





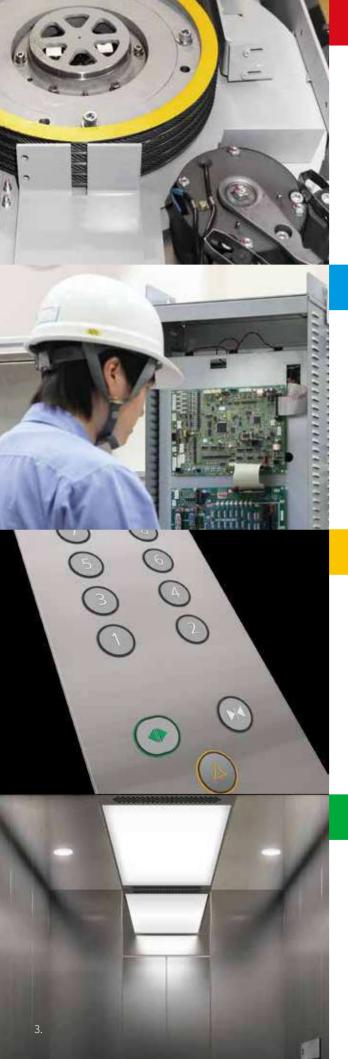
"Made in Fujitec"

Fujitec is Creating and Leading the New Global Standard for Elevators



By manufacturing safe and reliable elevators in-house, we are building trust with people around the world.

Fujitec's "Global Common Components" are used in the ZEXIA-D brand. The quality of components, such as traction machines, elevator controllers, and operating fixtures, is controlled through Fujitec's integrated system of global quality management. Elevators with the same high quality will be provided by Fujitec's global supply chain under the concept of "Made in fujitec."



Excellent Performance

The permanent magnetic synchronous gearless motors, which have been designed and developed by Fujitec, provide the utmost reliability and excellent driving performance. These motors reflect 75 years of accumulated know-how through our technological achievements in elevator manufacturing, which spans from product designing to fabrication.

Reliable Operation

Since all control-related components, ranging from control circuits to inverters, were independently developed by Fujitec, highly reliable elevator operation is established. In the event of an elevator malfunction, the elevator control system assembled with our components immediately detects the malfunction and maintains efficient and stable operation.

Universal Design

Under our universal designs, aesthetically refined buttons, displays, etc. on elevator operating fixtures are highly visible. Passengers will have a superb and comfortable riding experience.

Styles

Various decoration styles for the elevator interior and landing floors are offered by Fujitec.

Customers can select the most suitable decorative materials for car panels, car ceilings, car floorings, car operating boards and landing fixtures.





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Excellent Performance

Gearless Traction Machine with Permanent Magnetic Synchronous Motor

The gearless traction machine with a permanent magnet synchronous motor assure high riding comfort quality and low power consumption. This newly adopted technology reduces the weight and size of a traction machine, because gears are no longer required for elevator speed control.

A Small Machine Results in Space Saving

The machine room space required by our ZEXIA-D elevators is 60% smaller than that of conventional elevators. This remarkable feature results in a reduction of building construction costs and increases usable space in the building.

In addition, ZEXIA-D is small machines require less motor capacity and power consumption compared to conventional elevators.

The differences are shown below.

Given elevator operating conditions:

The maximum number of elevator operations per day: 600 times

The travel distance in a single operation: 30 meters

The rated speed: 1.0 meter per second The rated load: 1200kgs.

ZEXIA-D Elevator(PMGL)

Conventional Elevator(ACGD)

Required Motor Capacity

8.5kW 9.0kW

Electrical Usage per Month*1

646kW/month² ←→ 22% Energy saving

27kWh/ month

- $^{\star}1$: The number of days in a single month is assumed as 30 days.
- *2 : Electrical usage might vary depending on site conditions.

Ultra-Slim Door Operator with Permanent Magnetic Synchronous Motor

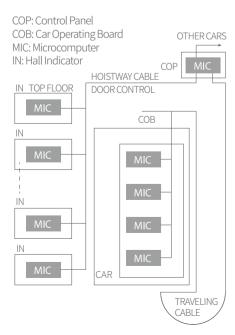
Fujitec's new door operators have adopted a permanent magnetic synchronous motor which doesn't have any gears for door speed control. The use of this kind of motor reduces the size of a door operator and achieves smooth and precise door operation.

These new door operators consume approximately

35% less power than the conventional ones.



Distributed Control System



- A 32-bit data bus provides high-speed and high-precision data transmission of input-output command signals between each microprocessor located in control panels, hall-call / car-call buttons, hall indicators and hall lanterns.
- High-speed data transmis with multiple protocols enables large-scale data processing at ten times the normal speed. This also improves the ability to monitor elevator running speed, landing precision and operating reliability as well as input-output command signals of car operating fixtures and operation indicators.
- The bus system is employed for data transmission between microcomputers located in every hall-call fixture, car operating board, and control panel. This bus system has strong protection against signal interference and has system-extending capability.

An elevator operation system with multiple microcomputers makes maximum use of the "Distributed Control System." Hall indicators, car operating boards, and control panels incorporate high-performance microcomputers. These independent microcomputers analyze elevator operating conditions utilizing self-diagnostic functions and implement immediate control of elevator operations. Also, data transmission buses among microcomputers increase data processing capability.



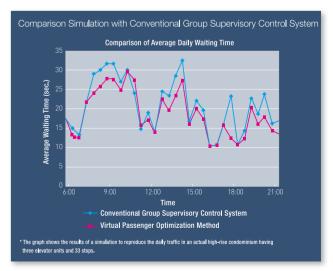
Reliable Operation



FLEX-NX series - Elevator Group Supervisory Control System -

Fujitec has adopted the "Virtual Passenger Optimization Method" as a new elevator group control system.

This system controls elevator group operation by virtually calculating passenger waiting time in advance based on past accumulated data, such as passenger travel patterns and passenger volume at each floor. Also, this method comprehensively calculates passenger waiting time based on extrapolated data of probable future passengers, how many passengers will come to a certain floor when a hall call is registered and/or how many passengers will come to a certain floor when no hall call is registered. This comprehensive analysis reflects whole building traffic conditions for efficient elevator operation control as well as reducing daily passenger waiting time by up to 10%.



Universal Design

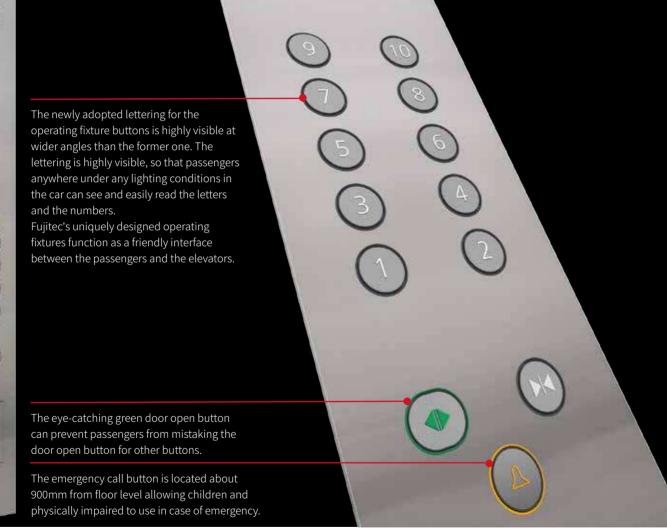


Fujitec's new global-standard operating fixtures reflect the latest in Human Engineering technology.

