

# MITSUBISHI ELEVATOR INDIA PRIVATE LIMITED

## Passenger Elevators



# DeLITE

*Delightful Ride for ELITE*



# Residential

Hotels

Hospitals

Offices

Stores

Museum

## Delight our dearest customer with DeLITE

Reliable & Smart Solution



### Safety

Trusted with Mitsubishi's accumulating result

### State-of-the-art Technology

Developed by our worldwide experience

### Sustainability

By using energy wisely and environmental friendly



# Safety is your CHOICE

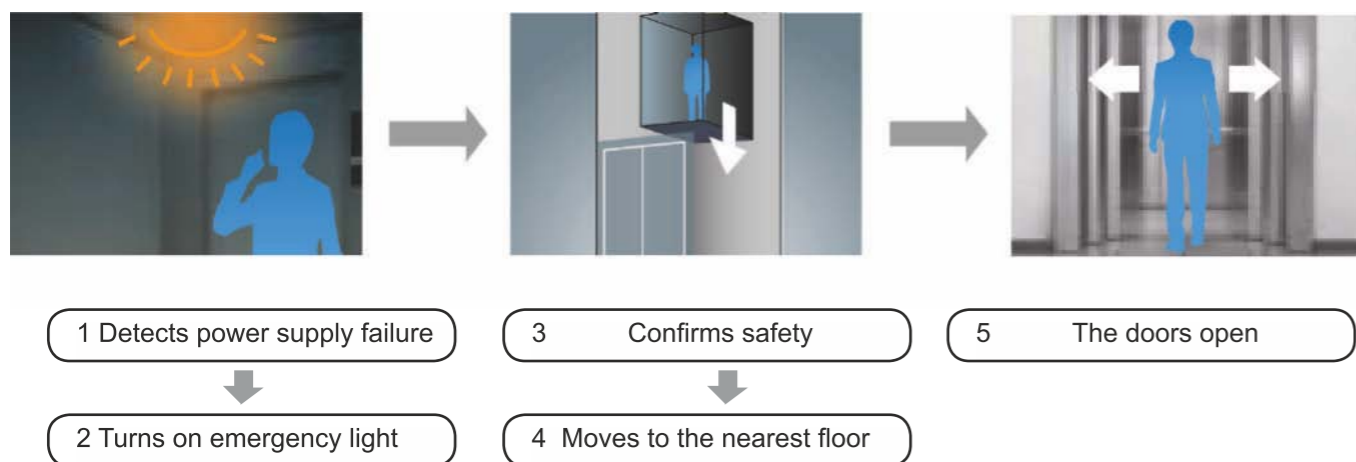
## Safety and Comfort

Whether the user is elderly or a person with special needs, our elevators deliver every passenger to the destination floor safely and comfortably.



## Mitsubishi Emergency Landing Device (MELD)

Upon power failure, the car automatically moves to the nearest floor using a rechargeable battery to facilitate the safe evacuation of passengers.



## Multi-beam Door Sensor

Multiple infrared-light beams cover a door height of approximately 1800mm to detect passengers or objects as the doors close

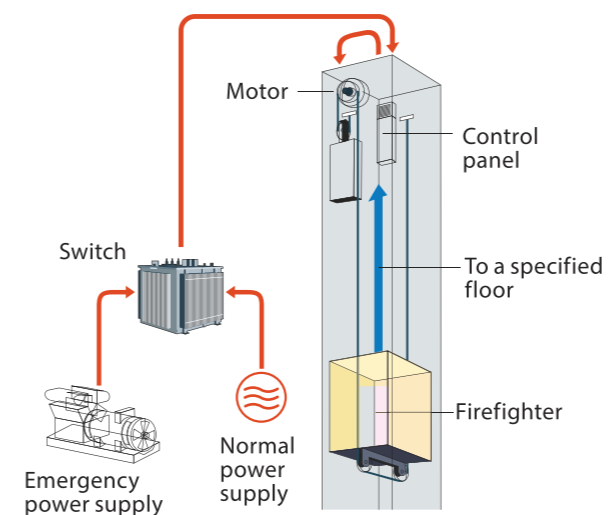


## Firefighter's Emergency Operation (Optional)

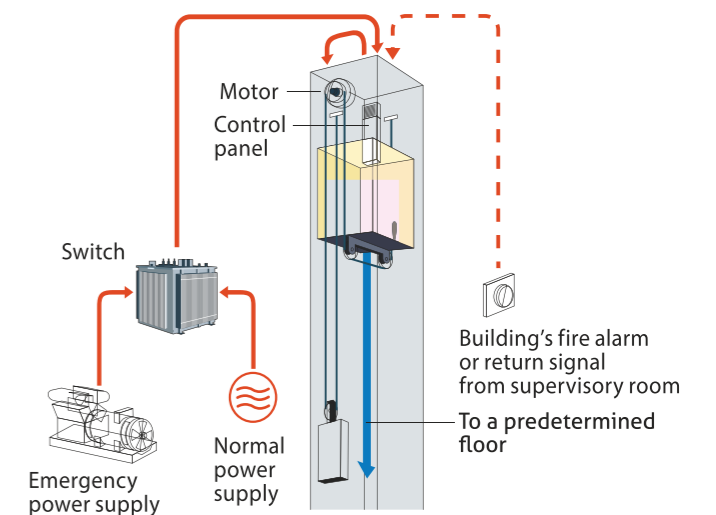
**FE:** When the fire operation switch is activated, the car immediately returns to a predetermined floor. The car then responds only to car calls which facilitate firefighting and rescue operations

