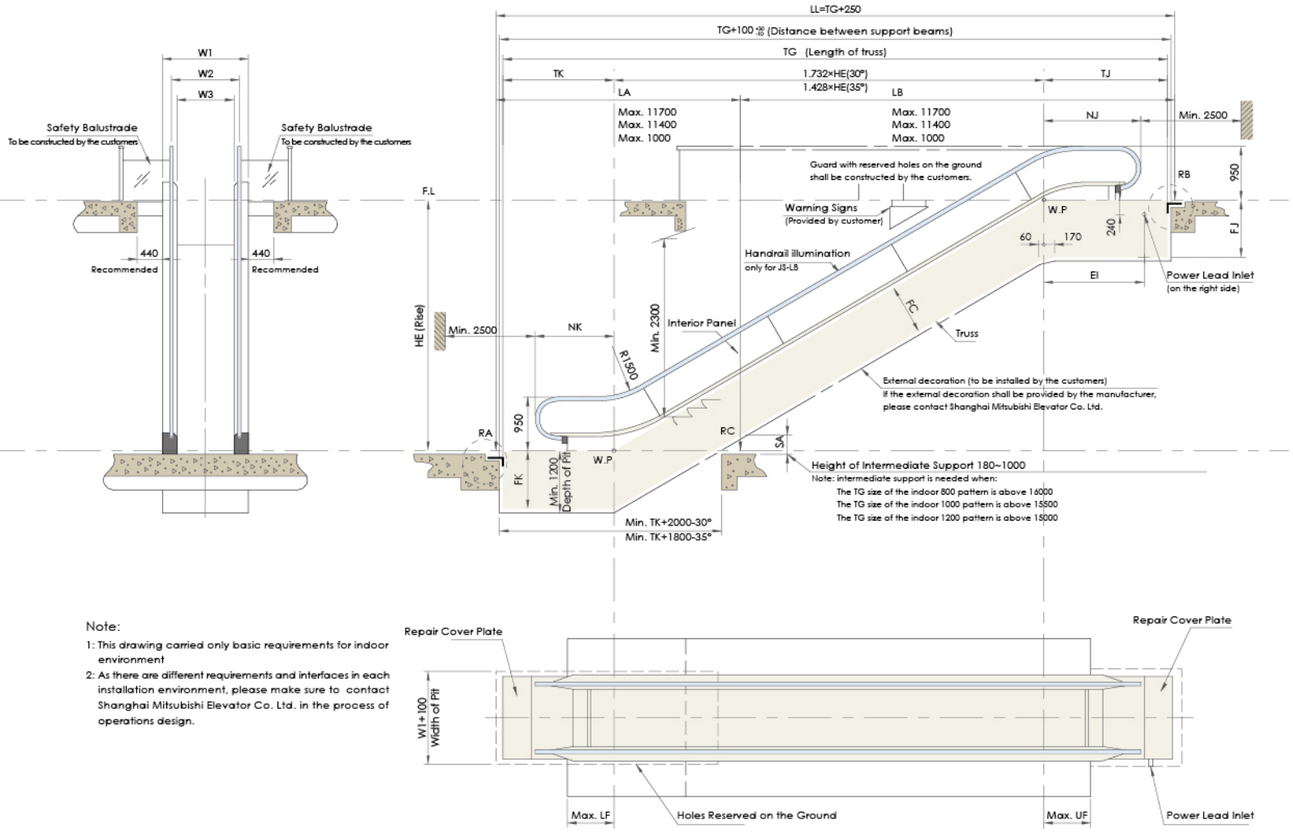
Pictures of computer painting may slightly differ from the actual.