Fixture buttons with clearly visible lettering function as the man-machine interface. Passengers can register their destination in a visually intuitive manner.

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Night-Time Self-Checking Operation

- A safety enhancement for increased reliability -

Mechanical brake conditions are automatically checked by moving the elevator during the night time while not receiving any car and hall calls.

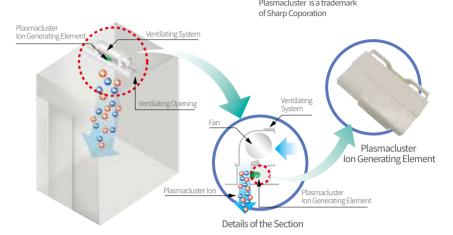
This night-time self-checking operation increases passenger safety and contributes to a high after-sales product quality.

IONFUL

- Plasmacluster™ Ion Generating Device -

(Optional Specification)

Fujitec is the leading elevator company to have installed a Plasmacluster lon generating device in an elevator. This device built in a car's ventilation unit disinfects airborne mold, bacteria, viruses, allergens, and odor molecules as well as creating clean air in the elevator which enhances passenger comfort.



Multi-Beam Sensor

Multi-beam Sensor emits multiple infrared beams, creating an invisible curtain covering the doorway. If any of the beams is interrupted, the closing doors will stop and reopen. This function results in a significantly higher detection rate of a passenger and/or an object in the doorway.



LED Down Lights on Car Ceiling

For car ceiling lighting, Fujitec adopts LED downlights, which are long-lasting and energy-efficient. This adoption contributes to the protection of the environment.

Lifetime	approx. 1,500 hours	approx. 20,000 hours	approx. 13 times
Wattage	90W	9W	1/10(one-tenth)



VONIC (Automatic Voice Announcement System)

(Optional Specification)

A computerized voice system (English) provides passengers with timely information about car directions, car arrivals, door opening and closing, and emergencies, etc.

[At the customer's request, announcements in other languages can be added.]







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STYLES Standard Car Design Optional Car Design







BD-b1



BD-b2



BD-b3



3D-b4



BD-b5



BD-b



BD-b7



BD-b8



Ceiling: (CE-e4)	Stainless Steel with Hairline Finish (Frame) Stainless Steel with Mirror Finish (Central)
Walls,Transom &Door:	Stainless Steel with Hairline Finish
Fan:	Cross-Flow Fan
COB:	FX-k11
Floor:	Designed PVC (BD-C1)
Sill:	Aluminum Allov



Ceiling: (CE-e2)	Paint Finished Steel Sheet (TE-f1)
Walls,Transom &Door:	Stainless Steel with Hairline Finish
Mirror:	Stainless Steel with Mirror Finish
Fan:	Cross-Flow Fan
Handrail:	HR-a1
WCOB:	FX-g31
Floor:	Designed PVC (BD-C1)
Sill:	Aluminum Alloy

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Optional Car Design



Ceiling: (CE-c1)	Paint Finished Steel Sheet (TE-f1)
Walls,Transom &Door:	Stainless Steel with Hairline Finish
Fan:	Cross-Flow Fan
Floor:	BD-b5
Sill:	Aluminum Alloy



Ceiling: (CE-e4)	Stainless Steel with Hairline Finish (Frame) Stainless Steel with Mirror Finish (Central)
Walls(CR-f2):	
Side Panel:	Steel Panel with Wooden Decorative Plate(Sides)
Rear Panel:	Stainless Steel with Mirror Finish(Centra) Steel Panel with Wooden Decorative Plate(Sides) Patterned Glass + Light Strip (Centra)
Front Panel, Transom :	Stainless Steel with Hairline Finish
Fan:	Cross-Flow Fan
Floor:	Designed PVC (BD-C1)
Sill:	Aluminum Alloy

Steel Panel with Wooden Decorative Plate



Ceiling:		
(CE-g5)	Stainless Steel with Mirror Finish	
Walls(CR-f1):		
Side & Rear Panels: Wall's Centra Panels: Front Panel,Transom:	Steel Plate with Laminated Sheet(TE-g1 Stainless Steel with Mirror Finish Stainless Steel with Sandblast Finish	
Door:	Stainless Steel with Sandblast Finish	
Fan:	Cross-Flow Fan	
Floor:	Designed PVC (BD-b8)	
Sill:	Aluminum Alloy	
Kick Plate:	Stainless Steel with Hairline Finish	



Ceiling: (CE-e2)	Stainless Steel with Mirror Finish
Walls(CR-f1): Side & Rear Panels: Wall's Centra Panels: Front Panel,Transom:	Steel Plate with Laminated Sheet(TE-g2) Stainless Steel with Mirror Finish Stainless Steel with Sandblast Finish
Door:	Stainless Steel with Sandblast Finish
Fan:	Cross-Flow Fan
Floor:	Designed PVC (BD-b6)
Sill:	Aluminum Alloy
Kick Plate:	Stainless Steel with Hairline Finish

1. 12.



Ceiling: (CE-c5)	Paint Finished Steel Sheet (Dark Gray with Sand Texture)
Walls(CR-f3):	
Side Panels:	Light Gray Satin Coated Steel Plate Black Satin Coated Steel Plate
Rear Panel:	Light Gray Satin Coated Steel Plate Black Satin Coated Steel Plate Mirror
Front Panel, Transom:	Stainless Steel with Mirror Finish
Fan:	Cross-Flow Fan
Floor:	BD-b6
Car Operating Board:	FX-k13
Sill:	Aluminum Alloy



Ceiling: (CE-e4)	Stainless Steel with Hairline Finish (Frame) Stainless Steel with Mirror Finish (Central)
Walls(CR-f4):	
Side Panels: Rear Panel:	Steel Plate with Laminated Sheet(TE-g1) Stainless Steel with Mirror Finish (Two sides), Stainless Steel with Mirror Etching Finish (Central)
Front Panel, Transom	: Stainless Steel with Hairline Finish
Fan:	Cross-Flow Fan
Floor:	Designed PVC (BD-e1)
Sill:	Aluminum Alloy



CE-g1

Flat Panel: Steel Sheet with Color Paint Light: LED (White) Emergency Light (1W, LED)



CE-g5

Flat Panel: Steel Sheet with Color Paint

Light:

Downlight (10W, LED) Emergency Light(1W,LED)



CE-c1

Arch-Shaped Part:
Milky-White Acrylic Sheet
Flat Part:
Steel Sheet with Color Paint
Light:
LED+ Downlight(3W, LED)
Emergency Light(5W, LED)



CE-e4

Frame Part:

Stainless Steel with Hairline

Central Part:

Stainless Steel with Mirror Milky- White Acrylic Sheet

Light:

LED(White)+ Downlight(2W, LED) Emergency Light(4.5W, LED)



CE-c7

Flat Part: Milky-White Acrylic Sheet Flat Panel: Steel Sheet with Color Paint Light: LED (White) Emergency Light(5W,LED)



CE-e5

Flat Panel: Milky-White Acrylic Sheet

Flat Panel:

Paint Finished Steel Sheet

- Dark Gray with Sand Texture

Light : LED (White)

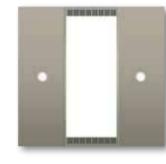


Standard

CE-c4

Arch-Shaped Part:
Milky-White Acrylic Sheet
Flat Part:
Steel Sheet with Color Paint
Light:
LED (White)
Emergency Light(5W,LED)

Optional



CE-e2

Arch-Shaped Part: Milky-White Acrylic Sheet

Flat Panel:

Steel Sheet with Color Paint

_ight:

LED (White)+ Downlight(3W, LED) Emergency Light(4.5W, LED)

(In case of deep car, the design of ceiling will be changed.)