**FER:** When a key switch or a building's fire alarm is activated, all cars immediately return to a predetermined floor and open the doors to facilitate the safe evacuation of passengers

### FE



### FER

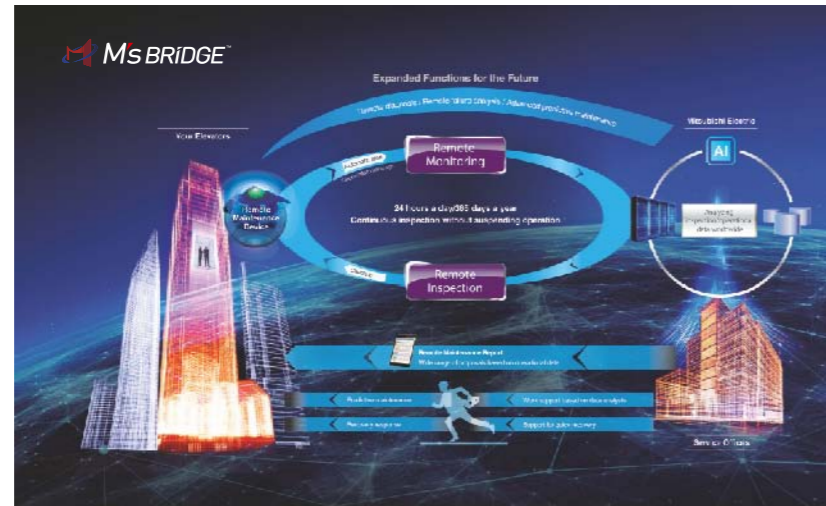


# State-of-the-art TECHNOLOGY

## M's BRIDGE - Remote Maintenance Service (Optional)

24 Hours a day, 365 days a year, continuous service without suspending elevator operations

M's BRIDGE connects the elevator with our remote maintenance service, which are at your disposal 24/7, year round. We have turned maintenance service provided by overseas service offices worldwide into a computer application that uses our internet of things (IoT) platform. In doing so, we are providing services that are more sophisticated than ever before, while **simultaneously improving user safety and convenience.**



## Touchless solution for elevator use (Optional)

Enable user to use elevator with their own smartphone

The mobile application of enable elevator users to call the elevator car and to reach the destination floor with their own smartphone. No necessity to physically select and push the button of the destination floor.



# Sustainability

Our long-term commitment to developing energy efficient elevators has created system and functions that make intelligent use of power.



## Traction Machine with PM Motor (Permanent Magnet motor)

DeLITE elevator uses permanent magnet excited gearless drive for traction sheave cable elevator with compact space saving design. This machine provides high energy efficiency and low noise levels while running.

## Permanent Magnet (PM) Door Motor

The direct-drive PM door motor and the VVVF inverter realize efficient door opening and closing.



## LED Lighting

Used for ceiling lights, LEDs boost the overall energy performance of the building. Furthermore, a long service life eliminates the need for frequent lamp replacement.

### Advantage of LEDs

		Ceiling: B600	
Service life (hr)	LED	25000	Approximately 12.5 times longer
	Incandescent lamp	2000	
Power consumption (W)	LED	20	Approximately 75% reduction
	Incandescent lamp	132	



Ceiling: B600S

## Car Light/Fan Shut Off – Automatic (CLO-A/CFO-A)

The car lighting/ventilation fan is automatically turned off if there are no calls for a specified period.



# Car Designs

**N600S**



Ceiling : Stainless Steel Hairline Finish  
Lighting : Downlights (LEDs)



**S00S**



Ceiling : Stainless steel hairline finish with a milky white resin lighting cover  
Lighting : Central lighting Car Design Example



**B600S**



Ceiling : Stainless Steel Hairline Finish  
Lighting : Downlights (LEDs)



**B610S**

Ceiling : Stainless Steel Hairline Finish  
Lighting : Rectangular Batten Light (LEDs)



### Car Design Example

- Walls ————— Stainless steel, hairline-finish
- Transom panel ——— Stainless steel, hairline-finish
- Doors ————— Stainless steel, hairline-finish
- Front return panels — Stainless steel, hairline-finish
- Flooring ————— Supplied by customer\*
- Car operating panel — CBV1-S760

**Note:**

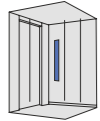
- \* Flooring is supplied by customer, in case of marble or granite
- \* All ceiling is available in Painted Steel sheet (White)
- \* Actual colour and Design may differ slightly from those shown

### Car Finishes

SL. NO.	Selection	Walls	Transom panel	Doors	Front return panels	Sill
1	Painted steel sheet	O	O	O	O	
2	Stainless steel hairline-finish (SUS)	S	S	S	S	
3	Stainless steel hairline-finish with Etched pattern (SUS-HE)	O	O	O	O	
4	Stainless steel - Gold Finish	O	O	O	O	
5	Extruded hard aluminum					S

# Car Designs

## Car Operating Panels



For side wall



CBV1-S760



Quickly pressing the same button again twice

The wrong car call can be cancelled

## Handrail



ROUND TYPE

Note:  
 \*1 AS or BP feature is applicable as an option only when EVRC-C is applied.  
 \*2 For Painted finishes, please consult us.  
 \* Actual colour and Design may differ slightly from those shown

## Infrared Remote Control (EVRC-C) (optional)

A handy accessory, especially for exclusive operation and changing lighting settings, etc.