Feature	Description	Code	Non-frequency Conversion	Frequency Conversion
■ Control and Security Features				
Phase Dislocation/ Phase Loss Protection	In case of phase dislocation or phase loss of the input power supply, cut the main circuit and control the circuit to stop the escalator.	3E	Ⓢ	Ⓢ
Non-manipulated Reversion Protection	In case of accidental reversion of the escalator, the device will cut down the power supply to the main drive motor and the brake.	ARP	Ⓢ	Ⓢ
Auxiliary Brake	When the escalator reaches 1.4 times of the rated speed or is not operating in the required direction, the auxiliary brake stops the escalator.	AUX-BK *1	Ⓢ	Ⓢ
Auxiliary Brake	When the escalator reaches 1.4 times of the rated speed or is not operating in the required direction, the auxiliary brake stops the escalator.	AUX-BK *2	◎	◎
Detection of Service Brake Actions	Stop the escalator when the service brake cannot release or brake normally.	BLR	Ⓢ	Ⓢ
Service Brake	The service brake takes action to stop the escalator, and keep it stopped.	BRK	Ⓢ	Ⓢ
Bended Guide rail Safety Device	When any object gets pinched between the pallets of two steps and causes abnormality of the operation, stop the escalator.	CRS	Ⓢ	Ⓢ
Comb Plate Safety Device	When any foreign object falls between the pallets and the comb plate, stop the escalator.	CSS	Ⓢ	Ⓢ
Detection of Contactor Action	In case of any abnormality with the contactor, stop the escalator.	CTD	Ⓢ	Ⓢ
Drive Chain Safety Device	When the drive chain breaks or extends abnormally, stop the escalator.	DCS	Ⓢ	Ⓢ
Cover Plate Safety Device	When the maintenance cover plate is taken out, stop the escalator or prevent it from starting.	DOS	Ⓢ	Ⓢ
Emergency Stop Button	In emergency, use this device to stop the escalator.	E-STOP	Ⓢ	Ⓢ
Detection of Auxiliary Brake Actions	When the auxiliary brake is not in place, prevent the escalator from starting. (When the rise is above 6m)	EBR *3	Ⓢ	Ⓢ
Electric Safety Circuit Protection	When there is any action in the electric safety devices connected in serial, stop the escalator.	ESC	Ⓢ	Ⓢ
Detection of Braking Distance	When the brake distance gets longer than 1.2 times the defined maximum, prevent the escalator from starting.	ESD	Ⓢ	Ⓢ
Water Level Warning Device	When too much water is accumulated in the lower truss, stop the escalator.	FLS *4	Ⓢ	Ⓢ
Handrail Anti-static Device	The device prevents static from occurring on the handrail.	HER	Ⓢ	Ⓢ
Over-speed	Stop the escalator before the operational velocity grows above 1.2 times the nominal velocity.	HGD1	Ⓢ	Ⓢ
Over-speed Limitation Device	Stop the escalator before the operational velocity grows above 1.4 times the nominal velocity. (when the rise is above 6m)	HGD2 *3	Ⓢ	Ⓢ
Handrail Inlet Safety Device	When any foreign object gets pinched into the handrail inlet, stop the escalator.	HGS	Ⓢ	Ⓢ
Handrail Velocity Inspection	When the velocity of the handrail is below the rated value, and the condition lasts for a period of time, stop the escalator.	HSS	Ⓢ	Ⓢ
Under-voltage Protection	When the voltage of the frequency converter is too low, stop the escalator.	LVP	—	Ⓢ
Over-current Protection	When the electric current of the frequency converter is too strong, stop the escalator.	OCP	—	Ⓢ
Motor Overload Protection	When the motor is overloaded, stop the escalator.	OCR	Ⓢ	Ⓢ
Over-voltage Protection	When the voltage of the frequency converter is too high, stop the escalator.	OVP	—	Ⓢ
Detection of Power Phase	Automatically inspect the power phase and frequency, and switch to bypass frequency converter in a shock-free manner. Realize self-adaptation control of power factors with the full frequency converter.	PLL	—	Ⓢ
Error of the Passenger Detection Device	Self-diagnosis of error with the passenger detection device. In case of any error, cancel the standby model.	PSD	—	Ⓢ
Step Chain Safety Device	When the step chains break or extend abnormally, stop the escalator.	SCS	Ⓢ	Ⓢ