The layout rotate by 90°.



Note: Ceiling internal height will vary based on the ceiling types.





Faceplate:

Stainless Steel with Hairline Finish Indicator:

Orange Dot-Matrix LED

Push buttons

FX-h12





Stainless Steel with Hairline Finish Indicator:

Push buttons

FX-h11





Stainless Steel with Hairline Finish Indicator: Multicolor LCD Screen (7 inch) Push buttons

Wall-mounted Type





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FX-h71













Faceplate:

Stainless Steel with Hairline Finish/ Acrylic Resin

Orange Dot-Matrix LED Multicolor LCD Screen (4.2 inch) Monochrome LCD (4.1 inch)

Buttons: Push buttons

0

Standard

Optional

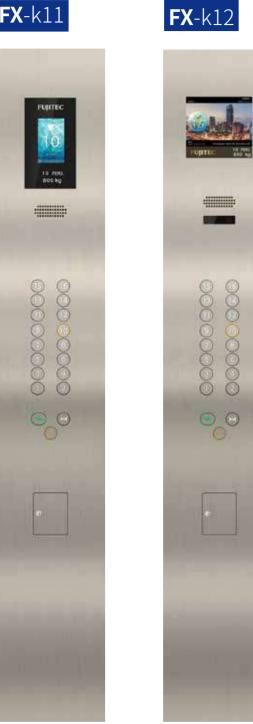




Faceplate: (Swing Type) Stainless Steel with Hairline Finish

Indicator: Orange Dot-Matrix LED

Buttons: Push buttons **FX**-k11



Faceplate: (Swing Type) Stainless Steel with Hairline Finish Stainless Steel with Hairline Finish Indicator: Multicolor LCD Screen (7 inch) Multicolor LCD Screen (10.4 inch) Buttons:

Push buttons

FX-k13



Faceplate: (Swing Type) Stainless Steel with Hairline Finish Indicator: Monochrome LCD Screen (7 inch) Buttons: Push buttons

Inserted Box Type





















































Faceplate:

Stainless Steel with Hairline Finish

Indicator:

Orange Dot-Matrix LED Multicolor LCD Screen (4.2 inch) Monochrome LCD (4.1 inch)

Push buttons

Standard **Optional**

Faceplate: (Swing Type)

Indicator:

Buttons:

Push buttons

17. 18.





















































19.







FX-n44





The surface of stainless steel is nano-anti-fingerprint treatment, which realizes the anti-fingerprint effect and greatly improves the anti-dirty.

Faceplate:

Fingerprint Resistant Sandblasted Stainless Steel

Indicator:

Multicolor LCD Screen (4.3 inch) Monochrome LCD (5.0 inch)

Buttons:









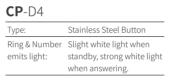
CP-D3 Stainless Steel Button with Braille Dots When Pressed: Light Emitting Part: Ring Lighting Color: Orange

Faceplate:	Stainless Steel with Hairline Finish
Buttons:	Stainless Steel Button



Button







CP -D5	
Type:	Stainless Steel Button with Braille Dots
Ring & Number emits light:	Slight white light when standby, strong white light when answering.



RP-D1

Туре:	Stainless Steel Button
When Pressed:	Light Emitting Part: Ring
Lighting Color:	Orange



RP-D3

Туре:	Stainless Steel Button with Braille Dots
When Pressed:	Light Emitting Part: Ring
Lighting Color:	Orange



RP-E4

Type:	Glass Button
Square &	Slight white light when
Number emits	standby, blue light when
light:	answering.



CP-D1

Stainless Steel Button
Light Emitting Part: Ring
Orange

Handrail



HR-a1 Stainless Steel Hairline Plate



HR-b1 & b2 Stainless Steel Hairline Tube/ Stainless Steel Mirror Tube

Hall Fixtures





Size (mm) L440x W90 x H8

Indicator LED

Lighting Color White





Size (mm) L440 x W100 x H14.5

Indicator

LCD (4.3 inch) **Lighting Color**Yellow





Size (mm) L60 x W200 x H46

Lighting Color Yellow



FX-k82

Size (mm) L55 x W422 x H46.5

Lighting Color Yellow



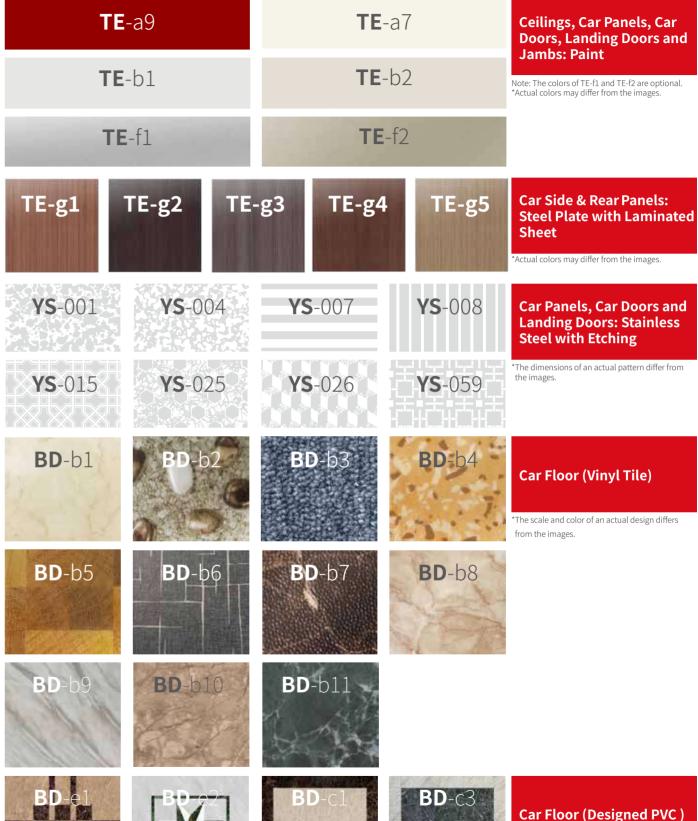
Landing Design Color Samples





TE-g1 BD-b1 **BD**-b5

Group Supervisory Control



*The scale and color of an actual design differs

from the images.

Systems & Functions



1. Elevator Operation Control System

Control Systems	Details of the Systems
For One Elevator: 1-Car Selective Collective Operation (Simplex)	Landing calls in the direction in which the elevator is traveling are served sequentially. After all the landing calls are served, landing calls in the opposite direction will be served. When there are no incoming calls, the elevator stops and stays at the last served floor.
For Two Elevators in a Bank: 2-Car Selective Collective Operation (Duplex)	Two selective-collective-operation elevators work together in one group. Landing calls are served by either elevator that can respond first. When there are no calls, one will be on standby at the main floor; the other will stay at the last served floor.
For Three to Eight Elevators in a Bank (Group Control Operation)	The operation of more than two elevators in a bank is controlled by a group supervisory system which calculates passenger waiting time in advance based on the accumulated traffic data, such as passenger travel patterns and passenger volume at each floor, etc.