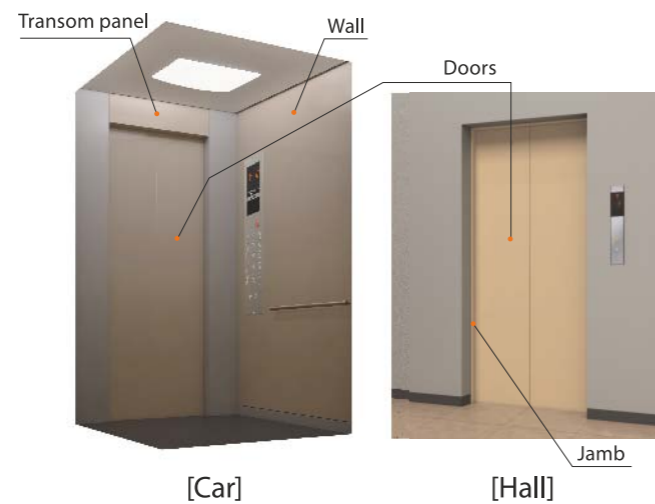
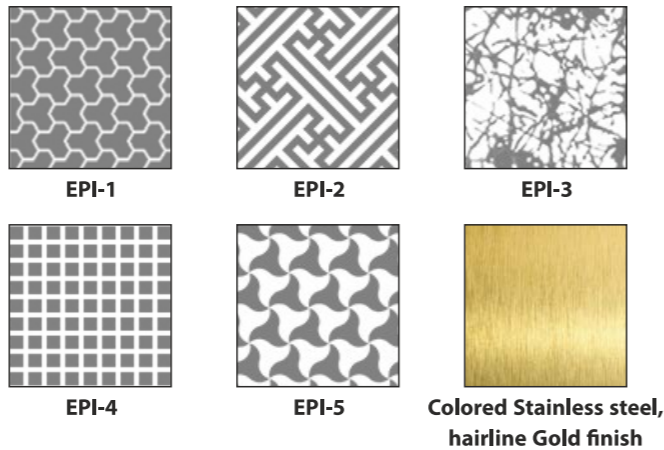


Available features

- Lighting can be turned on/off.
- Fan can be turned on/off.
- Attendant Service (AS) and Bypass (BP) setting (optional)<sup>1</sup>

## Etching pattern: (Optional)

Design is adopted for Car wall, Car transom panel, Front return panel, Car doors and Entrance doors.



# Design-Hall & Other Features

## Narrow Jamb



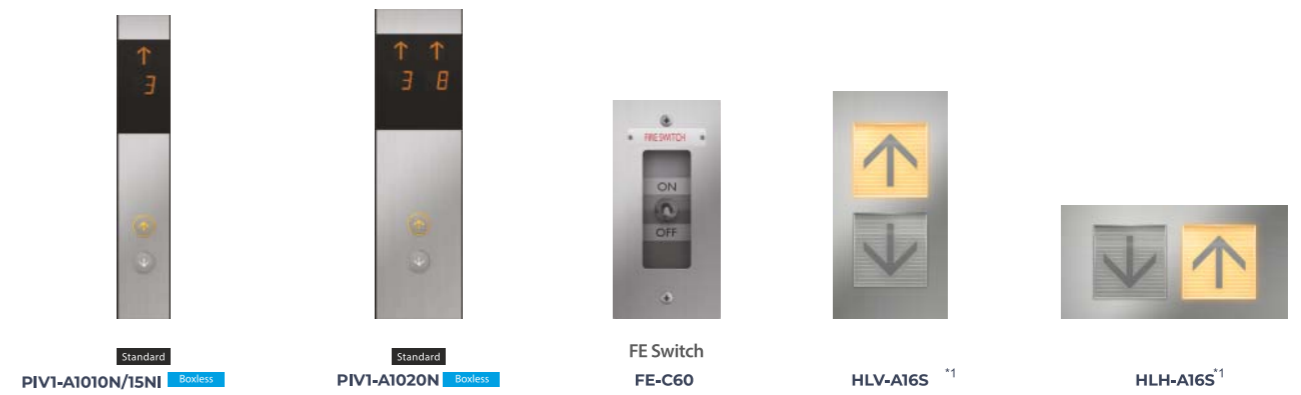
Door Stainless steel, hairline finish  
 Hall position indicator and Button - PIV1-A1010N

## Hall Finishes

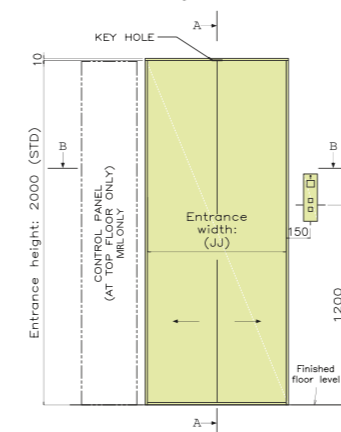
Materials/Finishes	Jamb	Doors	Sill
Painted steel sheet	O	O	
Stainless steel hairline-finish (SUS)	S	S	
Stainless steel hairline-finish with Etched pattern(SUS-HE)	NA	O	
Stainless steel - Gold Finish	O	O	
Extruded hard aluminum			S