Pinch-proof Device at the Skirting	Device with a rigid base installed on the skirting panels, to prevent foreign objects or feet from falling between the skirting panels and the steps.	SDS	Ⓢ	Ⓢ
Step Anti-static Device	The device prevents static from occurring on the steps.	SER	Ⓢ	Ⓢ
Steps Missing Safety Device	When there is any step missing, the device takes action to stop the escalator.	SMS	Ⓢ	Ⓢ
Steps Sinking Safety Device	If any part of a step sinks and the step cannot mesh with the comb plate, stop the escalator.	SRS	Ⓢ	Ⓢ
Skirting Panel Safety Device	When any foreign object falls between steps and skirting panels, stop the escalator.	SSS	◎	◎
Monitoring Cohesion of the Starting Switch	In case of cohesion of the starting switch, prevent the escalator from starting.	SWD	Ⓢ	Ⓢ
Overheating Protection of Frequency Converter	When the frequency converter is overheated, stop the escalator.	THMF	—	Ⓢ
Low Velocity Protection	When the velocity of the escalator is below the rated velocity, stop the escalator.	USP	Ⓢ	Ⓢ
■ Emergency Operations				
Fire Stop	When a signal of fire-fighting action is received, stop the escalator.	FSS	◎	◎
■ Operations and Service Functions				
Repair	The escalator can be set to the operation under repair model, to make the installation and commissioning convenient.	HAND	Ⓢ	Ⓢ
Manually Shut Down Illumination	Open or shut down illumination manually with the switch. (When auxiliary illumination below steps and/or at the handrails is equipped)	LO-M *5	Ⓢ	Ⓢ
Automatic Operation	Through the usage of passenger detection devices, the escalator could operate with the nominal speed when there is any passenger, and shift to standby in case of no load.	MDA	—	Ⓢ
Operation with Constant Velocity	The escalator keeps at the nominal velocity.	MDC	Ⓢ	—
Automatic Oil Feeding	Add lubricating oil to the chains of the escalator at predetermined time automatically.	OIL	Ⓢ	Ⓢ
Passenger Detection Device: Microwave but not the Column Pattern	Adopt microwave sensors for the passenger detection device.	PSM *6	—	◎
Passenger sensing device: photoelectric non-pillar type	Only for variable-frequency escalator; passenger sensing device: select one from three.	PSO *6	—	◎
Passenger Detection Device: Column Pattern	Adopt the photoelectric column for the passenger detection device.	PSP *6	—	◎
Low Velocity Standby	The escalator operates below the nominal velocity in the condition of no load.	SBLS *7	—	◎
Stop Standby	The escalator stops in the condition of no load.	SBSP *7	—	◎
Direct Start-up	Supply power with direct drive with mains at both starting and operation of the escalator, and the frequency converter serves merely as a backup.	SDT *8	Ⓢ	Ⓢ
Optional Directions of Operation	The direction of escalator operation could be reversed.	UDA	Ⓢ	Ⓢ
Bypass Frequency Converter	Supply power with frequency converter at starting, stop, and low velocity standby, and shift to direct drive with mains during operations with rated velocity.	VFBF	—	Ⓢ
■ Information and Display				
Displaying Safety Device Codes	Carry out one-on-one inspection on safety devices, and display response error codes if there is any error.	ASD *9	◎	◎
BA Interface	Use passive dry contact to output signals indicating basic status of the escalator.	BA	◎	◎
Buzzer	Remind the passengers of escalator starting, error, reversion, and etc.	BUZ	Ⓢ	Ⓢ
Operational Direction Indication	Indicate the passengers the operational direction, stop, no entry, or other conditions of the escalator.	DI *10	◎	Ⓢ
Reminder of Fire-protection Stop	When the escalator stops for fire-protection reasons, release the signal of fire-protection stop.	FE-CP	◎	◎
Handrail Illumination	Illumination at the lower edge of the handrail.	L-BAL *11	Ⓢ	Ⓢ
Illumination Below Steps	Illumination at the inlet and outlet of the staircase, highlighting the edge of the staircase.	L-STP *12	Ⓢ	Ⓢ
The Monitoring System	The system monitors the status of the escalator with computers, and gives orders of starting or stop when necessary.	SMOS-II	◎	◎