2. Functions and Specific-Purpose Operations, etc.

	Functions and urpose Operations, etc.	Details	• : Standard / ■ : Optional
	Alarm Buzzer	When the emergency button is pressed, the car-top-mounted buzzer will sound an alarm.	•
	Rescue Operation to the Nearest Floor	In the event that an elevator stops between floors, a safety circuit will automatically analyze the situation and slowly move the elevator to the nearest available floor.	•
	Automatic Releveling	In the event that an elevator floor isn't leveled with the landing floor, the Automatic Releveling function will initiate and make the elevator floor flush with the landing floor.	•
	Emergency Car Lighting	In the event of a power failure, a self-charging-battery-equipped emergency lighting system will light up the elevator for passenger safety and relief.	•
	Five-Way Intercom	An intercom for 5-way communication is installed in the elevator. It allows 4 remote telephones to communicate with the elevator; one on the car top, one in the pit, one in the machine room and one in the building-system control room.	•
Passenger-Safety Functions	Multi-Beam Sensor	A multi-beam sensor emits multiple infrared beams, which will scan at the high speed in the elevator door, forming an infrared beam barrier. If a single beam is interrupted, the sensor will stop the closing doors and reopen them.	•
	Multi-Beam Sensor with Mechanical Safety Edge	A multiple-beam sensor can be incorporated in mechanical safety edges of elevator doors.	
	Night-Time Self-Checking Operation	During the night time when the elevator doesn't receive any car and hall calls, the system will move the elevator and check the mechanical brake conditions automatically.	•
	Open Door Warning	If a passenger tries to forcibly open the doors while the elevator is in operation, the warning device will sound an alarm.	•
	Unintended Car Movement Protection (UCMP)	The Unintended Car Movement Protection system prevents elevator movement from the landing floor, while passengers are entering and getting off the elevator.	•
	Car Door Anti Stripping Device	It can prevent passengers from falling into the hoistway when the door is opened in the non- unlocking area, and further ensure the safety of elevator passengers.	•
	Impact Resistant Door System	The impact resistance of the landing door system is further strengthened, and the risk of falling into the hoistway caused by the impact of the landing door system is effectively prevented, further ensuring the safety of elevator related personnel.	•

The above functions may change without prior notice.

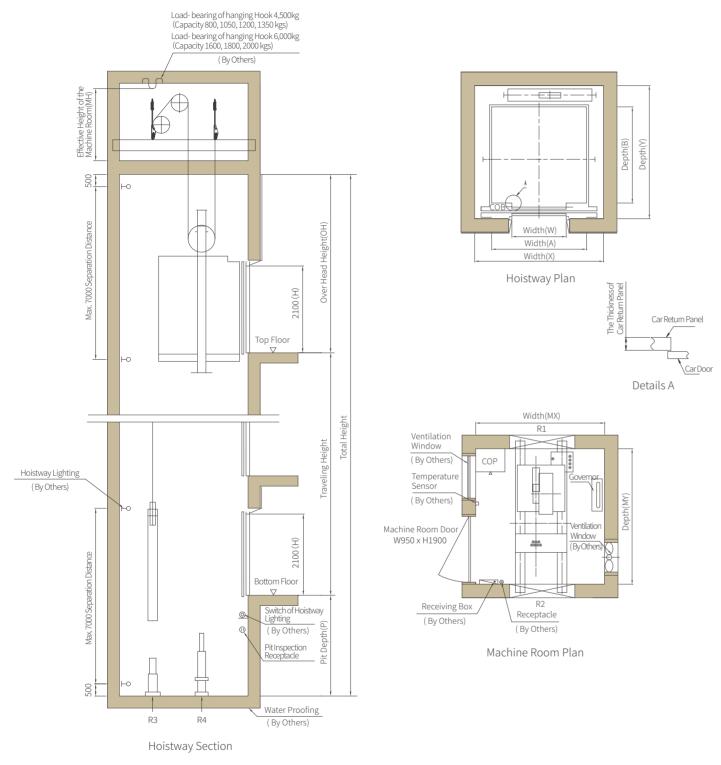
Systems & Functions

	Functions and	Details	A. Standard / . Ontional
Specific-P	urpose Operations, etc.	Details	●: Standard / ■: Optional
	Anti-Nuisance Function	1) For elevators with three or more landings, when three or more car calls are registered at the same time, or when four or more car calls are registered in an extremely short period of time, the system will automatically cancel the activated car calls. 2) For elevators with five or more landings, when an elevator loaded with 100 kg or less receives four or more car call registrations, the system will cancel all the activated registrations.	•
	Auto Adjustment of Door Open Time	This function automatically adjusts the door-hold open time (dwell time) at each floor depending on passengers' hall- and car- call registration situations.	•
	Automatic Return to Main Floor (for 1-Car & 2-Car & Group Control Operation)	When an elevator does not receive any car- or hall- calls for a certain period of time, the Automatic Return to Main Floor function makes the elevator go to the lobby or a predetermined floor and waits in standby for passengers to board.	•
	Door Nudging	If the car doors are held open over a given period of time, the Door Nudging function will close them slowly with an audible alarm.	•
Efficient-Operation Functions	Auto-Separation after Elevator Failure (for Group Control Operation)	When an elevator under group control operation fails to operate normally, it will be separated from the elevator group so as not to affect the overall group elevator performance.	•
	Load Bypass	When a traveling car is fully loaded, it will bypass floors where hall calls are registered. Those hall calls will be assigned to another available elevator.	-
	Overload Warning	When a car becomes overloaded, the warning alarm will sound. The elevator doors will not close until the overloaded state is resolved.	•
	Reverse-Direction Car-Call Cancellation	In the event that a passenger tries to register a car call that is behind the car's current travelling direction, the elevator system will regard it as a nuisance call and ignore it in order to maintain the elevator service efficiency.	•
	Wrong Car-Call Register Cancellation	In case a passenger presses the wrong car call button, this mistake can be cancelled by pushing the same button twice.	•
	Door Open Holding Button (COB)	In order to meet the demand of loading and unloading goods, a door opening extension button is installed on the operation panel in the car. Pressing this button can keep the door opening time for 3 minutes.	•
	Arrival Chime (In Car)	When a car arrives at a destination floor, an arrival chime will sound softly.	•
	Attendant Operation	By using attendant-operation buttons inside a car operating board's cabinet, authorized personnel can register car calls for in-car passengers. In addition to monitoring incoming hall calls, the attendant decides the car travel direction and operates the car doors with priority service for in-car passengers.	•
Passenger-	Automatic Voice Announcement System (VONIC)	A computerized voice system provides passengers with timely information about car directions, car arrivals, door opening and closing, and emergencies, etc. At the customer's request, announcements in other languages can be added.	•
Comfort Functions	Plasmacluster™ Ion Generating Device (IONFUL)	Plasmacluster Ion Generating Device to be built into a car's ventilation unit creates clean air for passenger comfort by disinfecting germs, odor molecules, bacteria, viruses, and allergens in the elevator.	•
	Visual Display on Car Operating Board	Informing on an elevator's current condition, a visual display on the car operating board will provide passengers with timely text messages such as "OVERLOADED", "EMER. OPERATION", "PLEASE EXIT THE ELEVATOR." etc,	•
	Visual Display on Landing Fixture	Informing on an elevator's current condition, a visual display on the landing fixture will provide waiting passengers with timely text messages such as "OVERLOADED", "EMER. OPERATION", etc.	•