## Hall Position Indicators and Buttons

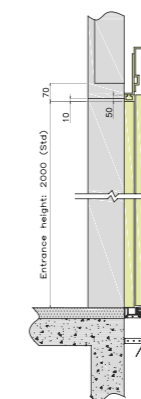
With Plastic Case



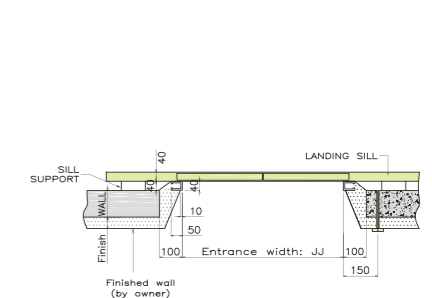
## Hoistway Entrance



## Door Elevation (Section A-A)



## Door Plan (Section B-B)



Note: \*1 Hall Lanterns, Applicable only for 1.75(m/sec)  
 \* Actual colours may differ slightly from those shown.  
 \* Actual colour and Design may differ slightly from those shown

# Basic Specification - With Machine Room (MR)

## Application for MR

(m/sec)				
1.75				
	680	884	1020 (kg)	

## Horizontal Dimensions

Code	Number of Persons	Capacity (kg)	Rated speed (m/sec)	Door type	Entrance size		Car internal dimension (mm) AA x BB	Minimum hoistway dimensions (mm) AH x BH	Minimum Machine Room dimensions (mm) AM X BM
					Width (mm) JJ	Height (mm) HH			
P10-CO	10	680	1.75	CO	800	2000/2100	1300 X 1350	2040 X 1660	2040 X 2850
P10D-CO					800	2000/2100	1100 X 1600	1840 X 1910	1840 X 3100
P13-CO	13	884			900	2000/2100	1600 X 1350	2340 X 1660	2340 X 2850
P13D-CO					800	2000/2100	1100 X 2000	1840 X 2310	1840 X 3500
P13D-CO	13	884			900	2000/2100	1100 X 2000	2035 X 2310	2035 X 3500
P15-CO					15	1020	900	2000/2100	1600 X 1500
P15D-CO	800	2000/2100					1100 X 2200	1840 X 2510	1840 X 3700
P15D-CO	900	2000/2100					1100 X 2200	2035 X 2510	2035 X 3700

[Terms of the Table]

\* Rated capacity is calculated as 68kg per person.

\* CO: 2- panel center opening doors.

\* Minimum hoistway dimension (AH and BH) shown in the table are after waterproofing of the pit and do not include plumb tolerance.

## Vertical Dimensions

Rated speed (m/sec.)	Rated capacity (kg)	Maximum no. stops	Travel (M) [TR]	Minimum Overhead (mm)		Minimum Pit depth (mm)	Minimum Floor Height (mm)	
				For Entrance Height			For Entrance Height	
				HH-2000	HH-2100		HH-2000	HH-2100
1.75	680 ~ 1020	28	TR≤80	3900	4000	1600	2750	2850

[Terms of the table]

• The contents of this table only apply to standard specifications without counterweight safety.

Please consult us for other specifications.

## Power feeder data

Capacity (kg)	Speed (m/sec.)	Motor output (kW)	Current at 400V		Capacity of power supply (kVA)	Breaker current rating (A) 400V	Heat emissions (W)
			FLU (A)	FLAcc (A)			
680	1.75	8.1	22	42	8	40	1850
884		9.7	28	49	10		2400
1020		11	34	54	12		2800

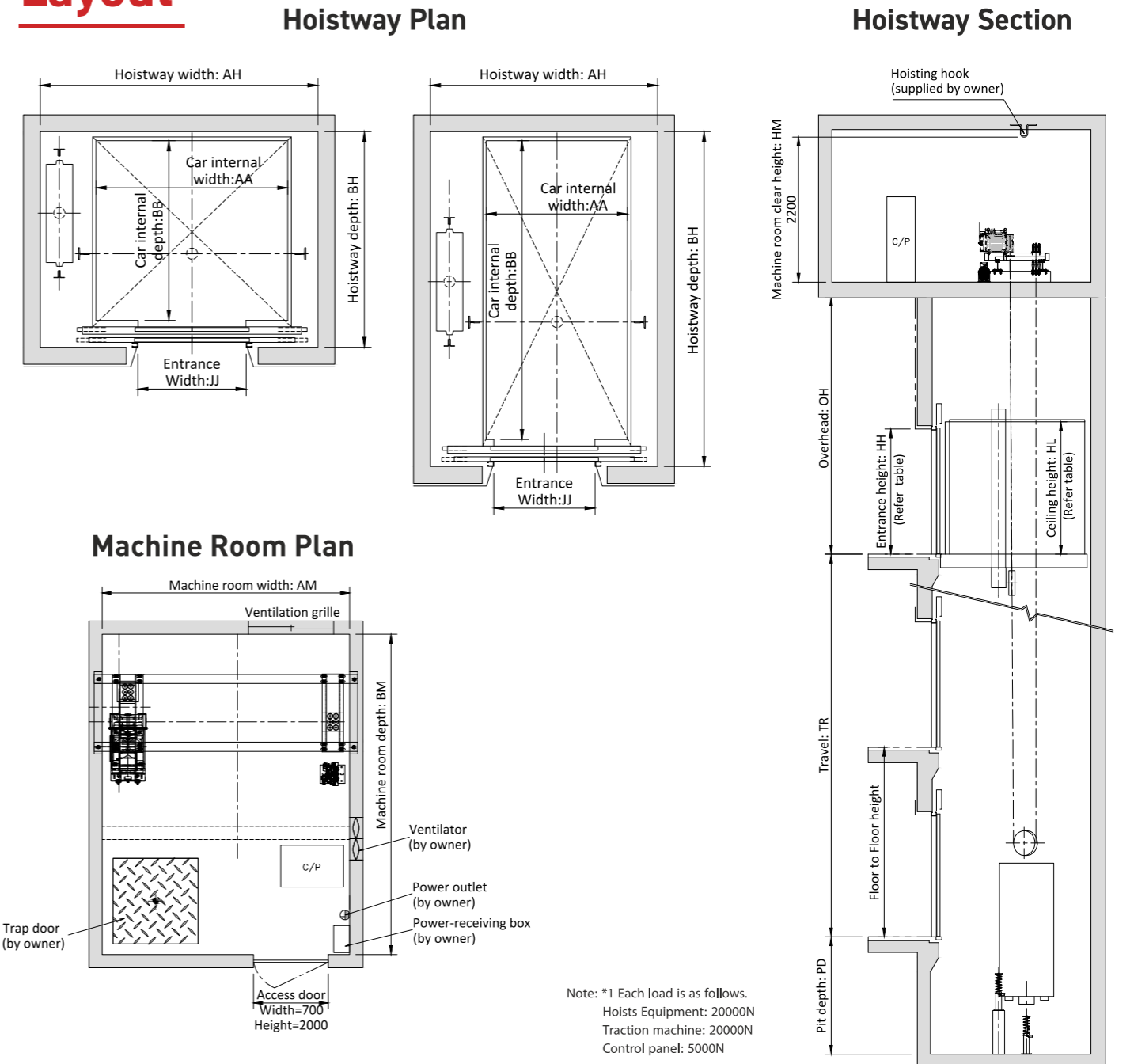
FLU: current during upward operation with full load at power supply voltage of 400V.