Note:

*1 Standard component when the rise is above 6 meters.
*2 Non-standard component when the rise is 6 meters or below.
*3 Standard component when auxiliary brakes are equipped.
*4 Standard component only when the escalator is installed outdoor or half-outdoor.
*5 When there is illumination system on the escalator.
*6 PSM or PSP (PSM is the recommended option)
*7 SBLS or SBSP (SBSP is recommended indoor option)
*8 The normal start-up model for non-frequency conversion escalators, and backup for frequency conversion escalators.
*9 Non-standard
*10 Non-standard for non-frequency conversion escalators
*11 Only for indoor
*12 Non-frequency conversion versions: JS-SB, JS-B, JS-LB, JP-B; frequency conversion versions: JS-SBF, JS-BF, JS-LBF, JP-BF
*13 Ⓢ Standard functions, ◎ optional functions



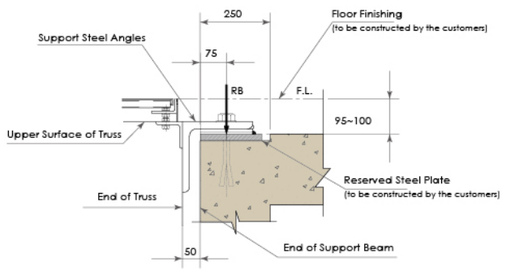


Note:

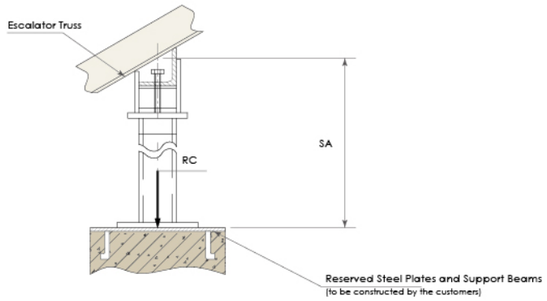
1: This drawing carried only basic requirements for indoor environment

2: As there are different requirements and interfaces in each installation environment, please make sure to contact Shanghai Mitsubishi Elevator Co. Ltd. in the process of operations design.

End Support Drawing



Intermediate Support Drawing



Item	Standard	Optional	Note
Length of the Upper Truss **TJ** (mm)	2560	2560~5260	Rise⩽6000mm/Angle of inclination 30°/Level 2 steps/Handrail nominal width 1000 or 1200
	3060	3060~5260	Rise⩽6000mm/Angle of inclination 30°/Level 3 steps/Handrail nominal width 800
	2970	2970~5670	Rise⩽6000mm/Angle of inclination 30°/Level 3 steps/Handrail nominal width 1000 or 1200
	3470	3470~5670	Rise⩽6000mm/Angle of inclination 30°/Level 3 steps/Handrail nominal width 800
	3380	3380~6080	Rise⩽6000mm/Angle of inclination 30°/Level 4 steps/Handrail nominal width 1000 or 1200
	3880	3880~6080	Rise⩽6000mm/Angle of inclination 30°/Level 4 steps/Handrail nominal width 800
	2970	2970~5670	6001mm⩽Rise⩽7500mm/Angle of inclination 30°/Level 3 steps/Handrail nominal width 1000 or 1200
	3470	3470~5670	6001mm⩽Rise⩽7500mm/Angle of inclination 30°/Level 3 steps/Handrail nominal width 800
	3380	3380~6080	6001mm⩽Rise⩽7500mm/Angle of inclination 30°/Level 4 steps/Handrail nominal width 1000 or 1200
	3880	3880~6080	6001mm⩽Rise⩽7500mm/Angle of inclination 30°/Level 4 steps/Handrail nominal width 800
	3450	3450~6150	7501mm⩽Rise⩽9500mm/Angle of inclination 30°/Level 3 steps
	3860	3860~6560	7501mm⩽Rise⩽9500mm/Angle of inclination 30°/Level 4 steps
	2600	2600~5300	Rise⩽6000mm/Angle of inclination 35°/Level 2 steps/Handrail nominal width 1000 or 1200
	3100	3100~5300	Rise⩽6000mm/Angle of inclination 35°/Level 2 steps/Handrail nominal width 800
	3010	3010~5710	Rise⩽6000mm/Angle of inclination 35°/Level 3 steps/Handrail nominal width 1000 or 1200
	3510	3510~5710	Rise⩽6000mm/Angle of inclination 35°/Level 3 steps/Handrail nominal width 800
	3420	3420~6120	Rise⩽6000mm/Angle of inclination 35°/Level 4 steps/Handrail nominal width 1000 or 1200
	3920	3920~6120	Rise⩽6000mm/Angle of inclination 35°/Level 4 steps/Handrail nominal width 800
Length of the Lower Truss **TK** (mm)	2290	2290~5000	Rise⩽6000mm/Angle of inclination 30°/Level 2 steps
	2700	2700~5410	Rise⩽6000mm/Angle of inclination 30°/Level 3 steps
	3110	3110~5820	Rise⩽6000mm/Angle of inclination 30°/Level 4 steps
	2700	2700~5410	6001mm⩽Rise⩽9500mm/Angle of inclination 30°/Level 3 steps
	3110	3110~5820	6001mm⩽Rise⩽9500mm/Angle of inclination 30°/Level 4 steps
	2350	2265~5060	Rise⩽6000mm/Angle of inclination 35°/Level 2 steps
	2760	2760~5470	Rise⩽6000mm/Angle of inclination 35°/Level 3 steps
	3170	3170~5880	Rise⩽6000mm/Angle of inclination 35°/Level 4 steps
Depth of the Upper Truss **FJ** (mm)	1030		Rise⩽7500mm
	1100		7501mm⩽Rise⩽9500mm
Depth of the Lower Truss **FK** (mm)	1030		
Depth of the Middle Truss FC (mm)	915		
Width of the Escalator **W1** (mm)	1550		Handrail nominal width 1200
	1350		Handrail nominal width 1000
	1150		Handrail nominal width 800