Fu	nctions and	Details	•: Standard / ■: Optional				
Specific-Pur	rpose Operations, etc.	Details	- Standard / - Optional				
	Automatic Fan and Light Control	If an elevator receives no car- and hall- calls within a certain period of time, its ventilation fan and lights will turn off automatically.	•				
Energy- Saving Functions	Elevator Operation Period Control	The elevator operation period in a day is automatically controlled by a timer mounted on the control panel's computer board in the machine room.	•				
	Parking Operation	When an elevator is shifted to Parking Operation mode, the elevator will move to the pre-assigned floor and park with its doors closed, and car lights and fan turned off.	•				
	Battery-Powered Automatic Landing Operation (LANDIC)	In the event of a power failure, a compact battery power source will move the car to the nearest available floor.	•				
	Door Opening Failure Rescue Operation	When an elevator fails to open the doors at a landing floor, it will move to the next available floor and open them.	•				
	Earthquake Rescue Operation (WAVIC)	When a seismic sensor has detected a seismic wave (the secondary seismic wave), the elevator(s) will be shifted to rescue operation mode and automatically move to the nearest available floor for passenger evacuation.					
Specific-Purpose Operations	Fire Operation	In the event of a fire, the Fire Operation mode will automatically take an elevator directly to an refuge floor and immobilize it there. (One refuge floor at the terminal floor)	•				
	Fireman Operation	Under automatic operation, when the Fireman's switch is on, the car will immediately cancel all the calls and run to the refuge floor. The elevator responds to the call in the car only, which is used for special fire fighting operation.	-				
	Independent Operation	By turning on the Independent Operation buttons (EXCL) inside a car operating board's cabinet, the elevator only responds the car-calls, and does not respond the hall-calls.	•				
	Standby Power Operation	In the event of a power failure, the elevator(s) will return to an refuge floor using standby power and will be held there on standby. * Standby power system shall be provided and installed by third parties.	•				
	Elevator Visual Monitoring System (ELVIC)	By monitoring the current status of running elevators and giving necessary commands to elevators through desk-top PCs in a specific remote location, ELVIC manages and controls elevator operation.					
Equipment for Building Security, etc.	CCTV-Camera Cables	To meet the needs of video capture or digital signal transmission such as surveillance cameras in the car, the elevator is equipped with dedicated transmission cables from the COP to the car, which can respond to various transmission schemes according to the needs of the building party.	•				
	Elevator Operation Supervisory Panel (such as watching board, console panel, etc.)	Through an elevator operation supervisory panel, the status of elevator operation can be monitored and controlled.					
	Building-Management-System (BMS) Interface	Through a purpose-built interface, a building management system can receive up-to-date elevator operation data.	•				

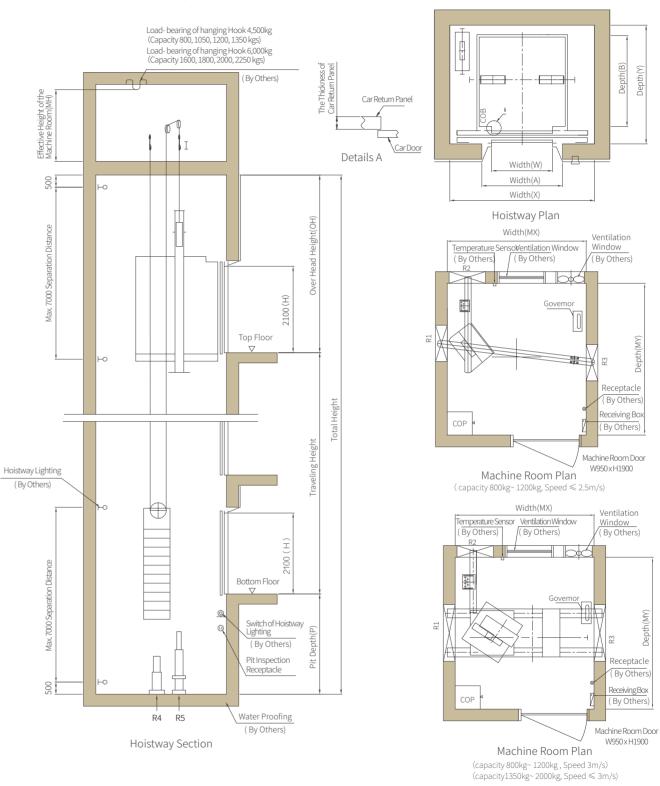
The above functions may change without prior notice.

Machine Room Arrangement Of The Hoistway (Wide Car)



- *1. The above dimensions are for reference only. The actual engineering design data shall be used.
- *2. The above dimensions are based on RC-structure hoistway.
- * 3. The location of the machine-room door in the above drawing is for reference only.
- * 4. The location of the machine-room control panel in the above drawing is for reference only.
- *5. The above hoistway's internal dimensions are based on the hoistway with waterproof finish.
- *6. If hoistway's internal dimensions are too large, intermediate beams shall be provided and installed by others based on Fujitec-submitted drawings.
- *7. The required thickness of the hoistway's structural walls is 150mm or more (not including the thickness of wall finish).

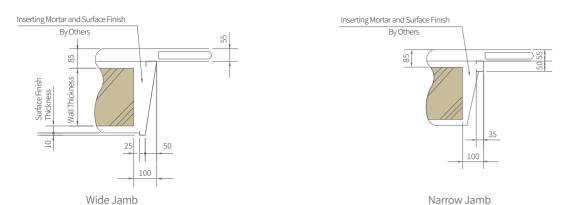
Machine Room Arrangement of The Hoistway (Deep Car)

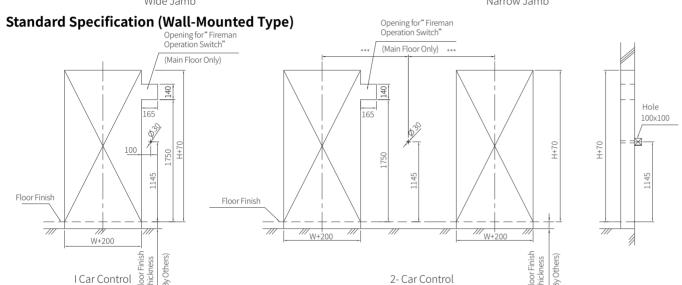


- * 1. The above dimensions are for reference only. The actual engineering design data shall be used.
- *2. The above dimensions are based on RC-structure hoistway.
- *3. The location of the machine-room door in the above drawing is for reference only.
- * 4. The location of the machine-room control panel in the above drawing is for reference only.
- * 5. The above hoistway's internal dimensions are based on the hoistway with waterproof finish.
- *6. If hoistway's internal dimensions are too large, intermediate beams shall be provided and installed by others based on Fujitec-submitted drawings.
- *7. The required thickness of the hoistway's structural walls is 150mm or more (not including the thickness of wall finish).