FLAcc: current while accelerating with full load at power supply voltage of 400V.

Note: If power supply voltage (E) is a value other than 400V, FLU current and FLAcc current are obtained via the following formula.

(FLU/FLAcc current (A) at E (V))=(Current at 400V)x(400/E(V))

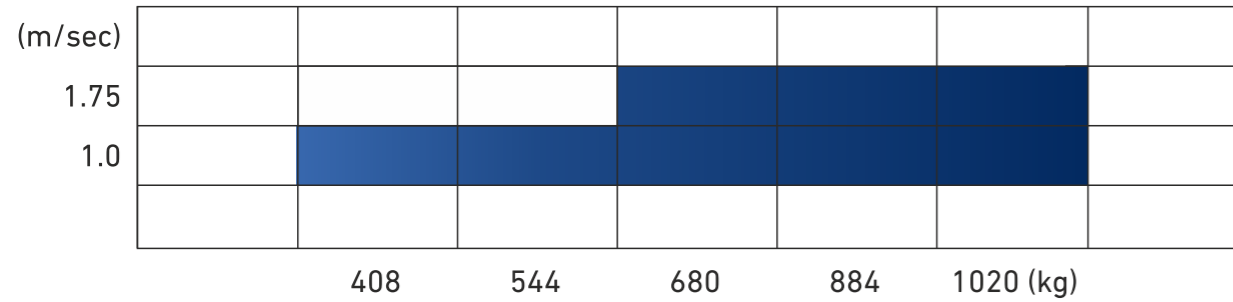
## Layout





# Basic Specification - Machine Room-Less (MRL)

## Application for MRL



## Horizontal Dimensions

Code	Number of Persons	Capacity (kg)	Rated speed (m/sec)	Door type	Entrance size		Car internal dimension (mm) AA x BB	Minimum hoistway dimensions (mm) AH x BH
					Width (mm) JJ	Height (mm) HH		
P6-CO	6	408	1.0	CO	700	2000/2100	950 X 1150	1650 X 1475
P8-CO	8	544			800	2000/2100	1100 X 1300	1800 X 1605
P10-CO	10	680	800		2000/2100	1300 X 1350	2040 X 1660	
P10D-CO			800		2000/2100	1100 X 1600	1840 X 1910	
P13-CO	13	884	1.0/1.75		900	2000/2100	1600 X 1350	2340 X 1660
P13D-CO					800	2000/2100	1100 X 2000	1840 X 2310
P13D-CO					900	2000/2100	1100 X 2000	2035 X 2310
P15-CO	15	1020	1.0/1.75		900	2000/2100	1600 X 1500	2340 X 1810
P15D-CO					800	2000/2100	1100 X 2200	1840 X 2510
P15D-CO					900	2000/2100	1100 X 2200	2035 X 2510

[Terms of the Table]

\* Rated capacity is calculated as 68kg per person.

\* CO: 2- panel center opening doors.

\* Minimum hoistway dimension (AH and BH) shown in the table are after waterproofing of the pit and do not include plumb tolerance.

## Vertical Dimensions

Rated speed (m/sec.)	Rated capacity (kg)	Maximum no. stops	Travel [M] [TR]	Minimum Overhead (mm)		Minimum Pit depth (mm)	Minimum Floor Height (mm)	
				For Entrance Height			For Entrance Height	
				HH-2000	HH-2100		HH-2000	HH-2100
1.0	408 ~ 1020	17	TR≤50	4100	4200	1400	2750	2850
1.75	680 ~ 1020	28	TR≤80	4500	4600	1600		

[Terms of the table]

• The contents of this table only apply to standard specifications without counterweight safety.

Please consult us for other specifications.