Basic Specifications

Item	Specification			Note
Nominal Width Between Handrails (mm)	1200	1000	800	
Distance Between Center Lines of Handrails (mm)	1280	1080	880	JS-LB/JS-LBF
	1280	1080	880	JS-B/JS-BF
	1208	1008	808	JS-SB/JS-SBF
	1260	1060	860	JP-B/JP-BF
Nominal Width of Steps (mm)	1004	804	604	
Maximum Load (Person/Hour)	6000	4800	3600	
Serial No.	JS-B/JS-BF, JS-LB/JS-LBF, JS-SB/JS-SBF			Indoor
	JP-B/JP-BF			Outdoor or Semi-outdoor
Drive System	Direct Drive			JS-LB/JS-B/JS-SB/JP-B
	VVVF Drive			JS-LBF/JS-BF/JS-SBF/JP-BF
Angle of Inclination (Degree)	30°, 35°			
Velocity (m/s)	0.5			
Escalator Rise (mm)	2241~9500			Indoor, Angle of inclination 30°
	2296~9500			Outdoor or Semi-outdoor, Indoor, Angle of inclination 30°
	2571~6000			Indoor, Angle of inclination 35°
	2634~6000			Outdoor or Semi-outdoor, Indoor, Angle of inclination 35°
Drive Power Supply	380V50Hz three-phase and five-wire			
Illumination Power Supply	220V50Hz single phase			
Horizontal Movement Distance of Steps (mm)	800			Level 2 steps, Rise≤6000mm
	1200			Level 3 steps, Rise≤6000mm
	1600			Level 4 steps, Rise≤6000mm
	1200			Level 3 steps, Rise≥6001mm
	1600			Level 4 steps, Rise≥6001mm
Applicable Environment	Indoor			Please contact the Shanghai Mitsubishi Elevator Co. Ltd. to confirm if the escalator could be used indoor.
	Outdoor			Please contact the Shanghai Mitsubishi Elevator Co. Ltd. to confirm if the escalator could be used outdoor and/or Semi-outdoor.
	Semi-outdoor			
Upper Horizontal Step Number	Level 2 steps, Level 3 steps, Level 4 steps			Rise≤6000mm
	Level 3 steps, Level 4 steps			Rise≥6000mm
Lower Horizontal Step Number	Level 3 steps, Level 4 steps			

Power Supply Data

Driving Power (three phase AC 380V, 50Hz)

Nominal Width Between Handrails (mm)	1200	1000	800	Note
Driving Power Capacity (kVA)	8	8	8	Rise≤4500mm
	10.4	8	8	4500mm<Rise≤5500mm
	10.4	10.4	8	5500mm<Rise≤6500mm
	15.4	10.4	10.4	6500mm<Rise≤6800mm
	15.4	10.4	10.4	5800mm<Rise≤9500mm

Illumination Power (single phase AC 220V, 50Hz)

Serial No.	JS-LB/JS- LBF	JS-B/JS-BF	JS-SB/JS- SBF	JP-B/JP-BF	Note
Illumination Power Capacity (kVA)	2.1	1.3	1.3	1.3	Rise≤6000mm
	2.5	1.3	1.3	1.3	6000mm<Rise≤9500mm

Motor Capacity

Nominal Width Between Handrails (mm)	1200	1000	800	Note
Motor Capacity (kW)	5.5	5.5	5.5	Rise≤4500mm
	7.5	5.5	5.5	4500mm<Rise≤5500mm
	7.5	7.5	5.5	5500mm<Rise≤6500mm
	11	7.5	7.5	6500mm<Rise≤6800mm
	11	11	7.5	5800mm<Rise≤9500mm

Sense of Secure and Peace to Create Harmonious Space of Life

Technology Improves Life

Science Guides the Smart Future

Shanghai Mitsubishi Elevator stays beside you