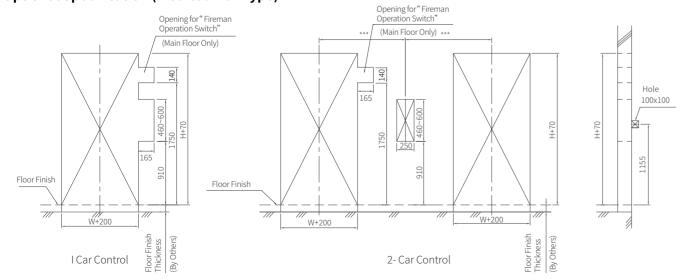
Power Supply Data

800-2000Kg 2-Panel Center Opening(2CO)





Optional Specification (Inserted Box Type)



Note: The above dimensions are for reference only. The actual engineering design data shall be used.

The wide jamb for fire rated door is different from above, which should be confirmed job by job.

Capacity (kg)	Speed (m/s)	Motor Power	Rated Current	Acceleration Current	Equivalent Current	Power Capacity	Open Circuit Current	uit Allowable Maximum Length of Main Power Feeder Line(m)						Heat Generation Rate in Machine	Air Ventilation Rate in Machine					
	1.0	5.2	19	29	7	7	20	344	469	615	833	1076	1511	1813	2126	2583	2719	5050	600	
	1.5	7.8	27	45	9	10	32	237	324	424	575	743	1043	1251	1468	1783	1877	7550	890	
000	1.75	9.0	30	50	9	11	32	218	297	389	528	682	957	1148	1347	1636	1723	8800	1040	
800	2.0	10.4	34	60	10	13	40	191	260	341	462	597	838	1006	1180	1434	1509	10050	1190	
	2.5	13.6	42	79	14	16	50	150	205	269	364	471	661	793	931	1131	1190	12600	1480	
	3.0	16.3	50	106	18	20	50	120	163	214	290	375	526	631	741	900	947	15100	1780	
	1.0	6.5	25	37	10	9	25	257	350	459	622	804	1128	1354	1588	1930	2031	6600	780	
	1.5	9.7	35	55	11	12	40	181	247	324	439	567	796	956	1121	1362	1434	9900	1170	
1050	1.75	11.4	38	61	12	14	40	167	228	298	404	522	733	880	1032	1254	1320	11550	1360	
1030	2.0	13.0	43	72	13	16	50	147	201	263	357	461	648	777	912	1108	1166	13200	1560	
	2.5	17.0	60	110	18	20	63	106	145	190	258	333	468	562	659	801	843	16500	1940	
	3.0	20.4	69	141	24	24	80	89	122	160	217	281	394	473	555	674	710	19800	2330	
	1.0	7.8	30	44	11	10	32	217	296	387	525	678	952	1143	1341	1629	1715	7550	890	
	1.5	11.7	41	67	13	14	50	155	211	276	375	484	680	816	957	1163	1224	11350	1340	
1200	1.75	13.7	47	78	15	16	50	134	183	240	326	421	591	709	832	1011	1064	13200	1560	
1200	2.0	15.6	55	94	16	18	63	116	158	207	281	363	510	612	718	872	918	15100	1780	
	2.5	19.5	63	112	19	22	80	100	137	180	244	315	442	530	622	756	796	18850	2220	
	3.0	25.5	74	146	24	30	80	86	118	154	209	270	380	456	535	650	684	22650	2670	
	1.0	9.2	31	46	12	12	32	208	283	371	503	650	913	1095	1285	1561	1643	8500	1000	
	1.5	14.7	42	64	14	18	50	153	209	274	371	479	673	808	947	1151	1212	12750	1500	
1350	1.75	16.0	46	73	14	19	50	139	190	249	338	436	613	735	862	1048	1103	14850	1750	
1000	2.0	18.4	51	82	15	22	63	126	172	225	305	394	554	665	780	947	997	17000	2000	
	2.5	23.0	64	111	18	27	80	99	136	178	241	311	437	525	616	748	787	21200	2500	
	3.0	27.6	78	149	25	32	80	81	111	145	197	254	357	429	503	611	644	25450	3000	
	1.0	10.9	36	55	14	14	40	179	244	319	433	559	785	942	1105	1343	1413	10050	1190	
	1.5	17.4	49	79	16	21	50	130	178	233	316	409	574	689	808	981	1033	15100	1780	
1600	1.75	19.0	53	89	17	23	63	119	163	213	289	373	524	629	738	897	944	17600	2070	
	2.0	21.8	58	99	18	26	63	109	149	195	265	342	481	577	677	822	866	20100	2370	
	2.5	27.2	75	137	22	32	80	85	115	151	205	265	373	447	525	637	671	25150	2960	
	3.0	32.6	90	176	29	38	100	-	96	125	170	220	308	370	434	528	555	30150	3550	
	1.0	12.2	40	59	16	15	40	161	220	288	390	504	708	849	996	1210	1274	11350	1340	
	1.5	19.5	56	92	19	23	63	114	156	204	277	358	502	603	707	859	905	17000	2000	
1800	1.75	21.3	59	95	18	25	63	107	147	192	260	336	472	567	665	808	851	19800	2330	
	2.0	24.5	66	110	19	29	80	97	132	173	235	304	427	512	601	730	769	22650	2670	
	2.5	30.6	88	157	26	36	100	0	98	129	174	226	317	380	446	542	570	28300	3330	
	3.0	36.2	98	179	30	42	100	0	88	115	157	202	284	341	400	487	512	33950	4000	
	1.0	13.6	44	66	18	17	50	147	200	262	355	459	645	774	908	1103	1161	12600	1480	
	1.5	21.7	61	101	21	26	63	103	141	185	251	324	455	547	641	779	820	18850	2220	
2000	1.75	23.7	66	107	20	28	80	96	132	172	234	302	424	509	597	726	764	22000	2590	
	2.0	27.2	72	121	21	32	80	88	120	158	214	276	388	465	546	663	698	25150	2960	
	2.5	34.0	99	178	29	39	100	-	87	115	155	201	282	339	397	483	508	31400	3700	
	3.0	40.2	117	217	36	46	125	-	-	97	131	170	238	286	336	408	429	37700	4440	

Notes: 1. The data shown above may vary based on elevator specification arrangement.