## Power feeder data

Capacity (kg)	Speed (m/sec.)	Motor output (kW)	Current at 400V		Capacity of power supply (kVA)	Breaker current rating (A) 400V	Heat emissions (W)
			FLU (A)	FLAcc (A)			
408	1.0	2.8	10	18	4	20	700
544	1.0	3.7	13	21	4	20	900
680	1.0	4.6	14	23	5	20	1050
	1.75	8.1	20	40	8	40	1650
884	1.0	5.6	18	28	7	20	1300
	1.75	9.7	26	47	10	40	2100
1020	1.0	6.2	20	31	8	20	1450
	1.75	11	32	52	12	40	2350

FLU: current during upward operation with full load at power supply voltage of 400V.

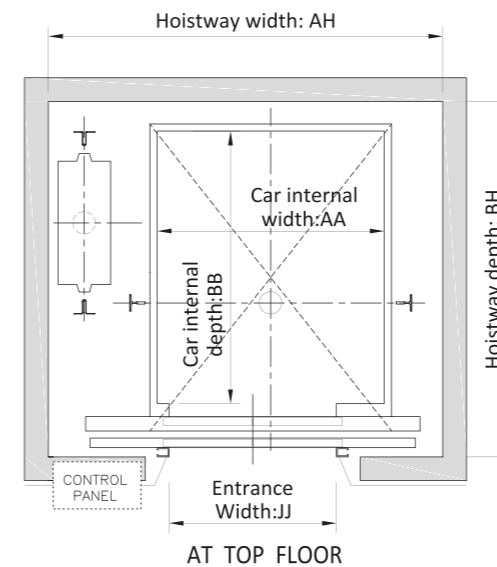
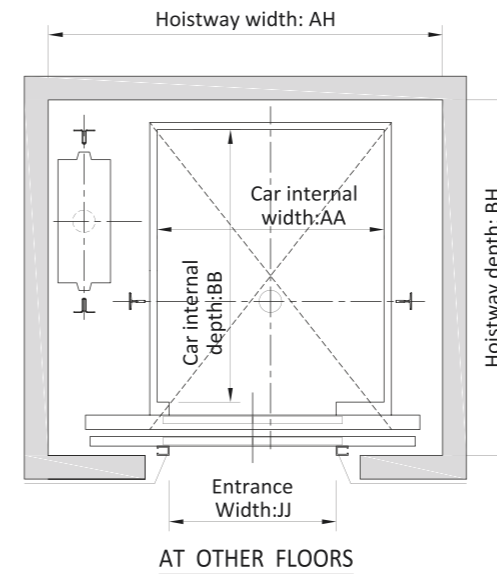
FLAcc: current while accelerating with full load at power supply voltage of 400V.

Note: If power supply voltage (E) is a value other than 400V, FLU current and FLAcc current are obtained via the following formula.

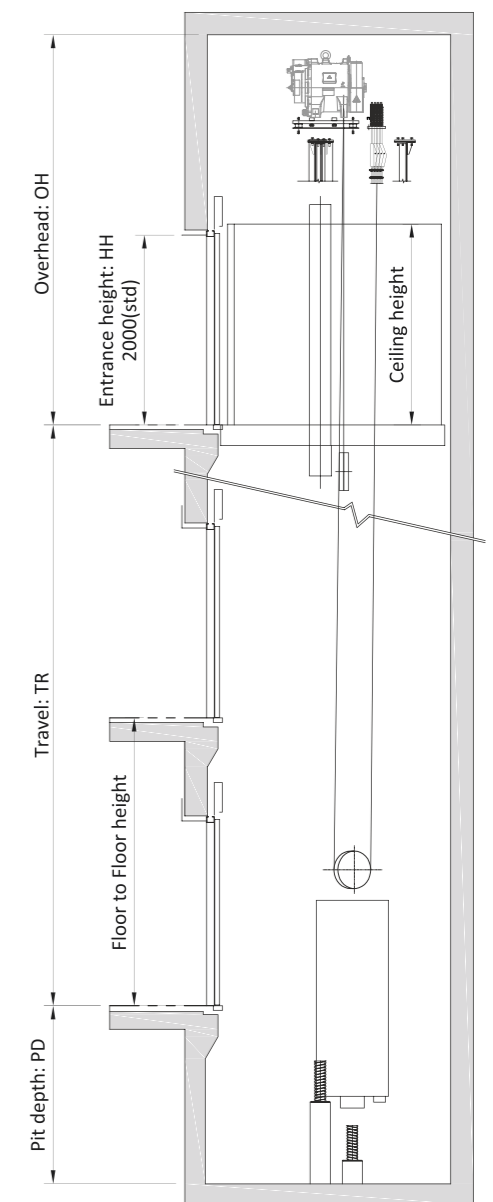
$$(FLU/FLAcc \text{ current (A) at E (V)}) = (\text{Current at 400V}) \times (400/E(V))$$

## Layout

### Hoistway Plan



### Hoistway Section





# Standard features

Feature	Abbreviation	Description	1 Car	2 Car	3 Car
Mitsubishi Emergency Landing Device	MELD	Upon power failure, a car equipped with this function automatically moves to and stops at the nearest floor using a rechargeable battery, and the doors open to facilitate the safe evacuation of passengers. (Maximum allowable floor-to-floor distance is 10 meters.)	S	S	S
Emergency Bell	EMB	A system for entrapped passengers in a car to contact a person outside by pressing the alarm button on the car operating panel.	S	S	S
Emergency Car Lighting	ECL	Car lighting which turns on immediately when power fails to provide a minimum level of lighting within the car. (Choice of dry-cell battery or trickle-charge battery.)	S	S	S
Door sensor self-diagnosis	DODA	Failure of non-contact door sensors is checked automatically, and if a problem is diagnosed, the door close timing is delayed and the closing speed is reduced to maintain elevator service and ensure passenger safety.	S	S	S
Automatic Door Speed Control	DSAC	Door load on each floor, which can depend on the type of hall door, is monitored to adjust the door speed, thereby making the door speed consistent throughout all floors.	S	S	S
Reopen With Hall Button	ROHB	Closing doors can be reopened by pressing the hall button corresponding to the traveling direction of the car.	S	S	S
Repeated Door-Close	RDC	Should an obstacle prevent the doors from closing, the doors will repeatedly open and close until the obstacle is cleared from the doorway.	S	S	S
Door Nudging Feature-with Buzzer	NDG	A buzzer sounds and the doors slowly close when they have remained open for longer than the preset period. With AAN-G, a beep and voice guidance sound instead of the buzzer.	S	S	S
Door Load Detector	DLD	When excessive door load has been detected while opening or closing, the doors immediately reverse.	S	S	S
Multi-Beam Door Sensor	MBS	Multiple infrared-light beams cover some of the height and full width of the doors. Closing doors can be reopened when one infrared-light beam is interrupted.	S	S	S
Safe Landing	SFL	If a car has stopped between floors due to some equipment malfunction, the controller checks the cause, and if it is considered safe to move the car, the car will move to the nearest floor at low speed and the doors will open.	S	S	S
Next Landing	NXL	If the elevator doors do not open fully at a destination floor, the doors close and the car automatically moves to the next or nearest floor where the doors will open.	S	S	S
Continuity of Service	COS	A car which is experiencing trouble is automatically withdrawn from group control operation to maintain overall group performance.	-	S	S
Overload Holding Stop	OLH	A buzzer sounds to alert the passengers that the car is overloaded. The doors remain open and the car will not leave that floor until enough passengers exit the car.	S	S	S
Car Call Canceling	CCC	When a car has responded to the final car call in one direction, the system regards remaining calls in the other direction as mistakes and clears them from the memory.	S	S	S
Car Fan Shut Off-Automatic	CFO-A	Car ventilation fan shut off automatically to conserve energy if there are no calls for a specified period.	S	S	S
Car Light Shut Off-Automatic	CLO-A	Car lighting shut off automatically to conserve energy if there are no calls for a specified period.	S	S	S
Backup Operation for Group Control Microprocessor	GCBK	An operation by car controllers which automatically maintains elevator operation in the event that a microprocessor or transmission line in the group controller has failed.	-	S	S
Independent Service	IND	Exclusive operation where a car is withdrawn from group control operation for independent use, such as maintenance or repair, and responds only to car calls.	S	S	S
False Call Canceling Car Button Type	FCC-P	If a wrong car button is pressed, it can be canceled by quickly pressing the same button again twice.	S	S	S

Feature	Abbreviation	Description	1 Car	2 Car	3 Car
Car Computer Backup Operation	CCBK	Failure of a car controller is immediately reported to the control system. The car parks at the next stop and opens the doors so that passengers exit.	S	S	S
Hall Computer Backup Operation	HCBK	Failure of a hall controller is immediately reported to the control system. The car parks at the next stop and opens the doors so that passengers exit.	S	S	S
Strategic Overall Spotting	SOHS	To reduce passenger waiting time, cars which have finished service are automatically directed to positions where they can respond to predicted hall calls as quickly as possible.	-	S	S
Car Top Buzzer	CTBZ	According to elevator operating condition, various buzzers are provided.	S	S	S

# Optional features

Feature	Abbreviation	Description	1 Car	2 Car	3 Car
Fire Emergency Return	FER	Upon activation of a key switch or a building's fire sensors, all calls are canceled, all cars immediately return to a specified evacuation floor and the doors open to facilitate the safe evacuation of passengers.	A	A	A
Firefighter's Emergency Operation	FE	During a fire, when the fire operation switch is activated, the car calls of a specified car and all hall calls are canceled and the car immediately returns to a pre-determined floor. The car then responds only to car calls which facilitate fire-fighting and rescue operations.	A	A	A
Earthquake Emergency Return	EER-S	Upon activation of seismic sensors, all cars stop at the nearest floor, and park there with the doors open to facilitate the safe evacuation of passengers.	A	A	A
Emergency Stop with Switch	EMS	This feature is provided on the car operating panel and makes the running car stop in case of emergency.	A	A	A
Voice Guidance System	AAN-G	Information on elevator service such as the current floor or service direction is given to the passengers inside a car. (English only)	A	A	A
Inter-Communication System	ITP	A system which allows communication between passengers inside a car and the building personnel.	A	A	A
Non-Service Temporary Release for Car Call – Card Reader Type	NSCR-C	To enhance security, car calls for desired floors can be registered only by placing a card over a card reader. This function is automatically deactivated during emergency operation.	A	A	A
Elevator Remote Control - Car	EVRC-C	A handy accessory, especially for exclusive operation and changing lighting settings, etc.	A	A	A
Main Floor Parking	MFP	An available car always parks on the main (lobby) floor with the doors open.	A	A	A
M's BRIDGE	GRMS	A remote maintenance monitoring system service which enables continuous service (remote inspection) 24/7 all year round.	A	A	A
Smartphone Car Calling System	SCCS	The mobile application which enables elevator users to call the elevator car and to reach the destination floor with their own smartphone	A	A	A
Contact Supply of Elevator State Signal for BA/BMS	CSB	The signals of elevator state are output to the BA (Building Automation / BMS (Building Management Systems) by contacts.	A	A	A
Car Arrival Chime-car	AECC <sup>*2</sup>	Electronic chimes sound to indicate that a car will soon arrive. (The chimes are mounted either on the top and bottom of the card.)	A	A	A
Car Arrival Chime-Hall	AECH <sup>*1</sup>	Electronic chimes sound to indicate that a car will soon arrive. (The chimes are mounted in each hall.) <sup>*1</sup>	A	A	A