2. Earthing wires shall be arranged and installed based on local elevator code requirement.

Relevant Dimensions

Counterweight at the rear

Capacity (kg)	Speed (m/s)	Opening Type	Car Inside A x B	Opening W x H	Hoistway X x Y	Machine Room Size MX.x MY.x MH	Pit Depth P	Overhead OH	Mac Rox Reactio		PitRe: (k	action N)
(r/g)												
	1.0						1350	CPH+1700				
	1.5						1450	CPH+1800	76			
	1.75				1800×1900	1800×1900×2200	1500	CPH+1900		45	90	105
800	2.0	2CO	1400x1350	800x2100	1000/1300	1000/1300/1200	1550	CPH+2000			30	100
	2.5						1880	CPH+2200				
	3.0				1850×1950	1850x1950x2200	2450	CPH+2500	84	52	103	119
	1.0						1350	CPH+1700				
	1.5						1450	CPH+1800				
	1.75				2000×2100	2000x2100x2200	1500	CPH+1900	86	53	104	125
1050	2.0	2CO	1600x1500	900x2100	2000/2100	2000/2100/2200	1550	CPH+2000	00	55	101	125
	2.5						1880	CPH+2200				
	3.0				2050x2100	2050x2100x2200	2450	CPH+2500	92	63	118	138
	1.0				2030/2100	2030/2100/2200	1350	CPH+1700	32	0.5	110	130
	1.5						1450	CPH+1800		61		
	1.75					2400x2100x2200	1500	CPH+1900	100		122	145
1200	2.0	2CO	1800x1500	1100x2100	2400×2100		1550	CPH+2000	100			143
	2.5						1880	CPH+2200				
	3.0						2450	CPH+2500	105	72	136	159
	1.0						1350	-	105	12	130	159
	1.5						1450	CPH+1700 CPH+1800		67	128	
					2450x2150	2450x2150x2200			102			154
1350	1.75	2CO	2000x1500	1100x2100	2430X2130	Z450XZ150XZZ00	1500	CPH+1900	102	01	120	154
	2.0						1550	CPH+2000				
	2.5				2450-2100	2450-2100-2200	1880	CPH+2200	110	70	1.41	1.07
	3.0				2450x2100	2450x2100x2200	2450	CPH+2500	112	72	141	167
	1.0						1350	CPH+1700				
	1.5						1450	CPH+1800	104		150	100
1600	1.75	2CO	2000x1750	1100x2100	2450x2450	2450x2450x2400	1500	CPH+1900	124	80	159	190
	2.0						1550	CPH+2000				
	2.5						1880	CPH+2200	100	0.5	171	202
	3.0						2450	CPH+2500	133	85	171	202
	1.0						1350	CPH+1700				
	1.5						1450	CPH+1800	400		4.00	
1800	1.75	2CO	2100×1800	1100x2100	2550×2500	2550x2500x2400	1500	CPH+1900	132	85	169	92
	2.0						1550	CPH+2000				
	2.5					1880	CPH+2200					
	3.0						2450	CPH+2500	141	90	181	98
	1.0						1350	CPH+1700				
	1.5						1450	CPH+1800	145	86	180	
2000	1.75	2CO	2200×1900	1200×2100	2650×2600	2650x2600x2400	1500	CPH+1900				110
	2.0						1550	CPH+2000				
	2.5						1880	CPH+2200				
	3.0						2450	CPH+2500	154	91	192	116

- Notes: 1. The data shown above may vary based on elevator specification arrangement.

 2. Refer to the Work Done by Others for the Acceptable Inclination of Hoistway's Vertical Centerline.

 3. The standard thickness of car return panel is 55 mm. It can be increased to 90 mm for the beautiful appearance with free cost, the precondition is that the depth size of hoistway and machine room should be added 35mm based on above.

 4. Car Panel Height(CPH)=Clear Ceiling Height+ Suspended Ceiling Height(SCH)

 (For CE-g1, CE-g5, CE-e2 SCH= 0mm, For CE-c1, CE-c4 SCH= 150mm, For CE-e4, CE-e5 SCH= 100mm.)

 5. The standard car panel height is 2350mm.

Counterweight at the side

Capacity			Car Inside A x B			Machine Room Size MX x MY x MH	Pit Depth P	Overhead OH		Machine Room eaction(k	: N)			
(kg)														
	1.0						1350	CPH+1700						
	1.5						1450	CPH+1800						
	1.75		1100×1800	800x2100	1900×2100	1900x2100x2200	1500	CPH+1900	78	11	45	92	107	
800	2.0	200					1550	CPH+2000						
	2.5						1880	CPH+2200						
	3.0		1350x1400	800x2100	2050×1900	2050x1900x2200	2450	CPH+2500	86	12	52	105	121	
	1.0						1350	CPH+1700						
	1.5						1450	CPH+1800						
	1.75		1100×2100	900x2100	2000×2450	2000x2450x2200	1500	CPH+1900	88	12	49	102	123	
1050	2.0	2CO					1550	CPH+2000						
	2.5						1880	CPH+2200						
	3.0		1350x1700	900x2100	2150×2050	2150x2050x2200	2450	CPH+2500	104	14	48	116	136	
	1.0						1350	CPH+1700						
	1.5						1450	CPH+1800						
	1.75		1300x2100	1100×2100	2400x2450	2400x2450x2200	1500	CPH+1900	101	14	57	120	143	
1200	2.0	200					1550	CPH+2000						
	2.5						1880	CPH+2200						
	3.0		1350x2000	1100×2100	2350x2350	2350x2350x2200	2450	CPH+2500	112	15	61	133	157	
	1.0						1350	CPH+1700						
	1.5						1450	CPH+1800						
1350	1.75	2CO	1300x2300	1100×2100	2400×2650	2400x2650x2200	1500	CPH+1900	106	14	60	124	151	
1350	2.0	200					1550	CPH+2000						
	2.5						1880	CPH+2200						
	3.0		1350x2200	1100×2100	2350x2550	2350x2550x2200	2450	CPH+2500	116	15	64	138	164	
	1.0						1350	CPH+1700						
	1.5						1450	CPH+1800						
1600	1.75	2CO	1400x2400	1100x2100	2450x2800	2450x2800x2400	1500	CPH+1900	135	21	72	162	193	
1000	2.0	200	1400XZ400	1100X2100	2430X2800	2430X2800X2400	1550	CPH+2000						
	2.5						1880	CPH+2200						
	3.0						2450	CPH+2500	143	22	76	173	205	
	1.0						1350	CPH+1700						
	1.5						1450	CPH+1800						
1800	1.75	2CO	1500x2400	1200x2100	2600x2800	2600x2800x2400	1500	CPH+1900	143	22	77	173	94	
1000	2.0	200	130072400	1200/2100	2000/2000	2000/2000/2400	1550	CPH+2000						
	2.5						1880	CPH+2200						
	3.0						2450	CPH+2500	151	24	82	184	99	
	1.0						1350	CPH+1700						
	1.5						1450	CPH+1800						
2000	1.75	2CO	1500×2700	1200×2100	2600x3050	2600x3050x2400	1500	CPH+1900	149	22	81	180	110	
2000	2.0	200	1000/2100	1200/2100	2000/3000	2000/3030/2700	1550	CPH+2000						
	2.5						1880	CPH+2200						
	3.0						2450	CPH+2500	158	23	86	192	116	

Notes: 1. The data shown above may vary based on elevator specification arrangement.

- 2. Refer to the Work Done by Others for the Acceptable Inclination of Hoistways's Vertical Centerline.
 3. The standard thickness of car return panel is 55 mm. It can be increased to 90 mm for the beautiful appearance with free cost, the precondition is that the depth
- size of hoistway and machine room should be added 35mm based on above.
- 4. Car Panel Height(CPH)=Clear Ceiling Height+ Suspended Ceiling Height(SCH)
 (For CE-g1, CE-g5, CE-e2 SCH= 0mm, For CE-c1, CE-c7, CE-c4 SCH= 150mm, For CE-e4, CE-e5 SCH= 100mm.)
- 5. The standard car panel height is 2350mm.

Work Done by Others

1. Elevator Machine-Room and Hoistway Environment

Temperature of Machine Room and Hoistway	Temperature of machine room and hoistway shall be kept from 5 °C (41 °F) to 40 °C (104 °F).
	1. When a temperature reaches at 40 °C (104 °F), the relative humidity does not go beyond 50%.
Relative Humidity	2. In the year's most humid month(s), relative humidity shall be kept lower than 90 % and the temperature lower than 25°C (77 °F).
	Dew condensation prevention measures shall be taken, if there are the possibilities that condensation form inside and on electrical equipment.