S = Standard A = Optional

Note:

\*1 AECH will be applicable along with Selection of Hall Lantern only

\*2 AECC & AECH cannot be selected together





# Network of Regional Offices and Area Offices

ISO9001 certification



## MITSUBISHI ELEVATOR INDIA PVT. LTD

Registered & Corporate Office, Factory:

Plot No. 59-63 & 65-71, Kiadb Vemagal Industrial Area, Vemagal, Kolar Taluk  
& District-563 102, Karnataka, India.

TEL: +91 80 46480666/777

E-mail: [info@mitsubishielevator.in](mailto:info@mitsubishielevator.in)

### Corporate Office:

Prestige Khoday Tower, 15th Floor, No.5, Raj Bhavan Road,  
Bengaluru - 560 001, Karnataka, INDIA  
Tel : +91 80 2225 2540

### Delhi Regional Office:

76, Ground Floor, Okhla Industrial Estate,  
Phase - III, New Delhi- 110 020.  
Tel : +91 11 26933921 - 24 Fax : +91 11 26933970  
E-mail: [infodelhi@mitsubishielevator.in](mailto:infodelhi@mitsubishielevator.in)

### Gurugram Area Office:

Unit No. 210, 2nd Floor, DLF Star Tower,  
Sector 30, Silokhera-II, Gurugram, Haryana - 122 003  
Tel : +91124 404 7237 / 404 7848  
E-Mail: [infodelhi@Mitsubishielevator.in](mailto:infodelhi@Mitsubishielevator.in)

### Kolkata Regional Office:

781, Anandapur, Akash Tower, 6th Floor, Room No. 6c,  
Kolkata - 700 107, West Bengal.  
Tel : +91 33 40146100 Fax : +91 3340146101  
E-Mail: [Infokolkata@Mitsubishielevator.in](mailto:Infokolkata@Mitsubishielevator.in)

### Mumbai Regional Office:

401, 4th Floor, Kamla Executive Park,  
J.B. Nagar, Off. Andheri Kurla Road  
Near J.B. Nagar Metro Station, Andheri (E)  
Mumbai - 400 059  
Tel : +91 22 6117 7222  
E-Mail: [Infomumbai@Mitsubishielevator.in](mailto:Infomumbai@Mitsubishielevator.in)

### Pune Area Office:

Metro House Building, 4A, 4th Floor, Plot No. 7B,  
Mangaldas Road, Pune - 411 001, Maharashtra  
Tel : +91 20 41200841 Fax : +91 20 41200841  
E-Mail: [Infomumbai@Mitsubishielevator.in](mailto:Infomumbai@Mitsubishielevator.in)

### Ahmedabad Regional Office:

D-603, Synthesis, "The First",  
Behind Keshav Baug Party Plot, Near Shivalik High-  
Street, Vastrapur, Ahmedabad- 380 015.  
Tel : +91 79 2970 1976 Fax : +91 20 4120 0841  
E-Mail: [Infoahmedabad@Mitsubishielevator.in](mailto:Infoahmedabad@Mitsubishielevator.in)

### Hyderabad Regional Office:

Lala 1 Landmark, 4th Floor, 402 5-4-94 To 97, M. G.  
Road, Ranigunj, Secunderabad - 500 003. Telangana.  
Tel : +91 40 2754 6738,  
E-Mail: [Infohyderabad@Mitsubishielevator.in](mailto:Infohyderabad@Mitsubishielevator.in)

### Bengaluru Regional Office:

Prestige Khoday Tower, 7th Floor,  
No.5, Raj Bhavan Road, Bengaluru - 560 001.  
Tel : +91 80 22252 2540 / 2225 9841 / 42/ 43,  
Fax: +91 80 22252 548  
E-Mail: [Infobengaluru@Mitsubishielevator.in](mailto:Infobengaluru@Mitsubishielevator.in)

### Chennai Regional Office:


Bannari Amman Towers, 4th Floor, Block - B  
No 29, Dr. R. K. Salai, Mylapore,  
Chennai - 600 004. Tamil Nadu.  
Tel: +91 44 2847 7320 / 21  
E-Mail: [Infochennai@Mitsubishielevator.in](mailto:Infochennai@Mitsubishielevator.in)

### Kochi Area Office

35/563, 3rd Floor. KCF Tower,  
Opp. NPOL Bharath Matha Collage Road, Thirkkakara  
P.O Kakkanad, Ernakulam, Kochi, Kerala - 682021  
Tel : +91 484 - 2423220 / 2427222  
E-Mail: [Infokerala@Mitsubishielevator.in](mailto:Infokerala@Mitsubishielevator.in)

## MITSUBISHI ELEVATOR INDIA PVT. LTD

Visit our website at:  
<https://www.mitsubishielevator.in>

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