2. Electric Power Source

Type of Power Supply	Three-Phase Power Supply for Elevator Driving Machine Single-Phase Power Supply for Lighting Equipment
Allowable Error of Voltage Value	The allowable error of voltage value is 7 % above and below the rated voltage.

3. Acceptable Inclination of Hoistway's Vertical Centerline

Hoistway's Vertical Length	Centerline's Tilt away from the Plumb Line (unit: mm)
30 meter or less	0 to 25 mm or less
More than 30 meters to 60 meters or less	0 to 35 mm or less
more than 60 m	0 to 50 mm or less

4. Work done by Others

The following items are in the scope of other contractors' work, not covering all items done by them.

For Hoistway

Construct solid-state, fire-proof elevator hoistway.
Cut out landing walls for Fujitec's installation of elevator operating fixtures and elevator equipment.
Do wall finishing work by filling cement between jambs and landing walls.
Do wall finishing work by filling cement between landing fixtures and landing walls.
Give water-proofing and drainage treatment in elevator pit including the installation of pumping equipment.
Install space divider screens between respective elevators in a hoistway pit.
Install steel separator beams at regular vertical intervals in a hoistway.
When hoistway is constructed with bricks, put steel lintels in their walls for Fujitec's installation of rail brackets. The steel lintels must be completely fixed inside the walls. The vertical height of the lintel is required to be 300 mm or more. For details, see the relevant drawings.
When an elevator traveling distance from a floor to the next is more than 11 m, make an opening on the hoistway wall between the floors and install emergency exit doors in the opening for passenger evacuation.
It is advised that there is no human access to the space below the hoistway pit.
When the bottom of a hoistway pit is deeper than the required level, add backfill concrete up to the required level.
Provide and install a pit ladder based on the layout drawings.
Provide and install all of electricity supply apparatuses (inclusive of pipes, leads, wires, etc.) from the building's electricity supply system to the hoistway, landing floors and Fujitec-designated locations.
Provide and install electrical outlets in the hoistway.
Install lighting equipment of 30 watt or more at 7-meter intervals inside the hoistway with 0.5-meter clearance at the top and bottom of the hoistway. The lighting intensity is required to be 50 lux or more at the car-top working platform and at the 1-meter high position above the pit bottom.

For Machine Room

1.	Construct solid-state, fire-proof machine room.
2.	Provide and install a power switching / distributing board in the machine room.
3.	Install and lay electrical pipes, wires, and leads in the machine room. They shall be extended from the power switching / distributing board to the controller, machine, and other electrical equipment.
4.	Provide and install all of electricity supply apparatuses (inclusive of pipes, leads, wires, etc.) on various routes from the building's electricity supply system to the machine room and Fujitec-designated locations.
5.	Install lighting equipment in the machine room. The lighting intensity on the machine room's floor is 200 lux or more.
6.	Install air ventilator(s) and/or air conditioner(s) in order to keep the temperature of the machine room between 5 °C (41 °F) and 40 °C (104 °F).
7.	Provide and install electrical outlets in the machine room.
8.	Install fire-proof entrance doors in the machine room.
9.	Take a noise reduction measure, if it is required.
10.	Install smoke detector, if it is required.
11.	Make cutouts and holes in the machine room.
12.	Construct machine room floor of which 1-square-meter area can bear the load of 700 kgs.
13.	Make holes in the walls of a machine room for Fujitec's installation of machine support beams and fill concrete into the gap between the walls and the fixed beams.
14.	After the installation of electrical pipes, wires, and leads, etc. on the machine room floor, lay lightweight concrete and finish the floor surface with dust-resistant material.
15.	Make an appropriate size of opening on the roof or the sidewall of a machine room in order for Fujitec to carry in elevator machine and other equipment.
16.	Install machine lifting hooks and / or steel beams on the ceiling slabs of a machine room. The required lifting load capability is stated on the relevant installation drawings.
17.	Install windows and louvers in order to let in daylight into the machine room.
18.	If a person's entry into the machine room needs a ladder or stairs, the installation and fixation of it or them is required.
19.	In case the machine room has two or more floors and a distance between each floor is more than 500 mm, install a ladder or stairs between the floors. Guardrails shall be provided and installed on the upper floor(s) for the prevention of a person's fall.

Others

1.	Ground-fault interrupter and current leakage alarm are required to be protected against current-harmonic distortion.	
2.	Lay building's telecommunication lines 500 mm away from the electric feeder lines for elevator system.	
3.	Remove corroded metal materials from the machine room and the hoistway.	
4.	Protect the machine room and the hoistway against hazardous gas.	
5.	Prevent dust from accumulating in the hoistway and the machine room.	
6.	Provide a storage room in order to stock elevator parts and installation materials.	
7.	Do not place any tools and materials not related to elevators in the hoistway and the machine room.	

Fujitec Global Operations



Ohio Plant (USA)



Langfang Plant (China)



Korea Plant



Shanghai Plant (China)



Taiwan Plant (China)



Big Wing (Group Headquarters in Japan, Elevator Plant) India Plant



Singapore Plant







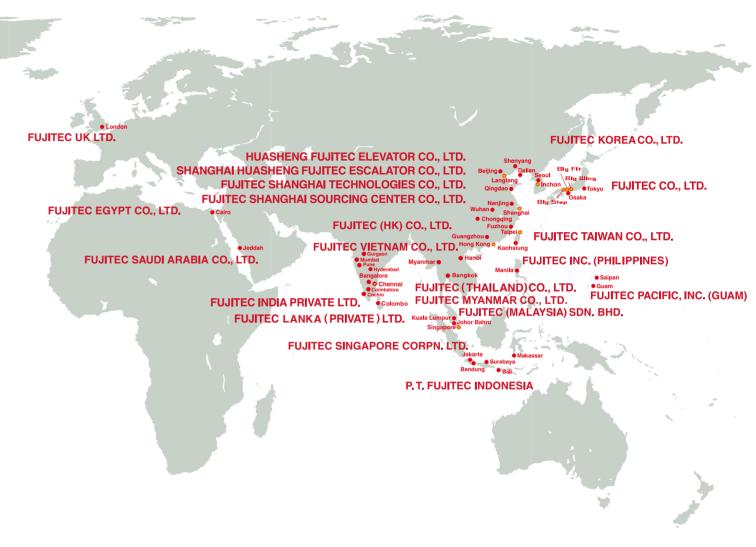


North & South America

FUJITEC AMERICA..INC. FUJITEC CANADA..INC. FUJITEC VENEZUELA C.A. FUJITEC ARGENTINA S.A. FUJITEC URUGUAY S.A.

Japan

FUJITEC CO.,LTD.



East Asia

FUJITEC (HK) CO., LTD. FUJITEC TAIWAN CO.,LTD. FUJITEC KOREA CO.,LTD. HUASHENG FUJITEC ELEVATOR CO.,LTD. SHANGHAI HUASHENG FUJITEC ESCALATOR CO..LTD. FUJITEC SHANGHAI TECNOLOGIES CO.,LTD. FUJITEC SHANGHAI SOURCING CENTER CO.,LTD.

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FUJITEC UK LTD. FUJITEC SAUDI ARABIA CO.,LTD. FUJITEC EGYPT CO.,LTD.

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